This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement No. 282542

DIFFER

EVALUATION OF THE PERFORMANCE OF THE IMPLEMENTED DIFFER INTERVENTIONS

International Centre for Reproductive Health
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www.icrhb.org
ICRH International Centre for Reproductive Health Moçambique

ICRH International Centre for Reproductive Health Kenya

Ashodaya Samithi Karnataka India

GHENT UNIVERSITY

UCL

MRU MatCH Research Unit
Department of Obstetrics and Gynaecology
Faculty of Health Sciences
University of the Witwatersrand

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Acronyms

AIDS	Acquired immune-deficiency syndrome
ANC	Antenatal care
APHIA	AIDS, Population and Health Integrated Assistance
ART	Antiretroviral therapy
CAB	Community Advisory Board
CBO	Community-based organisation
CHP	Centre for Health Policy
CSS	Cross-sectional survey
DIFFER	Diagonal interventions to fast-forward enhanced reproductive health
DIC	Drop-in clinic
DMSC	Durbar Mahila Samanwaya Committee
EC	Emergency contraception
FGD	Focus group discussion
FP	Family planning
FPAI	Family Planning Association of India
FSW	Female sex workers
GPW	General population women
HCN	Health Care Navigators
HCP	Health care providers
HSN	Health Systems Navigators
HTC	HIV Testing & Counselling
HTS	HIV testing services
HIV	Human immune-deficiency virus
ICRH	International Centre for Reproductive Health
ICTC	Integrated Counselling and Testing Center
IEC	Information, education and communication
KZN	Kwa-Zulu Natal
MatCH	Maternal Adolescent and Child Health
MSM	Men-having-sex-with-men
MoH	Ministry of Health
NACO	National AIDS Control Organisation
NASCOP	National AIDS & STI Control Programme
NGO	Non-governmental organisation
NHM	National Health Mission
OB/GYN	Obstetrics/Gynaecology
PAB	Policy Advisory Board
PAC	Post-abortion care
PE	Peer educator
PEP	Post-exposure prophylaxis

PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary health care
PPTCT	Prevention of parent-to-child transmission
PrEP	Pre-exposure prophylaxis
RDS	Respondent-driven sampling
RTI	Reproductive Tract Infections
SGBV	Sexual and gender-based violence
SRH	Sexual and reproductive health
SSA	Sub-Saharan Africa
STI	Sexually transmitted infections
TB	Tuberculosis
TI	Targeted intervention
TOP	Termination of pregnancy
UCL	University College London
UG	Universiteit Gent (Ghent University)
UNAIDS	Joint United Nations Programme on HIV/AIDS
USAID	United States Agency for International Development
VIA	Visual inspection with acetic acid
WHO	World Health Organization

Executive Summary

Background

The DIFFER Project (Diagonal Interventions to Fast-Forward Enhanced Reproductive Health) is an implementation research project that pilots and tests interventions to improve access to and uptake of HIV and sexual and reproductive health (SRH) services among female sex workers (FSW) in resource-limited settings. These include the cities of Mysore in Karnataka State, India; Mombasa, Kenya; Tete, Mozambique; and Durban, South-Africa. The hypothesis was that optimal results could be achieved by using a diagonal' approach, combining services targeting FSW (vertical) with improving access to general health services (horizontal). At the beginning of the project, a detailed policy and situational analysis was carried out at each site. This informed the development of site and context-specific intervention packages designed to strengthen SRH service delivery and to be implemented for a minimum of 18 months. The interventions comprised a combination of strengthening FSW community mobilisation and peer outreach; expanding and/or strengthening clinical SRH services specifically targeting FSW; establishing linkages between the targeted services and the general health services; and improving access to general health services for FSW.

At the end of the project, after at least 18 months of implementation, the performance of the interventions was evaluated. The principal evaluation questions to be answered included: (1) What was the main effect of the intervention on the uptake of SRH services by FSW? (2) Was the intervention feasible/ practicable to implement?; (3) Was the intervention adequately responding to the needs, in accordance with national policies and guidelines, and acceptable to beneficiaries, providers, health managers and policy makers?; and (4) Is the intervention financially and institutionally sustainable and can it be replicated elsewhere?

Methods

The DIFFER project applied a convergent parallel mixed-methods research design, combining qualitative research techniques with quantitative surveys.

The main quantitative method in the final evaluation was a ***cross-sectional survey*** (CSS) among a representative sample of FSW. A minimum of 400 FSW were recruited at each site, using a respondent-driven sampling approach, and interviewed face-to-face. The aim was to collect quantitative indicators on FSWs' use of SRH services and FSWs' appreciation of the availability of services. Crude and RDS-adjusted proportions were estimated, and compared for significant changes with the baseline CSS.

In Durban and Mombasa, in addition, a representative sample of 100 users exiting SRH services at a general health facility were interviewed and asked about their experiences and satisfaction with the SRH services. In Durban, 18 SRH providers were also interviewed and asked about their work practices and the access to services for FSW.

Available SRH ***service statistics*** were analysed and assessed for trends since baseline in Mysore, Tete and Durban.

The main qualitative method were ***focus group discussions*** (FGD) with FSW. In each site, between 4 and 8 FGD were held with 5 to 9 FSW. The topics discussed included knowledge and use of SRH services; access to SRH services; stigma and discrimination; peer outreach and community mobilization. FSW were asked if they were satisfied with the availability of services and what changes they had observed since the start of the intervention.

In all sites, ***key informants*** were consulted, either during specific group meetings or individually face-to-face. Using a semi-structured guide, they were asked about their appreciation of the feasibility, adequacy, perceived effectiveness, sustainability and replicability of the implemented intervention.

The type of informant consulted was site-specific but generally included relevant policy makers, health managers, community representatives and other stakeholders in SRH.

In Mombasa and Tete, in addition, group discussions were held with ***peer educators***, to have their feedback regarding feasibility, adequacy, perceived effectiveness and sustainability of the peer outreach component. In Tete, a checklist was filled out at four public health facilities by interviewing the appointed ***FSW focal points***, assessing the feasibility, adequacy, effectiveness and sustainability of the activities to make their services more FSW-friendly.

Once all data was collected and analysed, a mixed-methods analysis was conducted to formulate integrated conclusions to best answer the evaluation questions. This was done by comparing side-by-side, and by research topic, the results of the different research components.

Results

Mysore

Effectiveness. In Mysore, the intervention focussed on integrating family planning and cervical cancer screening into HIV/STI services already offered at the clinic operated by Ashodaya Samithi, a sex worker-led organization, and into the HIV care services offered at a charitable hospital. Both the CSS and the clinic statistics showed a substantial increase in the uptake of these services. Further improvement was also seen in the use of other services, such as HIV testing. In both the FGD and the CSS, FSW were extremely satisfied with the provision of these new SRH services.

Feasibility. The designed intervention was implemented as planned and perfectly feasible, despite a period of decreased service utilization when government funding was temporarily interrupted. Most interesting to note was that during this period clinic statistics showed that those most at risk for HIV/STI continued to access services and received the required treatment.

Adequacy. The DIFFER intervention was built on a well-established community mobilization/HIV/STI prevention model, that prioritises the needs of FSWs'.. The essence of the intervention was to move towards comprehensive integrated service delivery, rather than single service care, and to establish linkages with government and private service providers, through the placement of Health Care Navigators. Ashodaya collaborated with other partners on the intervention process, and conducted strategic advocacy at State & District levels. Consulted key stakeholders were extremely satisfied with the provision of the new SRH services and expressed an interest in further scaling-up the services.

Sustainability and replicability. The Ashodaya model has been proven to be sustainable and can without doubt absorb the newly added services. The findings of the DIFFER project offer an opportunity to adopt the approach of SRH/HIV integrated targeted services in the national AIDS Control strategy that is currently being revised.

Mombasa

Effectiveness. The CSS showed an increase in the uptake of several services, such as HIV testing, female condom use and non-barrier contraception use, mostly because of a higher uptake at the drop-in clinics, operated by ICRH-Kenya. These findings were supported by the FGD and peer educator discussions. FSW were greatly satisfied with the availability of services, but still face important barriers when accessing the public health services. There was a substantial increase in peer outreach coverage, but it is still insufficient.

Feasibility. The designed intervention was mostly implemented as planned, although termination of pregnancy (TOP) could not be included due to its illegality in Kenya. Also, the expansion of the peer outreach could not be done as planned due to lack of sufficient resources. Nevertheless, the feasibility of the designed intervention is considered good, if the necessary resources are made available.

Adequacy. The implemented intervention was in complete alignment with the national strategies and policies. The government endorses a model of peer outreach, combined with targeted clinics, such as applied by ICRH-K. Also the activities to make public health services more FSW-friendly are fully endorsed. Gaps identified as having been insufficiently addressed by the intervention included more mobile clinics and involvement of FSWs' regular partners.

Sustainability and replicability. The component of making public health services more FSW-friendly is considered sustainable because it required few additional resources, and could potentially be replicated nation-wide. The targeted interventions, both community-based and health facility-based, are however completely dependent on short-term, project-based funding from external donors and the government has currently no intention to fund these.

Tete

Effectiveness. Significant improvements were achieved in the use of some HIV/SRH services, in particular HIV testing, and also cervical cancer screening and female condoms. The increase in service use appears to be mostly due to the initiation of mobile outreach clinics. FSW were very satisfied with the availability of most SRH services, although slightly less with the availability of the female condom, lubricants, services for victims of violence and, termination of pregnancy. Access to the public health services has improved, but some barriers persist. A specific problem is the replenishment of ARVs for foreign FSW.

Feasibility. The intervention intended to address all gaps identified in the situational analysis, but, due to lack of sufficient resources, could not be fully implemented. In particular the strengthening and expansion of the targeted services was only partially done. As in Mombasa, TOP which is illegal, could not be offered.

Adequacy. Interventions to improve access to SRH services for FSW are in line with the country's policies and fully endorsed by all stakeholders, but the concept of having clinics specifically targeting key populations, an essential component of the tested intervention, is not endorsed by the government.

Sustainability and replicability. The targeted interventions, both community-based and clinic-based, are currently not financially sustainable because they are dependent on short-term project funding, and without potential for long-term funding from the government, the international community or other sources. Institutional sustainability is challenged by the high dependency on the technical and managerial support of external partners. The intervention as such cannot be replicated nationally, but some components, such as the FSW focal points at public health facilities, the linkage systems and the peer outreach model, could.

Durban

Effectiveness. Durban had the lowest uptake of SRH service at baseline, but also the greatest effect of the intervention. The use of the female condom, STI care seeking, HIV testing, HIV care, contraceptive use, and cervical cancer screening all substantially increased. The most important factor for this increase appears to be the mobile outreach services, conducted by the partner NGOs and the government clinic.

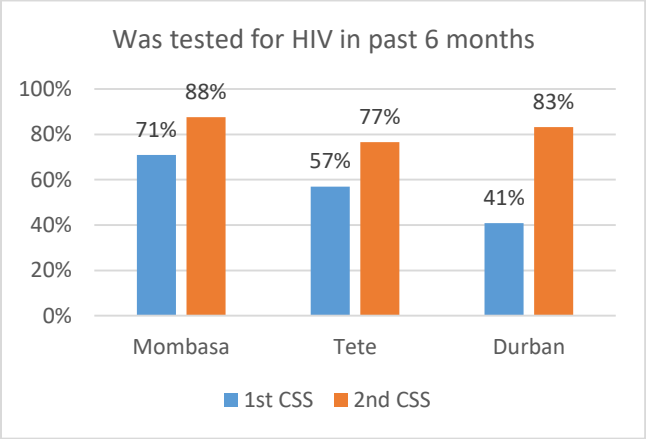
Feasibility. It was perfectly feasible to implement the designed intervention package. This was achieved by establishing a strong collaboration between MatCH-Research, non-governmental organisations already providing services in the field, and a governmental clinic. It showed that through a collaborative effort, tapping into the complementary available resources and skills, it is possible to have a comprehensive intervention.

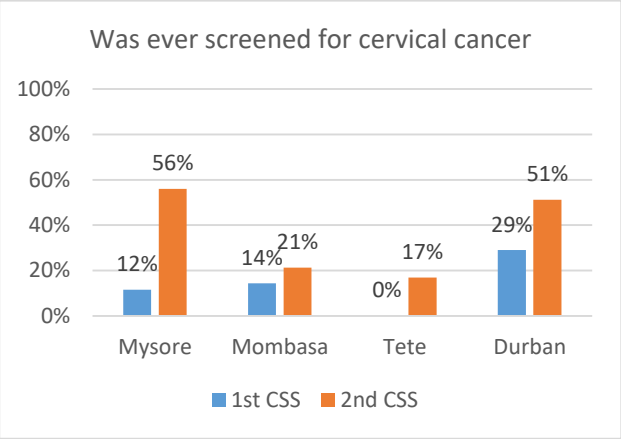
Adequacy. The intervention was harmonised with national policies and strategies. Buy-in by national and local policy makers was achieved with great success and contributed largely to the success of the intervention. Health managers and service providers were constantly engaged for the duration of the study and intervention, and the different components of the intervention were found to be acceptable.

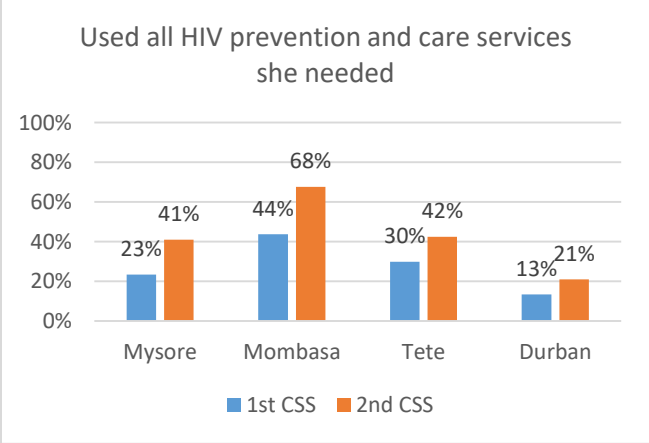
Sustainability and replicability. Overall, the intervention is judged sustainable because the government is committed to supporting the type of activities that were tested at their facility, and the perspectives for long-term funding of the NGOs look good. Several components of the intervention were considered replicable at a larger scale, and first steps are already being taken to adopt the tested peer model as a national strategy.

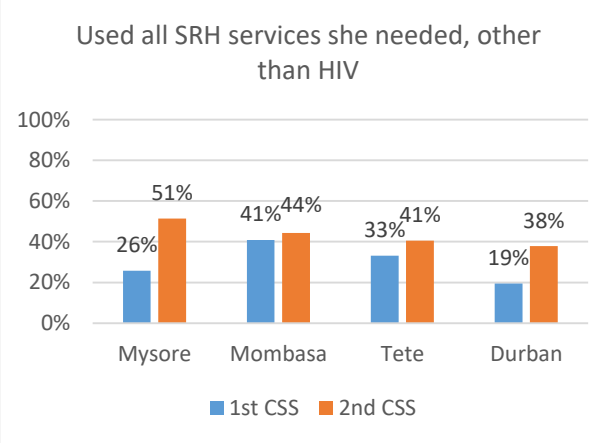
Main project indicators

The graphs below present the progress made in some of the project indicators.









Conclusions

The DIFFER project was successful in designing, piloting and testing a package of interventions, aimed at improving access to and uptake of SRH services among FSW, in four different settings. Despite the large differences between settings at baseline, and the different scope, approach and focus of each intervention, some conclusions across settings can be made.

The interventions had a clear effect on the uptake of services by FSW at all study sites. Although each intervention had focused on those services most relevant to their context, the uptake of some services, such as cervical cancer screening and HIV testing, consistently increased at all sites. Nevertheless, uptake of all HIV and SRH commodities and services is not yet optimal at any of the sites and access

needs further improvement, most particular at the African sites. For example, the coverage of peer outreach in the three African sites increased as a result of the intervention, but is still far from reaching the 100% of the Mysore programme. At some sites, specific barriers to care were identified that need to be addressed, such as the difficulties for foreign FSW to obtain ARVs in Tete and Durban.

The manner in which the increase in uptake was achieved differed substantially across sites, but it is noteworthy that at all sites it appears to have been mostly achieved by an increase in the uptake of services provided by targeted interventions, rather than an increase in the use of public health services. Each of the sites established context-specific mechanisms to improve access to the public health SRH services. Although these approaches were highly appreciated by beneficiaries, providers, managers and policy makers, the final evaluation was not able to demonstrate a substantial effect on the use of public health services. In most focus groups FSW reported that although access to public health services had improved there were still important barriers remaining. In the African sites, where the objective was to establish a provider-client relationship of mutual respect, most FSW still avoid disclosing that they engage in sex work out of fear of being badly received. It is important to develop these approaches further, and to carefully monitor and evaluate their effect on service uptake.

In Mysore and Durban, it was perfectly feasible to implement the designed intervention. In Tete, and to a lesser extent Mombasa, however, the intervention could not be implemented to its full extent because of lack of sufficient resources. At both these sites, because it is illegal, it was also not possible to include termination of pregnancy among the offered services, despite the fact that this was a service highly desired and needed by the FSW.

In all four countries interventions specifically targeting FSW are endorsed by policy makers, health managers and service providers. The preferred strategy of how to improve access to services differs however substantially, in particular for clinical services. In India, the concept of having a clinic providing clinical services specifically to FSW has been adopted as a national strategy for some time. Also in Mombasa the existing drop-in clinics are fully endorsed by the government. In Mozambique however, the government opted for a strategy to ensure adequate access to the public health services by making them key population-friendly, challenging the successful concept of the Night Clinic that was an essential component of the tested intervention, and prohibiting a replication of the tested model elsewhere in the country.

In all countries, some components or aspects of the tested intervention were identified by stakeholders as good candidates for scaling-up, and in India and South Africa first steps were already taken.

Stakeholders judged the long-term sustainability of the tested interventions as good, because of endorsement by policy makers and the FSW community, and because it used many existing programmes and structures. However, a critical condition for sustainability is that sufficient resources be made available. In Mysore and Durban sustainability is less of a challenge, but in Mombasa and Tete the interventions are greatly dependent on short-term project based funding and in neither of these countries are the governments willing to finance activities or services specifically targeting sex workers. Advocacy is therefore needed among all possible sources of funding, to establish a sustainable system to provide the finances needed for such interventions.

1. Background

1.1 The DIFFER Project

1.1.1 Rationale

The large majority of women in developing countries still lack access to even the most basic sexual and reproductive health (SRH) services. Reproductive and sexual ill health accounts for a large proportion of the global burden of ill health for women. This proportion is even higher in marginalised populations, such as female sex workers (FSW) who face increased risks because of limited access to health services, increased exposure to infection, general poor health, and the considerable effects of living in poverty. It is well documented that sex work remains a potent driver of HIV/STI transmission, but surprisingly few reproductive health services are directed towards sex workers in high-burden countries. Although a large body of evidence has shown that a few relatively simple interventions with sex workers, if implemented at sufficient scale, can interrupt transmission and help reverse the course of HIV epidemics, these kinds of interventions have been largely neglected in sub-Saharan African (SSA) countries with the highest burden of HIV.

Improving women's sexual and reproductive health requires innovative strategies to maximise potential synergies between components of care. Most adverse reproductive health outcomes stem from unintended pregnancy, and acquisition and transmission of reproductive tract infections. Although proven solutions exist, their implementation has been fragmented, with limited population impact, and little access for populations most at risk, such as sex workers. Integration of SRH services is key to achieving universal access to reproductive health. However, with weakened health systems and an HIV pandemic, the way forward is uncertain. The essential package of services and models for delivering them at high coverage in resource-limited settings are unclear.

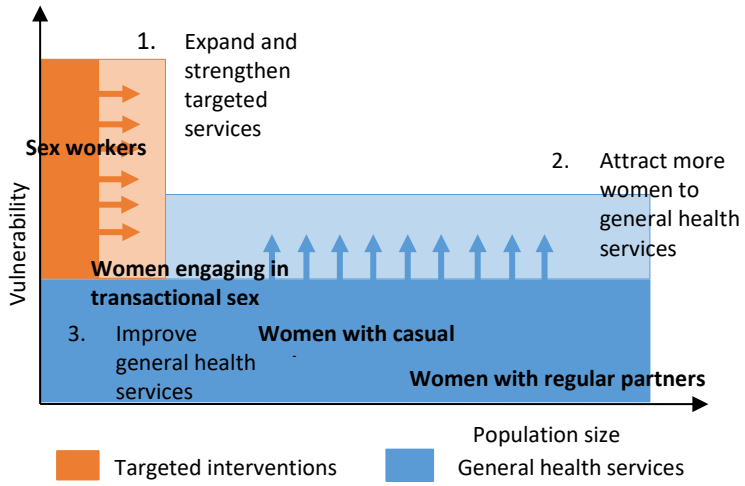
To address this, we implemented a '*diagonal'* strategy, incorporating both '*horizontal*' health systems strengthening and more targeted '*vertical*' approaches. Horizontal reproductive health services are those that are normally available to the general population and provided as standard care through a wide network of Primary Health Care (PHC) facilities, linked to district hospitals. Such services can reach large numbers of women, while vertical programmes often target specific high-risk populations who have high level of need, but are difficult to reach through a horizontal approach. In many countries many of these vertical services are NGO-run, with low coverage and have inadequate links with the rest of the health system.

The aim of the DIFFER project is improved SRH services through identifying best practices in delivering a combined package of interventions for general population women and female sex workers. The project helps to define packages of SRH services and models for delivery that meet the needs of all women and impact positively on their health.

1.1.2 Concept

The DIFFER project is based on the hypothesis that combining vertical SRH interventions, such as services targeted to FSW, with horizontal health systems strengthening by integrating a broader range of SRH services within existing health facilities, is synergistic, feasible, and likely to be more effective and cost-effective than providing them separately. In particular, the project activities build capacity to implement interventions for FSW, utilising the best practice experiences of partners in Mysore and Kolkata, India (Ashodaya and DMSC Sonagachi) where successful interventions for FSW have been brought to scale. These are applied and adapted to three research sites in SSA -- Kenya, Mozambique, and South Africa --focusing on integrated SRH care delivery to two populations of women: 1) FSW, and 2) women in the 'general population' who attend public health facilities, many of whom are also at high risk for poor SRH outcomes. These two populations have extensive overlap, with many of the

'general population' practicing some form of transactional sex, and many women who repeatedly enter and exit sex work, or are part-time sex workers.



DIFFER focuses on two channels for delivering improved SRH services; (1) through public facilities at district or primary level where women are already receiving some services, such as family planning (FP) and HIV testing services (HTS), and (2) through interventions designed with and for FSW in the communities where they work, through outreach and special mobile or satellite clinics. The latter services are referred to as Targeted Interventions (TI). This bidirectional or 'diagonal' approach builds on the strengths of both horizontal and vertical programming for maximum impact, as illustrated in the figure above.

The study explores possible ways of improving SRH services overall; attracting more women to SRH services through outreach and by improving provider attitudes; and strengthening targeted interventions. The study investigates ways of strengthening health systems and service delivery, rather than trying to establish the efficacy of already proven clinical interventions. For example, there is much data on the effectiveness of condoms use in sex work settings, and this project aims to examine how best to implement such interventions. The project has a deliberate focus on ensuring community mobilisation of FSW and their full participation in the design, assessment and implementation of study activities. FSW are supported by the research process in creating and promoting a supportive social environment for improved SRH. Additionally, there is a major focus on involvement of other community stakeholders and policymakers. This aims to increase uptake of study findings and to ensure that study results contribute practically to sustainable services in these and similar settings. Moreover, the research includes strong south-south collaboration, for the first time bringing the rich experience and successes of innovative, scaled-up sex worker-led interventions from the DMSC Sonagachi, Ashodaya and Avahan projects for adaptation to the African setting.

1.1.3 Objectives

General objective of the research:
The general objective is to improve SRH for all women by expanding and strengthening SRH services, and providing and testing targeted interventions for FSW in the context of existing health systems.

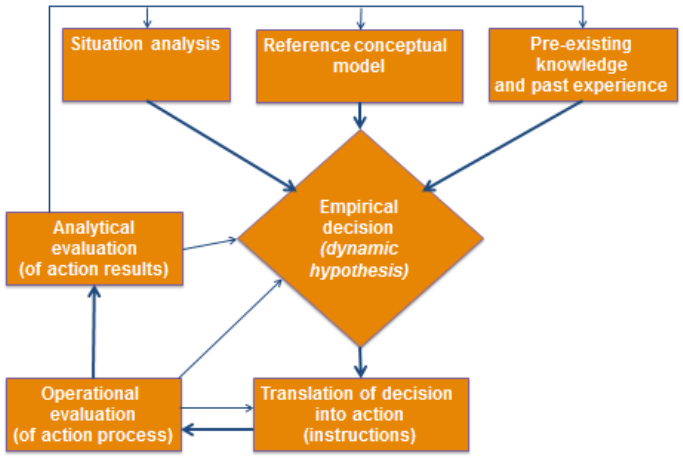
Specific scientific and technical objectives:

1. To assess the feasibility and practicability of integrating a combination of new SRH services into existing services for general population women;
2. To assess the feasibility and practicability of linking and/or integrating services for FSW into existing services for the general population, within district or Primary Health Centre (PHC) level facilities and at community drop-in centres;
3. To assess the feasibility and practicability of participatory processes involving FSW, local service delivery partners and the general population in design and delivery of improved SRH services for FSW;

4. To design packages of SRH care interventions which are feasible, appropriate, sustainable, effective, scalable and tailored to the conditions of each study site, to improve SRH among FSW and the general population;
5. To implement and evaluate site-specific packages of improved SRH services delivered at facilities, at TI sites (mobile/satellite clinics for FSW), and within the community by peer educators (PE);
6. To evaluate effectiveness of 21 months of strengthened services by conducting a cross-country assessment of the determinants of improved SRH services and outcomes pre- and post-intervention;
7. To measure cost-effectiveness and equity of improved SRH care for, and empowerment of FSW;
8. To engage policymakers from the outset in planning, implementing, evaluating and expanding the project;
9. To inform SRH policy and service delivery guidelines development that serves the needs of the general population and vulnerable groups such as FSW, thus aiming to improve reproductive health and health equity.

1.1.4 Methods

The study is designed as a set of case studies, with the 'case' being a well-defined geographical area where sex work is common. The project applies a methodological framework for health systems research as presented in the figure below. First, each site conducted a detailed situation and policy analysis that informed the development of site and context-specific packages of interventions to strengthen SRH service delivery. These packages were implemented for at least 12 months, after which the performance of each intervention package on the respective health system and on the population was studied, using a combination of qualitative and quantitative research methods. Individual and cross-country analysis was conducted. We compare process and outcome indicators at each study site pre- and post-intervention, and made comparisons across study sites.



1.1.5 Study sites

1.1.5.1 Mysore, India

In India, research was conducted in Mysore, a district in southern Karnataka. Mysore has a population of 1.03 million. Health facilities include one district medical college hospital, 3 government-run HIV Integrated Care and Treatment Centres, an ART centre, and a maternity hospital. According to the National AIDS Control Program, Mysore is a high priority district (category A) meaning that it has had a higher than 1% HIV prevalence among ANC populations in any of the sentinel surveillance sites for the last three years. The city of Mysore has close to 3000 sex workers, of which 2000 are female and the rest are male and transgender sex workers. A study documented 25% HIV prevalence among FSW in 2004 and 24% among male and transgender sex workers in 2006. HIV prevalence among FSW was 11% in 2009. In our DIFFER baseline survey, in 2012, we measured a prevalence of 15%. Access and

utilisation of reproductive health services for marginalised populations remain a challenge as the government system is unable to cater to the needs of sex workers.

The project was carried out by Ashodaya Samithi, a sex worker-led organization formed out of the aspirations of female, male, and transgendered sex workers. Since 2004, Ashodaya has been implementing HIV prevention programs with support from *Avahan*, the HIV/AIDS initiative of the Bill and Melinda Gates Foundation. The drop-in-centre and static and outreach clinics were initiated under Avahan and continue to be supported by the government HIV prevention program. Ashodaya also operates a Government Integrated Counselling and Testing Center (ICTC) and has strong linkages with the government run ART facility. In 2011, when DIFFER was launched, Ashodaya was implementing government-funded targeted interventions in four districts and had a total membership of 5,000 sex workers, with 1,826 FSW members in Mysore City. Sex work in Mysore has transitioned from operating in more visible street-based settings to mainly occurring in more hidden home-based locations. Over the years, Ashodaya has built strong relations with important stakeholders, including local police, government, non-government agencies, academic institutions, legal authorities and policymakers at the district, state, and national levels.

1.1.5.2 Mombasa, Coast Province, Kenya

In Kenya the DIFFER Project was carried out in Mombasa County, in the Coast region. The Mombasa County is situated in the South-Eastern part of Coast Province, and is the smallest of the six counties in the province. The county covers an area of 229.6 Km2 with an estimated population of 939,370 (Kenya Population Census, 2009). The county is divided into four divisions namely: Mombasa Island, Changamwe, Likoni and Kisauni.

The county is a busy container port and a popular destination for domestic tourism. As Kenya's major sea port on the Indian Ocean, conditions in Mombasa favour active sex work networks. Thousands of sailors, truck drivers and associated workers pass through the port each year, creating demand for sex work that is readily met by local women with limited economic opportunities. The resultant multi-cultural environment initiates varying behaviour and sexual practices.

The female sex worker (FWS) population is estimated to be 11,667 according to NASCOP reports from a study conducted in 2014. At baseline, the FSW population in Mombasa was estimated to be around 18,000 (out of an estimated 43,469 self-identified female sex workers in the Coast province) but with seasonal variations due to tourism (APHIA II/ICRH Enumeration report, March 2010). A study conducted in 2005 measuring impact of peer education among sex workers found that HIV prevalence in the sex worker population was around 30%, syphilis was 2%, gonorrhoea 1% and bacterial vaginosis 46%. Unwanted pregnancies were reported to be 27% in a cohort study conducted among Mombasa sex workers in 2008. In our baseline DIFFER cross-sectional survey we measured an HIV prevalence of 21.8% and unwanted pregnancies in the past 5 years were reported by 30.6% of FSW.

Mombasa county has 129 health facilities of which 22 in Likoni, 30 in Kisauni, 54 in Island and 23 in Changamwe.

The project was implemented by the International Centre for Reproductive Health (ICRH-K). ICRH-K works through a strong partnership with the Ministry of Health in Coast Region via the county department of health. ICRH-K addresses all areas of reproductive health, with special emphasis on family planning, including long- term methods, counselling, prevention, screening and treatment of cervical cancer, safe motherhood, post-abortion care, adolescents, HIV/AIDS prevention and treatment among the general population as well as key population(male and female sex workers), and prevention of gender-based violence.

Since 2001, ICRH-K operates several drop-in clinics (DICs) providing services to FSW in Mombasa County. In total there are 3 DICs, 1 in Kisauni, 1 in Island, and 1 in Likoni. The DICs are staffed by FSW

trained as HIV Testing and Counselling (HTC) counsellors to provide friendly services to their peers. A clinical officer visits the DIC once a week and provides STI screening and treatment and cervical cancer screening services. The DICs are equipped to provide access to information on HIV/AIDS, STIs, family planning (FP), condoms and counselling, and to facilitate referrals to health facilities for other services.

The baseline situational analysis was done in the whole of Mombasa county. However, during the design of the intervention it was decided to focus the intervention on two of the four divisions: Likoni and Changamwe, because a similar intervention was already planned in the two other divisions, as part of another project (the Learning Site Project). The final evaluation therefore also focussed on these two divisions, except for the cross-sectional survey that was conducted in the whole of the county to be comparable to the baseline survey. Because there is no DIC in Changamwe, the project linked up with Chaani Health Centre to provide targeted clinical services.

1.1.5.3 Tete, Mozambique

In Mozambique, the DIFFER project was implemented in Tete Province, in the area covering the adjoining cities of Tete and Moatize. The province is intersected by a major transport route connecting Malawi to Zimbabwe and the port of Beira, and over the past decade there has been a rapidly growing mining industry, attracting travellers, migrant workers and sex workers. The Tete-Moatize area has a total population of approximately 250,000 people. An accurate estimation of the number of female sex workers in the area is not available: A mapping and enumeration exercise conducted by ICRH in 2008 counted approximately 4000 women, likely to be an over-estimate; while recent USAID estimates are 1100 women. The FSW population in Tete-Moatize is characterised by a strong presence of women from neighbouring countries, in particular Zimbabwe. In the DIFFER baseline cross-sectional survey 67.5% of FSW were of foreign origin. FSW meet clients in various settings including on the street, in bars and their residences. A survey conducted in 2006 measured an HIV prevalence of 49.7% among FSW, and in our baseline CSS we measured a prevalence of 61.8%.

Health services in Tete-Moatize are mostly provided by the government. First-line health services are provided in primary health care centres. Some second-line services are provided in larger health centres, but primarily at the provincial hospital. For the DIFFER intervention, 4 of the 8 health centres in the project area were selected to be included in the project. These are the Carbomoc Health centre in Moatize, and the health centres Number 2, 3 and 4 in Tete City.

The DIFFER project in Mozambique was carried out by ICRH-Mozambique (ICRH-M). ICRH has been implementing interventions targeting FSW and other key populations in the city of Moatize since 2002. These interventions include a 'Night Clinic' that operates on week days from 4:00 PM to 10:00 PM, which is operated jointly by ICRH-M and the District Health Services with financial support from the international donor community. The government contributes by providing routine drugs and medical supplies and making health staff available against over-time payment. The private sector (mining industry) participated through a public-private agreement with the construction of new premises. At baseline, the clinic offered family planning, HIV testing and counselling, STI care, free condoms, IEC and SGBV services.

1.1.5.4 Durban, South Africa

The research activities in South Africa were conducted in central Durban, a coastal city in KwaZulu-Natal (KZN), one of South Africa's nine provinces, and home to roughly 20% of the country's population. Durban – the largest city in the province – had an estimated population of 3.4 million in 2007 (Statistics SA, Community Survey 2007). The city is the busiest container port on the continent and a popular destination for domestic tourism. As Africa's major port on the Indian Ocean, conditions in Durban favour active sex worker networks. A rapid size estimation, conducted in 2012, estimated that the metropolitan centre of Durban hosts 28% of South Africa's sex worker population, an

estimated 3000 – 6300 sex workers. The majority of sex workers are female with less than 5% male and 4% transgender sex workers. Of South Africa's nine provinces, KwaZulu-Natal has consistently recorded the highest HIV prevalence and sex workers based in this province are at an elevated risk for HIV acquisition and transmission. In the DIFFER baseline CSS we measured an HIV prevalence of 70.7%. Additionally, the eThekwini district in Durban has a high incidence of reported STI syndromes, higher than all metro areas in the country and higher than the national average (in 2008/09).

The DIFFER project was run from three study sites located in the downtown area adjacent to the port/harbour, where there is a known concentration of sex worker activity. Services for the intervention were provided by Commercial City Clinic, a Department of Health, Lifeline, an NGO and Sisonke, a FSW led organisation.

Commercial City Clinic is a popular clinic, with a client load of 6000-7000 per month. It offers a range of SRH services, including: family planning (mainly injectable hormonal methods, contraceptive pills and male/female condoms, although IUDs are also offered), pap smears, STI care, HIV testing services (HTS), and referrals for pregnancy tests, TOP and sterilisation. On-site CD4 testing is done, with ART initiation if eligible. It is also an 'adolescent friendly' site, as determined by national standards. Open Monday to Saturday, the clinic is staffed by professional nurses and nursing assistants, with a doctor available two afternoons a week for complicated cases.

Lifeline Durban hosts a drop-in centre, part of the Ithubalethu Project, which aims to educate, train and equip FSW with valuable life skills by offering them face-to-face counselling, HTS and CD4 testing facilities. The project also hosts various prevention programmes and a 15 week personal skills development training which focuses on developing FSWS' skills in order to attain alternative employment. This initiative is now in its 16th year and is supported by multiple stakeholders and donors including the Department of Justice and the Department of Social Welfare.

Sisonke is the National Sex Worker Movement of South Africa, run by sex workers for sex workers and is a non-profit organisation which aims to unite sex workers in order to improve living and working conditions and to fight for equal access to human rights. Sisonke provides information to sex workers on accessing social services, such as health care, and working with the police and legal system. The group offers workshops on sexual health, leadership and human rights and advocates for the decriminalization of sex work.

1.1.6 The DIFFER interventions

The detailed situational and policy analysis, that was carried out during the first years of the project, informed the development of context-specific packages of interventions to strengthen SRH services in the four countries and enhance access for FSW. First, a generic package was developed defining the key interventions, divided into 3 components: (1) Interventions targeted at FSW; (2) Strengthening of general SRH services; and (3) Strengthening of linkages between both.

Next, each of the four countries adapted the package to their specific context and developed a detailed intervention action plan. Activities differed according to the context of each site, but all included (1) strengthening of FSW community mobilisation and peer outreach; (2) expansion and/or strengthening of clinical SRH services specifically targeting FSW, either at specific clinics or drop-in centres, or through mobile outreach; (3) establishing linkages between the targeted services and the general health services; and (4) improving access to the general health services for FSW and ensuring a minimum standard of quality of these services.

1.2 Objectives of the final evaluation

The general objective of the final evaluation was to assess the performance of the package of interventions, after at least one year of implementation. The aim was to assess key aspects of performance and make evidence-based conclusions and recommendations for future SRH services. The performance was assessed at each of the four sites individually. The research components were site-specific and in line with the intervention package that had been implemented. Some components were included at all sites, in a standardised way, to allow as much as possible cross-site comparison. Others were site specific. Based on the results, we made site-specific conclusions and recommendations, and identified, through a cross-country comparison, which factors are site-specific and which are universal. Based on the cross-country comparison, general recommendations for FSW projects beyond these sites were generated.

The final evaluation had the following specific objectives:

1. To assess the feasibility and practicability of each of the developed packages of interventions, taking into account the site-specific context and constraints.
2. To assess the appropriateness and relevance of the packages of interventions, and the degree to which they respond to the needs of FSW and women of the general population, and are in accordance with national policies and guidelines.
3. To assess the sustainability of the packages, both financially and institutionally, beyond the duration of the project and the replicability on a larger scale.
4. To assess the effectiveness of the packages in improving access to, and use of, SRH care services, in particular for FSW, and in guaranteeing a minimum of quality of care, and, as a result, effective in improving SRH among these populations.
5. To assess the effectiveness of the packages in reducing stigmatisation of FSW.
6. To assess the cost-effectiveness of the packages compared with previous SRH service provision for FSW.
7. To assess the equity in terms of reaching those most in need.

The current report presents the findings in regard to objectives 1 to 5. The results in regard to objectives 6 and 7 are presented in a separate report.

1.3 Rationale of the final evaluation

The main focus of the evaluation was on gathering information about SRH care delivery and access for FSW. We use the term “female sex worker” to define women who receive money or goods in exchange for sexual services, either regularly or occasionally, and who may or may not self-identify as “sex workers”. In addition, some information was gathered to assess certain aspects of SRH care delivery to women of the general population.

The final evaluation gathered information on: current use of SRH care services by FSW and trends in service use since the baseline assessment; satisfaction of FSW with the current availability and quality of services; trends in the quality of the services provided at general and targeted health facilities, and in the community; appreciation by key stakeholders of the feasibility, appropriateness and sustainability of the current intervention package; and new policies and strategies that have been developed since the baseline.

The following research questions were to be answered by the evaluation, in accordance with the above listed objectives:

1. What was the main effect of the intervention on the uptake of SRH services by FSW? *(effectiveness)*

2. Was the intervention feasible/ practicable to implement? *(feasibility)*
3. Was the intervention adequately responding to the needs, in accordance with national policies and guidelines, and acceptable to beneficiaries, providers, health managers and policy makers? *(appropriateness/relevance)*
4. Is the intervention financially and institutionally sustainable on a long-term, and can it be rolled out on a larger scale? *(sustainability/replicability)*

Standardisation of study instruments ensured that the same study measures were gathered in the study countries (India, Kenya, Mozambique and South Africa) and as were collected in the baseline survey. The comparison of pre- and post-intervention consisted of assessing whether there was a change in routine service statistics (e.g. service utilisation and quality), and in population-level data measured by cross-sectional surveys, as well as other data collected. Each country team prepared and submitted their own detailed study protocol and ethics applications in their country, based on an overall study protocol.

1.4 Study design and methods

A convergent parallel mixed-methods design was used. There were in total six study components, which ran concurrently. Each component is described below. The study adopted a mixed-methods approach, combining qualitative research techniques with quantitative surveys. Qualitative methods included focus group discussions (with FSW), key informant interviews and discussions (with policy actors, senior health managers and community informants), and an analysis of the information collected during supervision visits and quality audits. Quantitative methods comprised a careful analysis of health service utilisation, client-exit interviews (where relevant), and a cross-sectional survey of FSW.

2. Study components

1.5 Component 1: Cross-sectional survey among FSW

The cross-sectional survey aimed to collect quantitative data on: FSW' current use of services for different SRH issues; use of SRH commodities, such as condoms and contraceptives; exposure to community activities, such as peer outreach; and FSW' appreciation of the current availability of services. The questionnaire also collected information on the current level of empowerment and some information on the cost of SRH services from the users' perspective; those results are presented elsewhere.

1.5.1 Eligibility criteria for study participants

To be eligible for the survey, women had to fulfil the following criteria:

- Be a woman (biologically)
- Have the minimum age to give informed consent, as specified by the ethical review boards of each country (18 years or older in India, Kenya and South Africa; 15 years or older in Mozambique)
- Having received money or gifts in exchange for sex at least three times in the last six months
- Be capable and willing to provide written informed consent to participate

1.5.2 Sampling strategy and size

Sampling strategy

A respondent-driven sampling strategy (RDS) was applied for the following reasons:

- To be aligned with the baseline survey and allow comparisons across surveys
- To improve the inclusion of hard-to-reach FSW that might be missed with a time-location cluster sampling approach, such as women who approach clients in settings other than recreational establishments

RDS has been developed over the past decade as a response to the limitations of time-location cluster sampling (TLS) or snowball sampling. TLS only samples FSW that visibly recruit clients in easily identifiable places such as bars, hotels, on the street, etc. In our context, FSW who contact potential clients in another way, such as on the market or at home, will be missed by this approach. Snowball sampling has a strong bias towards FSW with large social networks. RDS is similar to snowballing, but corrects for this bias through statistical adjustments that attempt to account for social network size and similarity among persons within social networks.

RDS begins with the selection of "seeds" who are known members of the FSW population. The seeds are instructed to educate a limited number of other FSW from their social circle about the survey, who in turn are enrolled (if eligible) and instructed to educate other FSW, and so on. The number of potential enrolees per person is usually restricted to three to five in order to ensure that RDS chains progress through diverse social networks. Coded coupons are used to link recruiters with whom they recruited. Although sampling begins with a purposely chosen set of initial participants, the composition of the final sample approaches independence from the starting point.

Sample size

The sample size was calculated to allow the detection of substantial changes in key project indicators between the initial baseline survey and the end-of-project survey. The main project indicators are: the % of FSW in need of contraception (no child wish, not currently pregnant and fertile) that use an appropriate contraception method (excludes condoms alone), which was estimated to be around 70% at baseline; and the % of HIV-negative FSW that received an HIV test in the previous year, which was estimated to be around 60% at baseline. The sample size should allow to significantly measure an increase to 85% and 80%, respectively, which were the targets by the end of the project. The required sample size was calculated using the sampsi command in Stata/IC 14.0 for two-sample comparison of proportions. The estimation is based on the method of Fleiss, Levin and Paik (without the continuity correction) to estimate the sample size to achieve a given power of a two-sided test for the difference in two proportions. The desired significance level was set at 0.05 and the desired power at 0.80. The required sample size calculated this way was 135 FSW in need of contraception for measuring the desired increase in contraception use, and 91 HIV-negative FSW to measure the increase in HIV testing. Considering that about 75% of FSW are in need of contraception, and that about 50% are HIV-negative, a total sample size of 180 was needed. Correcting for the design effect caused by the RDS approach (see above), which is estimated at 2.0, we calculated that at least 360 FSW needed to be recruited. To account for unexpected higher baseline levels of the two key indicator variables and to enable the detection of smaller effect sizes in other variables, we increased the target to 400 FSW.

The actual prevalence of the contraception use indicator at baseline ranged from 30% to 88%, and it was therefore believed that our sample size would indeed be sufficient to allow the detection of substantial changes. The prevalence of HIV testing in the past year was generally higher than 60% and therefore the prevalence of HIV testing in the past 6 months was used as indicator instead. Its prevalence ranged from 42% to 72% and it was expected that the detection of substantial changes would be possible.

In addition to sample size and power estimation, the sample size for RDS needs to reach equilibrium on the key variables listed above. We tracked these variables during recruitment to ensure equilibrium was achieved. We therefore enrolled FSW until we achieved at least 400 completed interviews and equilibrium on the above listed variables.

1.5.3 Enrolment procedures

Recruitment of seeds

In the three African sites, initial seeds were selected from each of the major sub-populations that are believed to differ in SRH care seeking behaviour, to ensure inclusion of all sub-populations.

We anticipated selecting seeds that are diverse with regard to the following:

- Mombasa, Kenya: location of sex work and hotspot type
- Tete, Mozambique: nationality (Mozambican/ foreign); residence (Tete City/ Moatize); type of FSW (full time/ occasional)
- Durban, South Africa: age; location of sex work; country of origin

Seeds had to meet the survey eligibility criteria and themselves participated in the survey. They were given coupons and instructions in peer recruitment. Seeds were oriented and motivated at the survey start to promote a feeling of survey ownership and enthusiasm about the project. To ensure rapid recruitment, the selected seeds were well connected within their networks (i.e. among their peers), well-regarded by their peers, and sympathetic to the survey's goals.

The number of initial seeds selected at each site was 8 in Mysore, 4 in Mombasa, 8 in Tete, and 7 in Durban. An additional 4 seeds were added in Mombasa after one of the chains had died rapidly, and it was observed that the coverage of the seeds was mostly in one particular area. In Tete, several of the initial seeds recruited no or few participants and their chains died out very rapidly. An additional 5 seeds were therefore recruited and FSW peer educators started to assist participants in reaching members of their network to participate in the survey. In Durban seeds were identified through dialogue with the FSW community and as an outcome of the focus group discussion which took place prior to the CSS.

Survey location(s)

One or more discreet spaces were used to administer interviews and provide service referrals. The locations had central access and were private, quiet and secure. Only survey staff, investigators, and potential participants bearing valid referral coupons were granted access. To avoid stigma by the public, no signs revealed the actual purpose of the visits. The survey site remained open up to three weeks after the last enrolment to ensure all participants received referrals and secondary incentives.

In Mysore, the survey office was open from 10:00 a.m. to 5:00 p.m. six days a week until recruitment was completed. A number of interviews also occurred in outreach settings, when appropriate. Recruitment and interviews occurred from December 2015 to January 2016.

In Mombasa, four locations were used: 3 were drop in centres (Kisauni, Likoni and Island-Mvita) and one was at the Chaani health centre where the project had a room where HTS services were offered. The locations were open every day Monday to Friday from 8 am to 5pm. Recruitment and interviews occurred during February-March 2016.

In Tete, two survey offices were used, one in the centre of Tete City, at the ICRH-Mozambique offices, and one in Moatize, at the newly built, but not yet opened, Night Clinic. The offices were open 5 days a week from 08:00 AM to 04:00 PM. Recruitment started in October 2015 and was completed in December 2015.

In Durban, the site office was located in the central business district, near a major commuter hub to facilitate access. The building and offices used were private and secure, and the office was open from 8:30am to 4:00pm five days a week until recruitment completed. Recruitment and interviews were done between February and April 2016.

Interview scheduling

Potential participants received a coupon from their recruiter that provided the survey site location, a phone number to call or "beep" (i.e., calling a single ring without connecting to signal the receiver to call back), and hours of operation at the survey site for drop in. Upon returning the call, the next available interview slot was offered to match the participants' convenience. Drop-ins were accommodated and fitted into the schedule as soon as possible. If there were too many drop-ins, recruits were offered the opportunity to schedule an appointment for a later time and date and were given an appointment voucher.

If a non-recruit presented to the survey site without a coupon, staff informed her that it is the office of a 'health survey' and escorted her from the survey site, so that confidentiality was preserved.

Coupon management

The coupon is essential to link the recruiter to their recruits and is necessary for the analysis of RDS data to adjust for network size and homogeneity within social circles. Being in possession of a valid coupon was an eligibility criterion. Issuance and receipt of coupons was monitored using RDS Coupon Manager software (RDSCM, version 3.0, UCSF Global Health Sciences) in Mombasa and Tete, using a Microsoft Access Database in Durban, and manually in a coupon notebook in Mysore. In Mombasa, a paper-based recruitment log was also used to verify the RDS Coupon Manager data.

Based on previous studies, it was determined that in Mysore three rounds of recruitment (waves) were optimal. The initial seeds were given 5 coupons each and in the second and third wave participants were given 3 coupons each. In Mombasa, Tete and Durban, participants were given three coupons each. In Tete, the number was increased to up to five, because recruitment was slow. Once the sample size approached the target, coupon dispersal to remaining recruits was reduced and slowly phased out.

The coupon was designed in consultation with FSW community representatives to appeal to the population, include images recognised by FSW, and have a consistent survey logo. No information that would directly divulge the FSW focus of the survey appeared on the coupons. Coupons had the following elements: serial number (which became the recruit's survey ID code), survey ID code of the recruiter, telephone number to call or beep, days and hours of operation for drop-in appointments, activation date (date before which the coupon may not be used for enrolment), expiration date (date after which coupon should not be used), and date of collection (returned and retained by coupon manager, left blank until collected). In practice, the activation and expiration dates were flexible. Information on the coupon was written in a language understandable to the participants. A coupon was considered invalid if expired, tampered with, unreadable, or already used. Invalid coupons were retained and stamped "VOID". Valid coupons of recruits undergoing screening for eligibility were retained and stamped "USED". Recruits who were re-scheduled for a future visit had their coupons returned to them.

Survey ID codes

The survey was confidential. Non-identifying survey ID codes were used for the various data components pertaining to the survey. In the questionnaire, interviewers noted whether the woman gave informed consent for the questionnaire (see below).

Eligibility screening

The coupon manager examined the coupon presented by the potential participants for dates and originality. The potential participant's eligibility was assessed through a short personal interview to screen for eligibility covering the eligibility criteria listed above. When doubts about eligibility remained, staff posed additional (non-standardised) questions to confirm eligibility.

Written informed consent

Informed consent scripts were pre-recorded in the languages understood by participants. In Mysore this was in Kanada, in Mombasa in Ki-Swahili, in Tete in Portuguese and English, and in Durban in English and isiZulu. All participants signed a written informed consent and received a copy of the informed consent to keep.

Written informed consent was required for ALL participants. Eligible potential participants were given the time to read the consent document. In lieu of written informed consent with a signature, illiterate persons could make a thumb print on an informed consent document after the consent information was explained to them orally in a language they understood. A witness signed to confirm that the participant was consented and understood the consent form. The interviewer promptly answered any questions asked. Informed consent covered all procedures, potential risks, benefits, and who to contact to report complaints or concerns.

1.5.4 Survey data collection

Interview

A standardized questionnaire was developed (Annex 1) with the key information to collect, and each site adapted this questionnaire to their specific context, while maintaining a set of core questions, where relevant. Data items included indicators needed for tracking the progress made in improving sexual and reproductive health and rights SRH practices, service utilisation and client satisfaction. The instrument collected data on demographics, behaviours potentially correlated with SRH, occurrence of SRH problems, care seeking behaviour for these problems and satisfaction with the availability of services. The questionnaire was pilot tested during field work preparation and adapted if needed.

The questionnaire was translated from English into other relevant languages by a professional translator and reviewed by multiple bilingual investigators. In Mysore, the questionnaire was translated into the local language, Kannada, and back translated to English to ensure the integrity of the questions. In Mombasa, the questionnaire was translated into Kiswahili, which was basically the language of the interview. In Tete the questionnaire was translated into Portuguese, but not into the local language (Nyungue) because this language is an oral language without a standardised written form. Instead, during the training, the interviewers practiced the questionnaire in Nyungue. Zimbabwean and Malawian FSW where interviewed in English or ChiShona. In Durban the questionnaire was translated from English into isiZulu.

Interviews were interviewer-administered and conducted face-to-face. In Mysore, Mombasa and Durban a paper-based questionnaire was used. In Tete, the questionnaire was completed using Computer-Assisted Personal Interview (CAPI) (QDS version 3.0.1.2, Nova Research Company), meaning the interview took place in person with the interviewer posing questions to the participant and noting the participant's answers on a laptop computer.

In Mysore, the interviewers were literate SWs who are external of the DIFFER project and not part of the DIFFER implementation team, and who were established community researchers of Ashodaya Academy. Initial training of the community researchers was held for 3 weeks. A second 5-day training was done ahead of the survey. The Community Advisory Board (CAB) also supervised this process.

Interviewers received training on the administration of the questionnaire, question by question. Skip patterns ensured that the appropriate questions were asked of the participants during the interview. The CAPI program, or interviewers in the case of paper-based interviews, informed the participant of any illogical data values. Throughout each interview, verification of completeness and internal consistency was performed. Additionally, in order to ensure quality of the interviews, interviewers successfully completed a minimum of three practice interviews prior to the start of data collection.

Once data collection began, interviewers were evaluated at least once during the first week. The site supervisor oversaw one out of every ten of the interviews conducted by each interviewer. Following each evaluation, the evaluator and interviewer met to discuss areas where the interviewer could improve.

Peer sensitization and recruitment

Following completion of the above procedures, the coupon manager explained the handling of the peer recruitment coupons and the recruitment process to participants. The participant was asked to identify, depending on the site, three to five peers (see above) and offer them survey participation. Interested peers received the referral coupon and called for an appointment or presented themselves at the survey office. Survey participants who indicated they are not interested in recruiting were encouraged to take the referral coupons in case they changed their mind about recruiting.

1.5.5 Data analysis and statistical considerations

Data management

In Mysore, data was securely stored at the Ashodaya office at the end of each workday. Following each interview, surveys were checked for consistency and correctness by the data management team and project coordinator. The data entry team double-entered the data from the surveys into Epi-Info 3.1 software then exported to Microsoft Excel and SPSS 21 for analysis. Both the unique ID numbering system generated by Ashodaya and a simplified RDS coupon notebook-based log enabled the tracking and management of the recruitment progress to ensure no duplication occurred.

In Mombasa, data was transported to the ICRHK office from the field and stored at a locked place. Data entry was done manually at a later stage using Microsoft Access. Data quality was verified by the study coordinator who checked questionnaires for completeness and accuracy of the information recorded. The interviews and coordinator kept a log that was updated on daily basis to track the interview progress.

In Tete, survey data were entered directly in electronic form during the interview using the CAPI software. To ensure quality of data, built-in checks were programmed into the CAPI control file and verification of completeness and internal consistency was performed automatically. Additionally, the site coordinator oversaw one out of every ten of the interviews conducted by each interviewer. The Site Supervisor uploaded, at the end of each day, all interview files from the laptops to a QDS data warehouse located on a password-protected computer at the office. The Site Supervisor also stored a back-up copy of the files on a flash drive that was kept in a locked cabinet. The interview files were then deleted from the computers.

In Durban, Epidata entry client version 2.07 was used for manual data entry. Quality control checks were conducted manually by the project coordinator and data manager, with further electronic checks run by the data manager after the data had been exported to Stata IC version 13.

In Mysore, Mombasa and Durban, original paper-based forms were kept in a secure locked cabinet at the office. Questionnaires did not contain identifiable information, only a unique sequential survey code. Access to data was limited to the data/coupon manager, site project manager, data analysts, and investigators.

Continuous quality checks were performed to ensure that code numbers were recorded properly for each participant. Merging of data sources (i.e. the coupon data and survey responses) was conducted under the supervision of the investigators and lead data manager. All databases were password-protected. The complete databases of each site were exported to a Stata format and shared with ICRH/UGent for the data analysis through a password protected drop-box folder.

Data analysis

The analysis of RDS data requires adjustment for social network size and homophily within networks. Specialised analyses were conducted to produce population prevalence estimates and confidence intervals (CI) of variables adjusting for unequal probabilities of inclusion due to varying social network sizes and the similarities in characteristics of persons within their social networks.

The Stata (Version 14.2, College Station, TX) RDS analysis package (package st0247_1 / SJ13-4) was used for calculating the population prevalence estimates and confidence intervals. We used the Volz-Heckathorn estimator (RDS II estimator) for the adjustment and bootstrapping for calculating the CI. Confidence intervals were corrected for non-normal distribution. The RDS Analysis Tool (RDSAT, Version 7.1.46, 2012 Cornell University) was used to analyse the recruitment chains and calculate the level of homogeneity, and Netdraw 2.141 (Borgatti, S.P. Netdraw Network Visualisation, Analytic Technologies, Harvard, MA) for graphic visualisation.

The primary analysis comprised of the adjusted population point estimates of the uptake of, and satisfaction with, SRH care and prevention services, key risk behaviours and occurrence of specific SRH outcomes. Secondly, the database was merged with the baseline database, and the results were compared and assessed for statistically significant changes, fitting a logistic regression model with RDS-adjusted weights and using jack-knife resampling.

1.5.6 Long-term data storage

Once the final report is published, the consortium partner that conducted the survey in each country and ICRH/UGent will maintain the country-specific databases (the baseline database, the final database, and the merged database),for at least 5 years. The survey database will not be released to outside researchers prior to publication of the final report without authorisation of the DIFFER consortium and the European Commission.

1.5.7 Reimbursements

Reimbursements for participation are integral to the RDS methodology because of the reliance on survey participants to identify, approach, and educate their peers about the survey. Moreover, because RDS relies on participants travelling to fixed project sites, transportation costs should not be a barrier for poorer people to participate. To propagate recruitment chains, primary reimbursements were offered for completing the survey and secondary reimbursements for each peer sensitised and referred to the survey. Participants needed to travel to the survey office for the interview and were asked to return for one or more visits to collect secondary reimbursements.

In Mombasa, the primary reimbursement was 300 Kenya shillings (equivalent to 2.6 EUR), while the secondary reimbursement was 200 Kenya shillings (1.8 EUR) for each peer who joined the survey. In Mozambique, the primary reimbursement was snacks and a cool drink, and the secondary reimbursement was a small gift bag; in addition, participants were reimbursed for transport costs at 100 Meticais per visit (2 EUR). In Durban, participants were given R100 (5.7 EUR) for survey participation and R30 (1.7 EUR) for each successful referral, up to a maximum of R90 for 3 coupons. All participants were provided, free of charge, female and male condoms.

1.6 Component 2: Focus group discussions

Focus group discussions (FGD) were held with FSW to explore their perceptions and appreciation of the package of interventions that was implemented at each site. FSW were asked if they judged the current availability, accessibility and quality of the services satisfactory and what were the main changes in comparison to the pre-intervention period.

1.6.1 Eligibility criteria for FGD participants

To be eligible for the FGD, women had to fulfil the same criteria as for the cross-sectional survey:

- Be a woman (biologically)
- Have the minimum age to give informed consent, as specified by the ethical review boards of each country (18 years or older in India, Kenya and South Africa; 15 years or older in Mozambique)
- Have received money or gifts in exchange for sex at least three times in the last six months
- Be capable and willing to provide written informed consent to participate

In addition, participants had to speak fluently the language of the FGD. Care was taken to only include FSW who speak the same language in each focus group. FSW who had resided in the area for less than three months were excluded.

In Mysore, an additional eligibility criteria was to have used services that were part of the DIFFER intervention. Four FGDs were conducted with a total of 40 participants (10 participants per FGD).

In Mombasa, additionally the participants needed to have identified themselves as female sex workers and also reside within the area that the FGD participants were being selected from.

In Tete, FGDs were held separately with FSW of different characteristics. Initially, one FGD was held with FSW who self-identify as such and for whom sex work is their main source of income ('full-time' FSW) and who had immigrated from Zimbabwe to the Tete-Moatize area. A second FGD was held with full-time FSW who have Mozambican nationality, and a third with Mozambican women of the Tete-Moatize area who engage in sex work, but for whom sex work is not their main source of income ('occasional' FSW). The criteria used to identify a FSW as 'full-time' are: (1) having had at least 20 client contacts in the past month; and (2) to work as a FSW at least two days each week. The criteria to be considered as an 'occasional' sex worker is to have had less than 10 client contacts in the previous month. After analysis of these FGD, it was conclude that saturation had not yet been reached, and an additional FGD was held with each of the three populations. Therefore, a total of 6 FGD were conducted, each containing 5 to 9 participants.

In Durban, a total of 4 FGDs were held, with uniform groups of female sex workers (eg. groups containing FSW of similar age or sub-group/type of sex worker – brothel, street etc.). Each group contained 8-10 participants.

1.6.2 Recruitment and FGD procedures

In Mombasa, the participants were recruited through the existing FSW peer education program network. In Tete, potential participants were identified by the peer educators. In Durban, when recruiting FSW, the research study team liaised with the NGO Lifeline in order to access the sub-groups that were in existence in the study site. When recruiting potential participants for the FGD it was ensured that participants from all pre-identified sub-groups were recruited. Lifeline peer outreach workers (who are familiar with these sub-groups and know how to locate them) assisted in identifying and approaching potential participants.

The objectives and procedures, and where and when the FGD would take place, were briefly explained to all potential participants. Participants who agreed to proceed to the next step were checked for

their eligibility. More detailed explanations were provided at the FGD site, and at that time the FSW could decide to participate or not.

The FGD were held at a space that allowed a private and confidential conversation. Before the FGD, each participant was explained in detail the study procedures, using an information sheet and was asked if she consented to participate. Consenting participants signed a consent form. The FGD were moderated by a trained facilitator who guided the discussion using a semi-structured FGD guide. A standardised guide was developed in English (Annex 2), and each site adapted it to their specific context. The FGD guide focused on knowledge and use of SRH services; access to SRH services; stigma and discrimination faced by the community; peer outreach; community mobilization; and satisfaction with the services offered through the intervention. The discussions were audio-recorded and all participants provided specific consent for recording. Before starting the discussion, the moderator ensured that all participants spoke the same language fluently.

In Mysore, FGD were facilitated in Kannada by community researchers and non-FSW Ashodaya program staff. In addition to the guide there was a short questionnaire including a socio-demographic profile of the participants. The FGD guide and the questionnaire were translated into Kannada.

In Mombasa, the FGDs were facilitated by trained research assistants using a guide that had been translated into Kiswahili. The participants were offered refreshments and reimbursed 500 Kenya shillings (equivalent to 4.4 EUR).

In Tete, the guide was translated from English into Portuguese. The English guide was used in the FGD with Zimbabwean FSW, but the language most commonly used during the discussion was Shona. The Portuguese guide was used in the FGD with Mozambican FSW, but a large part of the discussion was in Nyungue. All participants were offered a snack and a drink and reimbursed for their travel.

In Durban, FGD were in English and/or IsiZulu. Study staff from MatCH Research Unit facilitated the discussions. There were several trained and experienced facilitators available for these FGDs. All participants were reimbursed R70.00 (4 EUR) and provided with refreshments.

1.6.3 Data management and analysis

After each FGD session, the moderator and observer transcribed the audio-recording in MS-Word, which then was converted to be analysed either manually or using appropriate software. The choice of manual or electronic depended upon the complexity of the data and the final amount of data available.

In Mysore and Mombasa, all the FGDs were recorded, transcribed and translated into English. The Tete FGD transcripts were translated into Portuguese and analysed using NVivo software (NVivo 11, QSR International). In Mombasa and Durban, Nvivo QSR 10 was used to identify interview themes and code the interview transcripts.

The analysis focussed on examining current determinants of use of SRH services and commodities, remaining barriers and differences with the pre-intervention period. The answers given during the FGD were deductively and selectively coded, applying the following axial coding matrix:

Theme	Positive experiences	Negative experiences	Changes over the past 2 years
Place where HIV/SRH care sought and reasons for choosing that place			
• Public health facilities			
• Targeted facilities/ outreach services			
• Other facilities/ services			
Access to and availability of HIV/SRH services and commodities			
• Male condoms			
• Female condom			
• Lubricants			
• Contraception			
• STI care			
• HIV testing			
• HIV care			
• SGBV care			
• Cervical cancer screening			
• Care for unintended pregnancies (TOP or other)			
Quality of received HIV/SRH services			
• Public health facilities			
• Targeted facilities/ outreach services			
• Other facilities/ services			
Reception and barriers to access at public health facilities			
Satisfaction with peer outreach			
Satisfaction with community mobilisation			

Selected quotations were highlighted to illustrate the main themes.

In Mysore, findings were discussed with members of Ashodaya in order to check for accuracy. In Durban findings were discussed with the community advisory board.

1.7 Component 3: Analysis of collected health facility and community outreach statistics

All SRH care routine data available from the health facilities that were involved in the intervention, and all available routine data recorded during the provision of community outreach services, were collected for comparison with the baseline data and analyses of trends in SRH care use.

1.7.1 Data collection tools

A SRH service statistics data collection form was developed to summarise the key statistics collected from the recording and reporting tools available at the health facilities and community outreach programmes. Only data already available in the routine monitoring tools that were developed for the monitoring of the services were collected and no additional data collection forms were developed. The data were summarised by month, covering the entire intervention implementation period. Only monthly statistics were collected and no individual data were collected.

1.7.2 Data management and analysis

The data, without any personal identifiers, was entered into an Excel database and merged with the pre-intervention statistics that were gathered as part of the baseline situational analysis. The analysis included assessing time trends during the period, and differences between the pre- and post-intervention period.

1.8 Component 4: Analysis of the collected process measures

Additional information collected during the implementation of the intervention package was analysed to assess feasibility, acceptability (from the providers' perspective), sustainability and some aspects of the quality of the SRH services offered at the targeted and general health facilities, and during community outreach. A standardised process monitoring tool was developed for this purpose. The information collected in the tool was be qualitatively interpreted and summarised descriptively.

1.9 Component 5: Discussions with and/or interviews of key informants and stakeholders

Key informants included those people who had been selected to be a member of one of the mechanisms that were developed to ensure adequate coordination of the project, such as the Policy Advisory Board and the Community Advisory Board. Feedback was obtained, either during specific meetings organised with each of these boards to discuss the topics relevant for the final evaluation, or, alternatively, key informants were interviewed individually, face-to-face or by telephone.

1.9.1 Study participants and interview procedures

Key informants included those people who had been selected to be a member of one of the mechanisms that were developed to ensure adequate coordination of the project, such as the Policy Advisory Board and the Community Advisory Board. Feedback was obtained, either during special meetings organised with each of these boards to discuss the topics relevant for the final evaluation. Alternatively, key informants were interviewed individually, face-to-face or telephonic.

In Mysore, eligibility criteria included involvement with policy development, part of health service delivery at district, state or national level, involvement with sex workers, and/or with the DIFFER project. Participants included policymakers, government representatives from the district, state and national levels with experience in departments ranging from the Ministry of Health and Family Welfare, The National AIDS Control Organization, the Reproductive and Child Health Department of Women and Child Development, and leaders from NGOs working with sex workers in Mysore and lawyers who work as advocates for sex workers. Most key informants were met individually, however a few group discussions took place.

In Mombasa, all members of the policy and community advisory board were eligible.

In Tete, eligibility criteria were either being a person who played an important role in defining or influencing HIV/SRH policies for key populations at national level (either from the government, donor agencies, or NGOs); or playing an important role in the management of HIV/SRH programmes at provincial or district level (governmental or non-governmental). In addition, two members of the project's general community advisory board were included.

In Durban, key informants comprised of members of the DIFFER project PAB and included policy-makers, programme managers, donor agencies and academics with knowledge and experience of integrating SRH and HIV services in South Africa.

Participants were given an information sheet and if they agreed to participate, they signed an informed consent form. In Mysore, interviews were conducted in English by non-FSW Ashodaya staff and researchers. Detailed notes were taken immediately following the interviews. In Tete, interviews were held in either Portuguese or English and audio-recorded. In Durban, interviews were face-to-face or

telephonic. The discussion was in English and audio recorded and no reimbursements were provided for participation, refreshments were served during the discussions.

1.9.2 Interview topics

Following a standardised semi structured guide (Annex 3), interviewers/moderators asked informants about their views on the feasibility of the package of interventions that was developed (practicability of the implementation, accordance with national legislation), the appropriateness and relevance (alignment with national policies, endorsement by policymakers, health managers, providers and beneficiaries, adequately responding to the needs), and the sustainability (financial and institutional sustainability, scalability). Interviewers/moderators probed the responses given, aiming to provide an in-depth understanding of participants' perceptions of the adequateness of the developed packages. Some sites added other topics, relevant to their context. For example, in Durban the interviews explored current SRH policy and service availability and integration issues (including understanding of integrated care, challenges and benefits to integration, and ideal service-delivery models).

1.9.3 Data management and analysis

The audio-recordings of all individual semi-structured interviews or group discussions were transcribed and the transcripts were thematically analysed. Manual coding or NVivo was used to deductively and selectively code the interview transcripts. The choice of manual or NVivo coding depended upon the complexity of the data and the amount of data available. The following axial coding matrix was applied:

Theme	Positive	Negative	Type of stakeholder*
Feasibility of the intervention			
• Peer outreach			
• Community mobilisation			
• Targeted clinical services			
• Strengthening general SRH services			
• Linkages between targeted and general SRH services			
Appropriateness and relevance of the intervention			
• Peer outreach			
• Community mobilisation			
• Targeted clinical services			
• Strengthening general SRH services			
• Linkages between targeted and general SRH services			
Sustainability and scalability of the intervention			
• Peer outreach			
• Community mobilisation			
• Targeted clinical services			
• Strengthening general SRH services			
• Linkages between targeted and general SRH services			

* The following type of stakeholders were distinguished: government policy makers; non-governmental policy makers; local health managers; local community stakeholders; other stakeholders

1.10 Site specific study components

1.10.1 Client exit interviews

Interviews with users of SRH services exiting the general health facilities that were involved in the intervention were held at those sites where this was relevant and feasible. These were Mombasa and Durban. The exit interviews aimed to collect quantitative data on current actions taken during SRH

provision, the acceptability of the SRH services for users of the general population, their satisfaction and in how far it responded to their needs.

In Durban, the eligibility criteria for participation were as follows:

1. Women older than 18 years
2. Have completed a visit at the facility which involved receiving services for an STI, FP, HIV testing and counselling, prevention and ART; Cervical cancer; Gender-based violence; or TOP
3. Willing to participate and sign informed consent

The sample size for this component was 100 female participants and health care facility clients were recruited for exit interviews immediately following their consultations for SRH services with health care providers. Potential participants were given an information sheet and, if interested in participating, they were screened for eligibility and taken through the informed consent process providing written informed consent. This component aimed to assess the services requested by the participant and those offered to her at this visit; the counselling participants received; and whether they received integrated services and were given referrals for other services. The nature of the provider-client information exchange and the clients' satisfaction with services received and unmet needs were also assessed. Interviews were paper-based and conducted face-to-face by a trained interviewer. Participants were reimbursed R100 (5.7 EUR) for completing the survey. Epidata entry client v2.07 was used for manual data entry. Data were exported to Stata v13 for cleaning, query generation and analysis.

1.10.2 Provider interviews/ Facility assessments

Feedback from service providers was obtained in Mombasa, Tete and Durban.

In Mombasa one, and in Tete two, group discussions were held with FSW peer educators. In Tete this was one with Zimbabwean, and one with Mozambican educators. The procedures, in term of space where the discussions were held, consent procedures, moderation, discussion guide, language used, audio recording, reimbursements, transcription, translation and analysis, were identical to the FGD procedures described above. The topics discussed included the appreciation by the peer educators of the feasibility, adequacy, effectiveness and sustainability of the peer outreach activities.

In addition, in Tete, the health care providers who had been appointed as FSW focal point at the four public health facilities participating in the intervention were interviewed face-to-face using a structured questionnaire. All participants were explained the objectives and procedures of the interview, received an information sheet and signed an informed consent form. No reimbursements were offered. The questionnaire addressed the appreciation of the activities carried out at their facility to make the services more FSW-friendly, in term of feasibility, adequacy, effectiveness and sustainability. After the interview, a facility checklist was completed to assess the conditions at the facility to offer quality SRH care.

In Durban, structured interviews were held with different service providers. Participants were drawn from the different stakeholders providing healthcare services for the intervention. This included a government primary health care facility, a non-governmental organisation and a female sex worker rights movement. A total of five provider types were selected: 5 registered nurses, 2 enrolled nurses, 1 lay counsellor and 10 other types of provider (such as outreach peers, facility managers and monitoring officers). All interviews took place in May 2016.

1.11 Mixed methods analysis

To formulate integrated conclusions in regard to the research questions listed in chapter 1.3, a mixed methods analysis was conducted.

In Tete, a joint display of the results was done in a matrix displaying the evaluation components in the x-axis (cross-sectional surveys, focus group discussions, peer educator group discussions, and health facility statistics) and the evaluation research themes in the y-axis (Satisfaction with current availability, changes in availability and uptake, reasons for improved availability, and reasons for persisting lack of availability) to come to integrated conclusions regarding the effectiveness of the intervention and the appropriateness from the beneficiaries' perspective. In the three other sites, the results of the cross-sectional survey, FGD and, where available, the service statistics were side-by-side compared by topic.

Integrated conclusions regarding the feasibility, sustainability, replicability and appropriateness from the providers' and policy makers' perspective were formulated based on a side-by-side comparison by topic of the results of the key informant interviews, the process measures analysis, the provider interviews/ group discussions, and a policy document review.

1.12 Ethical considerations

All ethical standards and guidelines necessary to protect participants from any risks or burdens were respected.

Written informed consent was obtained of all participants of the cross-sectional surveys, focus group discussions, key informant interviews/discussions and client exit-interviews. In Mozambique, in addition, written informed consent was obtained from the peer educators who participated in the group discussions, and from the health care providers interviewed as part of the facility-level assessment.

In India, Kenya and South Africa all participants were 18 years or older. In Mozambique, 15-17 years old FSW were also eligible for participation in the cross-sectional survey. Although the age of adulthood in Mozambique is 18, FSW aged 15-17 years were eligible as emancipated minors, defined as individuals who are self-supporting, generally do not live with their parents, and have decision-making capacity. The National Bioethics Committee of Mozambique had on several previous occasions approved HIV survey protocols in which 15-17 year olds could provide their own informed consent for participation. These protocols included the 2009 National AIDS Indicator Survey and the 2011 Women's Health Monitoring Survey.

Confidentiality was guaranteed through the use of non-identifying survey codes and keeping all collected information locked or protected. Informed consent forms were stored separately from other data. Reimbursements were only given to cover extra costs, such as for transportation. Women identified as in need of services, such as having experienced violence or reporting to be HIV positive, were actively linked with existing services to assist these women.

The country-specific study protocols were approved by the responsible ethical boards in each country: the University of Witwatersrand's Human Research Ethics Committee in South Africa (ref: M120324), the National Committee of Bioethics for Health in Mozambique, the KNH/UoN Ethics and Research Committee in Kenya, and the Asha Kirana Institutional Ethics Committee in India. In Durban, the study protocol was also approved by the KwaZulu-Natal Provincial and eThekwini District Departments of Health, and in Mozambique by the Ministry of Health.

1.13 Limitations of the study design

Each of the study components has certain limitations which need to be taken into account when interpreting its results.

In the *cross-sectional surveys* and the *client exit interviews* we collected the information needed to calculate our indicators through face-to-face interviews using a structured questionnaire. This method

has a substantial risk of measurement bias, in particular reporting bias. Responses could be influenced by poor understanding of the question, poor recollection, social desirability, or reluctance to divulge sensitive personal information. For the CSS, we minimised this risk by formulating the questions at baseline and end-line, and across the four study sites, exactly the same, but we can nevertheless not exclude that some of the differences measured between the two surveys are a result of a differential measurement bias. The same applies to selection bias. Participants were recruited applying exactly the same sampling approach across surveys. However it cannot be excluded that in the baseline and end-line surveys, some subpopulations were differently tapped into, and that this contributes to some of the differences. In addition, data were corrected for the sampling bias induced by a respondent-driven sampling design. This assumes however that respondents correctly report their social network size, which is also susceptible to reporting bias.

Qualitative research techniques, such as *focus group discussions* allow a more in-depth understanding of how and why FSW use, or don't use, SRH services and the choice of place of care. The most important limitation with this method is that only a limited number of FSW can be consulted which contains a risk that they are not representative for the whole FSW population. For example, it might be FSW who were relatively more exposed to the carried out interventions. A similar risk exist for *key informant interviews.*

An analysis of *service statistics* can give a more exact picture of service use over time and demonstrate trends. However, they have to be available and sufficiently disaggregated. This was not always the case. For example, statistics on how many FSW use the general health services were not available at any of the sites. They also have to be recorded over time in a comparable way. In Mozambique, the recording tools changed as part of the intervention and this complicated the comparison between baseline and end-line.

To limit the above described limitations of different data collection methods, we used a mixed methods design, complementing the information obtained from the surveys and the service statistics with the results of the more in-depth qualitative research methods. We ensured that the topics addressed were comparable across methods. For example, the same topics investigated in the cross-sectional survey questionnaire were also discussed in the focus group discussions. Conclusions were based on a comparative analysis of all research components.

2 Results

2.1 Mysore, India

2.1.1 Cross-sectional surveys

Socio-demographic characteristics

At Baseline, 458 FSW completed the CSS, with 415 participating at end-line. The age distribution was similar between the two surveys, with women reporting a median age of 34 at baseline (1st CSS) and 32 at end-line (2nd CSS). Other characteristics differed between the two surveys. At end-line, many more reported to have at least primary completed (52.3%) than at baseline (25.4%), and the difference persisted after adjusting for the respondent-driven sampling effect (45.2% vs. 21.0%). At end-line, participants more often reported to be original from Mysore, to have resided less than 3 years in their current place of residence, and to have been away for more than one month in the past 12 months. Marital status was comparable, if grouping unmarried, married and widowed/divorced women together, although that more responded to be living with a husband (27.7% compared with 5% at baseline). Socio-demographic characteristics are presented in Table 1, and the data adjusted for the RDS sampling bias in Table 2. There is no clear explanation for the observed differences, and we cannot exclude that they have been caused by a different level of reporting, measurement or selection bias between the two surveys, rather than reflecting real changes in the FSW population since baseline.

Table 1: Socio-demographic characteristics of FSW - Unadjusted data

	1st CSS (N=458)		2nd CSS (N=415)	
Characteristic	n	%	n	%
Age (years)				
Median	34		32	
Q1 – Q3	29-38		28-38	
Range	18-48		18-45	
<=20	**8**	1.8	**4**	1.0
21-25	**56**	12.2	**58**	14.0
26-30	**133**	29.0	**121**	29.2
31-35	**110**	24.0	**87**	21.0
>=36	**151**	33.0	**145**	34.9
Place of origin				
Mysore district	**88**	19.2	**142**	34.2
Other district	**370**	80.8	**273**	65.8
Education				
None	**299**	65.3	**156**	37.6
Primary started	**68**	9.3	**46**	11.1
Primary completed	**51**	7.0	**192**	46.3
Secondary completed	**9**	1.2	**19**	4.6
Technical completed	**1**	0.1	**0**	0.0
Higher completed	**30**	4.1	**2**	0.5
Years living in current residence				
Median	**18**		**10**	
Q1 – Q3	**8-30**		**4-26**	
Range	**0.3-42**		**0.25-45**	
Was away from residence				
In the past year	**45**	9.8	**118**	28.4
Present relationship				
Unmarried (living alone)	**16**	3.7	**16**	3.9

	1st CSS (N=458)		2nd CSS (N=415)	
Unmarried (live-in partner)	**16**	3.7	**11**	2.7
Married (live with husband)	**23**	5.3	**115**	27.7
Married (live with partner other than husband)	**165**	37.8	**136**	32.8
Married - living alone	**158**	36.1	**64**	15.4
Divorced/separated - live alone	**24**	5.5	**1**	0.2
Divorced/separated - live with partner	**4**	0.9	**0**	0.0
Widowed - live alone	**4**	0.9	**58**	14.0
Widowed - live with partner	**27**	6.1	**14**	3.4
Unknown	**21**	4.6	**-**	-

Table 2: Socio-demographic characteristics of FSW - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
Age (years)				
<=20	**0.3**	0.2 – 0.8	**1.1**	0.1-3.1
21-25	**16.6**	11.2 – 23.4	**17.0**	9.2-26.4
26-30	**33.0**	20.8 – 42.1	**30.0**	22.3-38.0
31-35	**19.5**	13.7 – 25.2	**16.4**	11.3-22.2
>=36	**30.7**	23.2 – 39.2	**35.6**	27.5-43.5
Education				
Less than primary	**79.0**	67.4 – 87.7	**54.8**	45.7-63.3
Primary completed	**16.7**	8.1 – 27.8	**18.8**	11.7-27.4
Secondary completed	**4.3**	2.3 – 7.0	**26.4**	19.4-33.6
Years living in current residence				
<3 years	**11.6**	7.0 – 17.5	**22.0**	14.0-30.6
>= 3 years	**88.4**	82.5 – 93.0	**78.0**	69.4-86.0
Present relationship				
Unmarried	**8.9**	3.6-16.6	**13.6**	6.2-21.5
Married	**77.2**	68.6-84.4	**70.8**	62.6-79.6
Widowed/Divorced	**13.9**	9.3-19.7	**15.6**	10.9-20.4

Sex work characteristics

Sex work characteristics were similar between the two surveys. The median number of commercial sex acts at end-line was 1 a day and 18 in the past month. At Baseline, they were 2 and 20, respectively. The median amount charged per sex act remained consistent at 500 INR. Sex worker characteristics are presented in Table 3 and Table 4.

Table 3: Sex worker characteristics of FSW - Unadjusted data

Characteristic	1st CSS (N=458)		2nd CSS (N=415)	
	n	%	n	%
No of commercial sex acts in a day				
Median	**2**		**1**	
Q1 – Q3	**1-2**		**1-3**	
Range	**0-20**		**1-10**	
No of commercial sex acts in the past month				

Characteristic	1st CSS (N=458)		2nd CSS (N=415)	
	n	%	n	%
Median	**20**		**18**	
Q1 – Q3	**10-20**		**11-20**	
Range	**2-50**		**3-50**	
<=10	**120**	26.2	**104**	25.1
11-15	**61**	13.3	**103**	24.8
16-20	**183**	40.0	**136**	32.8
>20	**94**	20.5	**72**	17.4
Average amount charged for commercial sex (INR)				
Median	**500**		**500**	
Q1 – Q3	**300-500**		**300-700**	
Range	**100-1000**		**100-3000**	
Average amount charged for commercial sex (EUR)				
Median	**5.9**		**6.7**	
Q1 – Q3	**3.5-5.9**		**5.3-9.3**	
Range	**1.2-11.8**		**1.3-39.9**	
Has other source of income				
Yes	**159**	34.7	**176**	42.4
No	**299**	65.3	**239**	57.6

Table 4: Sex worker characteristics of FSW - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
No of commercial sex acts in the past month				
<=10	**23.6**	16.6-31.6	**37.6**	28.8-46.2
11-15	**19.5**	10.6-30.3	**21.8**	16.2-28.0
16-20	**35.8**	28.3-43.7	**19.5**	13.9-26.2
>20	**21.0**	14.4-28.8	**21.0**	13.4-29.6
Has other source of income				
Yes	**27.8**	21.2 – 35.1	**33.4**	25.7-41.5

Number of sex partners

The proportion of FSW who reported to have had a regular non-paying partner and the proportion who reported to have had another non-paying partner was substantially lower at end-line. 71.6% of the interviewed FSW reported having a regular non-paying partner at end-line, corresponding with an estimated 72% of all FSW in Mysore after adjusting for the RDS effect, compared with 95.4% at baseline, 96.8% after adjustment. 41% of FSW reported having another non-paying partner at end-line, compared with 64.9% at baseline. After adjusting for the sampling effect, this difference became even greater (20.7% vs. 59.6%), because FSW with another non-paying partner had on average a greater social network and therefore were therefore given less weight in the adjustment, and this effect was greater in the second survey. Again, there is no clear explanation for the observed differences in the proportion of FSW reporting to have non-paying partners, and we cannot exclude a different bias between the two surveys. For example, FSW could have understood differently what was meant by this type of partners.

The number and types of clients remained consistent across surveys. Number of sex partners is presented in Table 5 and adjusted in the Table 6.

Table 5: Number of sex partners

Characteristic	1st CSS (N=458)		2nd CSS (N=415)	
	n	%	n	%
No of clients in the past month				
Median	16		12	
Q1 – Q3	10-20		10-18	
Range	3-35		3-49	
<=10	182	39.7	179	43.1
11-15	120	26.2	107	25.8
>15	156	34.1	129	31.1
No of occasional clients in the past month				
Median	8		8	
Q1 – Q3	4-10		5-12	
Range	0-25		0-49	
0-4	140	30.6	75	18.1
5-9	111	24.2	170	41.0
>=10	207	45.2	170	41.0
No of regular clients in the past month				
Median	4		4	
Q1 – Q3	2-6		2-6	
Range	0-15		0-20	
0-2	123	26.9	145	34.9
3-4	119	26.0	95	22.9
5-6	139	30.4	89	21.5
>=7	77	16.8	86	20.7
Had a regular/steady non-paying partner in the past month				
Yes	437	95.4	297	71.6
No	21	4.6	118	28.4
Had an occasional non-paying partner in the past month				
Yes	297	64.9	170	41.0
No	161	35.2	245	59.0

Table 6: Number of sex partners - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
No of clients in the past month				
<=10	33.2	25.6-42.7	42.1	33.3-50.3
11-15	28.0	20.5-35.9	23.6	17.7-30.0
>15	38.8	28.3-49.0	34.3	26.0-43.6
No of occasional clients in the past month				
0-4	21.6	16.1-27.8	19.2	13.0-26.3
5-9	25.1	18.3-33.1	31.0	23.4-40.4
>=10	53.2	43.7-62.4	49.7	40.5-57.9
No of regular clients in the past month				
0-2	27.5	20.4-36.3	49.7	40.6-58.5
3-4	24.1	17.1-31.5	16.5	11.2-22.7
5-6	29.9	23.0-37.8	19.5	14.0-25.8
>=7	18.4	10.1-28.9	14.4	9.6-19.4
Had a regular/steady non-paying partner in the past month				
Yes	96.8	94.2 – 98.8	72.0	64.3-78.8
Had an occasional non-paying partner in the past month				

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
Yes	59.6	50.0 – 69.4	20.7	15.5-26.8

Use of HIV/SRH commodities and services by FSW - Crude data

Table 7 presents the unadjusted results of use of different HIV prevention and care commodities and services, as reported by the interviewed FSW in the baseline and end-line survey. Table 8, presents the results adjusted for the selection bias caused by the respondent-driven sampling approach, and thus assumed to represent the actual proportions in the entire Mysore FSW population, and the results of the statistical comparison between the two surveys.

Table 7: Use of HIV commodities and services by FSW – Crude data

	1st CSS		2nd CSS	
	N	%	N	%
Condom use at last sex with: (N=had this type of partner in the past month)				
Any client	458	94.1	415	97.6
New client	458	95.9	412	98.1
Regular client	374	90.6	346	97.4
Occasional partner	144	88.9	92	79.4
Regular partner	404	63.6	270	71.9
Always used condoms in past month with last: (N=had this type of partner in the past month)				
Regular client	373	82.3	346	83.2
Occasional partner	142	88.0	92	64.1
Regular partner	405	64.7	270	54.1
Knows HIV status of : (N=had this type of partner in the past month)				
Last non-paying partner	408	45.6	289	60.9
Last regular partner	397	48.1	264	58.3
Always uses condoms with all partners (N: Excludes women who desire pregnancy)				
Yes	441	50.1	406	66.0
Had condom break in the past year				
Yes	458	5.9	415	19.8
Ever used female condom				
Yes	457	2.6	413	2.2
Abnormal discharge or genital ulcer in past 12 months				
Yes	458	31.2	415	28.0
Care sought for last STI/RTI syndrome (N=had discharge or ulcer in past year)				
Yes	143	83.2	116	84.5
Ever tested for HIV				
Yes	458	96.5	415	99.3
When last tested for HIV (N=did not test positive for HIV before that period)				
Less than 3 months	428	31.1	381	75.3
Less than 6 months	431	52.4	382	87.7
Less than 12 months	432	89.0	385	98.4
Result of last test (N=ever tested for HIV)				
Positive	437	7.6	412	9.2
Currently using HIV care services (N= HIV positive)				
Yes	33	87.9	38	94.7
On ART	33	81.8	38	79.0
Used all HIV services she needed				
Yes	458	28.0	415	53.3

Table 8: Use of HIV commodities and services by FSW – Comparison between 1st and 2nd CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	Adjusted %	N	Adjusted %			
Condom use at last sex with: (N: had this type of partner in the past month)							
Any client	458	96.2	415	98.1	1.67	0.47-5.92	0.427
New client	458	97.4	412	98.2	1.20	0.29-4.87	0.800
Regular client	374	93.3	346	95.9	1.76	0.59-5.24	0.313
Occasional partner	144	94.2	92	58.0	0.10	0.03-0.27	<0.001
Regular partner	404	63.0	270	53.8	0.64	0.32-1.28	0.211
Always used condoms in past month with last: (N:had this type of partner in the past month)							
Any client	458	96.2	415	98.1	1.67	0.47-5.92	0.427
New client	458	97.4	412	98.2	1.20	0.29-4.87	0.800
Regular client	374	93.3	346	95.9	1.76	0.59-5.24	0.313
Always uses condoms with all partners (N: Excludes women who desire pregnancy)							
Yes	441	53.9	415	53.0	0.75	0.43-1.29	0.296
Knows HIV status of : (N: had this type of partner in the past month)							
Last non-paying partner	408	54.4	289	49.1	0.70	0.37-1.31	0.263
Last regular partner	397	57.3	264	48.5	0.80	0.43-1.47	0.467
Abnormal discharge or genital ulcer in past 12 months							
Yes	458	34.8	415	22.3	0.58	0.28-1.02	0.058
Care sought for last STI/RTI syndrome (N: had discharge or ulcer in past year)							
Yes	143	74.4	116	55.8	0.44	0.10-1.95	0.281
Ever tested for HIV							
Yes	458	95.2	415	97.8	2.31	0.20-26.6	0.502
When last tested for HIV (N: did not test positive for HIV before that period)							
Less than 3 months	428	26.3	381	73.3	7.25	3.94-13.4	<0.001
Less than 6 months	431	40.5	382	87.4	9.90	5.27-18.6	<0.001
Less than 12 months	432	76.8	385	95.7	6.83	2.11-22.1	0.001
Result of last test (N: ever tested for HIV)							
Positive	437	8.0	412	10.4	1.30	0.57-2.96	0.529
Currently using HIV care services (N: HIV positive)							
Yes	33	(92.7)*	38	(94.7)**	1.71	0.07-43.7	0.741
On ART	33	(92.8)*	38	(79.0)**	0.83**	0.23-2.98	0.776
Used all HIV services she needed							
Yes	458	23.3	396	41.0	2.15	1.28-3.62	0.004

* RDS adjusted proportion could not be calculated and the weighed proportion is shown instead.

**RDS adjusted proportion and weighed proportion could not be calculated and the non-adjusted/non-weighed proportion is shown instead.

Condom use

Condom use with new and occasional clients, as self-reported by the interviewed FSW, was already very high at baseline and it remained high, and even slightly further increased, at end-line. Self-reported condom use at the last contact with a regular client also further increased. Self-reported condom use with non-paying partners did however, overall, not increase. Condom use at last sex with a regular non-paying partner increased, but always having used a condom with this partner decreased. Condom use with the last occasional non-paying partner decreased, both at last sex act and always during the past month.

When extrapolating to the entire FSW population, adjusting for the sampling bias, we note that the slight increase in condom use with clients is maintained, although that it is not statistically significant. The decrease in condom use with non-paying partners becomes however bigger and is mostly statistically significant. Care has to be taken however to conclude that this reflects a real decrease in

condom use with this type of partners, because these questions are highly susceptible to misclassification of the type of partner (see above), reporting bias in the network size and/or reporting bias in condom use. We cannot exclude that the extent of bias was different between the two surveys, and that it is the cause of the detected decrease. Having consistently used a condom with all last partners of different types in the past month remained quite stable, after adjusting for the selection bias.

Condom breakage was statistically significantly more often reported at end-line (20.5% compared to 6.6% at Baseline).

STI care
Less FSW had genital symptoms in the past year at end-line than at baseline (34.8% vs. 22.3%). The number of FSW who reported to have sought care for these genital symptoms was slightly higher (83.2 vs. 84.5), but lower when adjusting for the sampling bias (74.4 vs. 55.8).

HIV testing
The number of FSW reporting to have ever been tested for HIV increased from 95.2% to 97.8%, and the number recently tested increased significantly. Almost three quarters (73.3%) reported to have been tested in the past 3 months, while at baseline this was only one quarter (26.3%). However, it has to be observed that at baseline the recall periods might not always have been well understood and the actual proportion of FSW who recently tested might have been underestimated.

HIV care
The proportion of FSW reporting to be HIV positive is similar across the two surveys (8.0% at baseline vs. 10.4% at end-line). The proportion reporting to be in HIV care was already very high at baseline (92.7%) and remains high (94.7%). A lower proportion however reported to be taking ART at end-line (79% vs. 92.8% at baseline).

All HIV services combined
Calculating the same index as at baseline (combining consistent condom use with all partners, care seeking for last STI episode, HIV testing in the last 6 months and being in HIV care), we note a substantial and significant increase, because of the increase in HIV testing.

Table 9 presents the unadjusted results of the use of SRH commodities and services, other than for HIV prevention and care, and Table 10 the adjusted and comparison results.

Table 9: Use of other SRH commodities and services by FSW – Crude data

	1st CSS		2nd CSS	
	N	%	N	%
Currently using contraception (N= not wanting to get pregnant, not pregnant, and able to conceive)				
Yes	381	98.4	396	100
Main contraception method used (N=currently using modern contraception)				
Injectable contraceptives	374	0.3	396	3.0
Oral contraceptives	374	1.3	396	5.8
IUD	374	1.1	396	0.3
Implant	374	0.3	396	0.0
Condom	374	6.2	396	9.9
Female sterilization	374	90.6	396	81.1
Currently using a non-barrier modern contraceptive method (N= not wanting to get pregnant, not pregnant, and able to conceive)				
Yes	379	92.6	396	90.2
Ever used emergency contraception				
Yes	455	3.3	415	4.3
Ever got pregnant while didn't want to get pregnant in the last five years				

	1st CSS		2nd CSS	
	N	%	N	%
Yes	458	9.4	397	7.7
Action taken for unwanted pregnancy (N=had unwanted pregnancy in the past 5 years)				
Went to a health facility	43	88.4	32	90.6
Kept the pregnancy	43	11.6	32	9.4
Found other solution	43	0.0	32	0.0
Ever tested for cervical cancer				
Yes	458	10.9	415	72.8
Ever tested for cervical cancer (N= Age>=30 years)				
Yes	337	10.4	232	72.7
Forced to have sex in the past 12 months				
Yes	458	9.0	415	2.7
Condom use at last forced sex incident (N=Was forced to have sex in the past 12 months)				
Yes	39	46.2	11	27.3
Sought medical care for last forced sex incident (N=Was forced to have sex in the past 12 months)				
Yes	41	56.1	11	54.6
Used all SRH services she needed				
Yes	428	20.8	408	53.9
Used all HIV/SRH services she needed				
Yes	458	6.6	415	29.6

Table 10: Use of other SRH commodities and services by FSW – Comparison between 1st and 2nd CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	Adjusted %	N	Adjusted %			
Currently using contraception (N: not wanting to get pregnant, not pregnant, and able to conceive)							
Yes	381	95.8	396	100.0	-	-	-
Main contraception method used (N: currently using contraception)							
Injectable contraceptives	373	0.0	396	2.46	105	40.4-275	<0.001
Oral contraceptives	373	0.6	396	11.0	12.0	2.32-61.6	0.003
IUD	373	1.0	396	(0.3)*	0.27	0.06-1.31	0.105
Implant	373	0.3	396	0.0	-	-	-
Condom	373	10.0	396	14.7	1.44	0.16-13.0	0.747
Female sterilization	373	88.2	396	71.5	0.39	0.08-1.91	0.244
Currently using a non-barrier modern contraceptive method (N= not wanting to get pregnant, not pregnant, and able to conceive)							
Yes	379	85.1	396	85.3	0.97	0.21-4.47	0.964
Ever used emergency contraception							
Yes	455	2.4	415	6.7	2.65	0.45-15.7	0.283
Ever got pregnant while didn't want to get pregnant in the last five years							
Yes	458	8.0	397	7.2	0.88	0.41-1.88	0.752
Action taken for unwanted pregnancy (N=had unwanted pregnancy in the past 5 years)							
Went to a health facility	43	(93.7)*	32	(96.0)*	1.64	0.13-20.5	0.697
Kept the pregnancy	43	(6.3)*	32	(4.0)*	-	-	-
Found other solution	43	(0.0)*	32	(0.0)*	-	-	-
Ever tested for cervical cancer							
Yes	458	11.5	415	56.0	9.85	5.29-18.3	<0.001
Ever tested for cervical cancer (N= Age>=30 years)							
Yes	337	13.6	232	60.5	10.8	5.41-21.7	<0.001
Forced to have sex in the past 12 months							

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	Adjusted %	N	Adjusted %			
Yes	458	7.1	415	2.0	0.27	0.08-0.88	0.030
Sought medical care for last forced sex incident (N=Was forced to have sex in the past 12 months)							
Yes	41	(51.9)*	11	(79.9)*	0.94**	0.21-4.12	0.932
Used all SRH services she needed							
Yes	428	25.7	408	51.4	2.91	1.63-5.20	<0.001
Used all HIV/SRH services she needed							
Yes	458	5.6	415	21.9	4.46	1.97-10.1	<0.001

* RDS adjusted proportion could not be calculated and the weighed proportion is shown instead.
**RDS adjusted proportion and weighed proportion could not be calculated and the non-adjusted/non-weighed proportion is shown instead.

Contraception
The use of contraception, amongst FSW who do not want to become or are pregnant and are able to conceive, was already very high at baseline (95.8%) and was 100% at end-line. In the methods used, we observe a significant increase of the use of hormonal contraceptives (0.6% vs. 11%). Emergency contraception was used slightly more at end-line than at baseline (6.7% vs. 2.4%), but still rarely used. The difference was not statistically significant.

Unwanted pregnancies
The proportion that reported to have had unwanted pregnancies in the past 5 years was similar across surveys (8% at baseline vs. 7.2% at end-line). The proportion who said that they sought a solution for their unwanted/unintended pregnancy at a health facility was already high at baseline and remained so at end-line.

Cervical cancer screening
Ever having been screened for cervical cancer increased five-fold between surveys and more than half of the FSW now have ever been screened (56.0 % vs. 11.5%). The unadjusted data shown even an increase in VIA testing from 10.9% at baseline to 72.7% at end-line.

Sexual and gender-based violence
According to the unadjusted data, 8.9% at baseline and only 2.6% at end-line reported to have been forced to have sex. This was similar in the adjusted data, which showed the proportion of FSW who reported to have been forced to have sex was significantly lower at end-line (2% vs. 7.1% at baseline). The number of FSW who reported to have been a victim of forced sex was too small to make any valid comparisons between the two surveys in regards to care seeking or condom used during forced sex.

All SRH services, other than HIV/STI, combined
The index of the use of SRH services/commodities, other than HIV/STI, also significantly increased between surveys. The index includes the use of a non-barrier contraception method, ever having been screened for cervical cancer if older than 30 years, and having sought medical care for last forced sex. The large increase is completely attributable to the increase in cervical cancer screening.

All SRH/HIV services combined
The overall index also increased substantially and statistically significantly. The estimate is that about a fifth of FSW are now accessing and using all commodities/services needed, about four times more than at baseline.

Stigma and Discrimination
Using the unadjusted data we find 25.1% at baseline and 26.3% at end-line disclosed their FSW identity at government hospitals while seeking services. Adjusted data documents significantly less FSW

reported disclosing involvement in sex work when visiting public health services (28.3% at Baseline vs. 15.3% at end-line). But of those who disclosed, significantly more FSW reported feeling treated like everyone else when visiting public health services (78.7% vs. 20.0% at baseline) (Tables 11 and 12).

Table 11: Stigma and discrimination – Crude data

	1st CSS		2nd CSS	
	N	%	N	%
Discloses as being a FSW when visiting public health services				
Yes	458	25.1	415	28.2
Feels treated like everyone else, when visiting public health services				
Yes	456	76.1	415	83.1
Feels treated like everyone else, when visiting public health services (N=discloses when visiting public health facilities)				
Yes	115	20.7	117	77.8

Table 12: Stigma and discrimination – Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%	N	%			
Discloses as being a FSW when visiting public health services							
Yes	458	28.3	415	15.3	0.42	0.24-0.76	0.004
Feels treated like everyone else, when visiting public health services							
Yes	456	74.0	415	87.2	2.21	1.13-4.31	0.021
Feels treated like everyone else, when visiting public health services (N=discloses when visiting public health facilities)							
Yes	115	20.0	117	78.7	14.6	4.6-46.0	<0.001

Exposure to Peer Education

Coverage of the peer outreach activities was nearly 100% at baseline and reached full coverage at end-line. Nevertheless, there was a decrease in the proportion of FSW who reported to have had at least 10 contacts with a peer educator that was almost statistically significant at the 5% threshold (p=0.057). This decrease could potentially be a result of differential reporting bias (Tables 13 and 14).

Table 13: Exposure to peer education – Crude data

	1st CSS		2nd CSS	
	N	%	N	%
Had contact with a peer educator in the last 12 months				
Yes	458	99.3	415	100.0
Had at least 10 contacts with a peer educator in the last 12 months (all FSW)				
Yes	456	97.8	415	97.8
Services or information received from peer educators (N=had contact with a peer educator)				
General HIV/STI prevention	455	89.9	415	90.4
Condoms	455	100.0	415	100.0
Referral for STI treatment	455	89.0	415	90.8
Referral for HIV testing	455	90.6	415	91.1

Table 14: Exposure to peer education – Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	RDS-Adjusted %						
	N	%	N	%			
Had contact with a peer educator in the last 12 months							
Yes	458	99.6	415	100.0	-	-	-
Had at least 10 contacts with a peer educator in the last 12 months (all FSW)							

	1st CSS		2nd CSS		OR	95% CI	p-value
	RDS-Adjusted %						
	N	%	N	%			
Yes	456	98.1	415	91.7	0.21	0.04-1.05	0.057
Services or information received from peer educators (N=had contact with a peer educator)							
General HIV/STI prevention	458	93.7	415	89.6	0.56	0.27-1.17	0.122
Condoms	458	99.6	415	100.0	-	-	-
Referral for STI treatment	458	90.2	415	89.0	0.83	0.39-1.77	0.628
Referral for HIV testing	458	92.1	415	90.9	0.80	0.37-1.65	0.544

Where Care Was Sought

All places where condoms are usually obtained were more frequently mentioned in the second CSS than at baseline, probably indicating that in the second CSS there was more probing. Nevertheless, there were some important changes. Peer educators were the second most important source (62%) and pharmacies the fifth (36.2%), while at baseline they were only fourth and ninth, respectively. The Ashodaya clinic remains however by far the most important source (100%), and also friends (52.4%), and public health facilities (36.5%) continue to be important sources.

Where FSW reported to usually go for general health care was quite different between the two surveys. Many more FSW mentioned Ashodaya (either the Ashodaya clinic or the Ashodaya outreach clinic) as a source of general health care than at baseline, and substantially less public health facilities. Private health facilities were mentioned almost twice as much at end-line than at baseline (16.3% vs. 30.7%, p value: 0.005). Though there is no statistically significant change in place for seeking contraception services, yet there is a reduction in number of FSW seeking contraception at public health facility (75% at Baseline vs. 47.2% at end-line), almost one-fifth accessing it from Ashodaya clinic (0% at Baseline vs. 19.4% at end-line) and the rest from private for profit health facilities. Ashodaya continues by far to be the most reported source of STI care, but substantially and significantly more FSW reported using a private clinic at end-line (26% vs. 1.6%, p value: 0.002). No changes were observed in the place where FSW reported to have last been tested for HIV, with Ashodaya ICTC being most commonly used (86.7% at end-line). For HIV care, public health facilities remain the main place of care (89.9% end-line). All FSW reported at end-line that they were last screened for cervical cancer at either the Ashodaya clinic or by the Ashodaya outreach clinic, indicating that the large increase in screening for cervical cancer is due to this service now being offered there.

Table 15: Where care was obtained – Comparison between first and second CSS

	RDS adjusted %				
	1st CSS	2nd CSS	OR	95% CI	p-value
Condoms (N=all)***	N=458	N=415			
Ashodaya clinic	100.0	100.0	-	-	-
Friends	35.6	52.4	2.16	1.30-3.62	0.003
Public health facilities	24.0	36.5	1.83	1.07-3.10	0.026
Peer Educators/ CHW	19.1	62.0	6.84	3.65-12.8	<0.001
At work	6.0	10.1	1.61	0.75-3.45	0.220
Private-for-profit facilities	4.4	7.6	2.08	0.66-6.60	0.213
Market/Stand/Street vendor	1.4	3.4	2.73	0.06-118	0.601
Shop/Supermarket/Petrol station	1.3	3.1	1.97	0.41-9.56	0.398
Pharmacy/ Chemist	0.9	36.2	65.8	18.4-235	<0.001
Café/Bar/Night club/Hotel	0.0	0.0	-	-	-
General health care (N=all)***	N=458	N=415			
Public health facility	75.0	45.6	0.28	0.16-0.49	<0.001
Private-for-profit health facility	16.3	30.7	2.61	1.33-5.12	0.005
Targeted services	25.8	80.9	11.0	4.92-24.6	<0.001

	RDS adjusted %				
	1st CSS	2nd CSS	OR	95% CI	p-value
Pharmacy/ Chemist	0.0	1.2	1.77	0.04-84.9	0.771
Traditional healer	(0.2)*	0.0	-	-	-
Contraception (N=using non-barrier contraception method other than sterilisation)	N=12	N=36			
Public health facility	(75.0) **	(47.2)**	0.18	0.02-1.82	0.142
Private-for-profit health facility	(25.0) **	(33.3)**	1.08	0.10-12.2	0.952
Ashodaya clinic	0.0	(19.4)**	-	-	-
STI care (N=sought care for last STI episode)***	N=101	N=98			
Ashodaya clinic	84.9	(94.0)*	3.02	0.74-12.4	0.125
Public health facility	9.9	25.3	1.70	0.19-15.6	0.636
Private-for-profit health facility	1.6	(26.0)*	26.6	3.48-203	0.002
Pharmacy/ Chemist	(0.9)*	0.0	-	-	-
HIV testing (N=was tested in the past 2 years)	N=414	N=395			
Ashodaya clinic	79.1	87.6	1.85	0.68-5.06	0.231
Public health facility	20.1	11.5	0.57	0.20-1.64	0.296
Private-for-profit health facility	1.0	0.3	0.24	0.02-3.02	0.268
HIV care (N=is currently in HIV care)	N=29	N=36			
Public health facility	100.0	(89.9)**	-	-	-
Private-for-profit health facility	0.0	(11.1)**	-	-	-
Cervical cancer screening (N=Was ever tested for cervical cancer)	N=50	N=302			
Public health facility	(48.9)*	0.0	-	-	-
Private-for-profit health facility	(2.9)*	0.0	-	-	-
Ashodaya clinic	(40.0)*	100.0	-	-	-
SGBV care (N=sought care for last forced sex)***	N=23	N=6			
Ashodaya clinic	(91.3) **	(50.0)**	-	-	-
Public health facility	0.0	(50.0)**	-	-	-
Private-for-profit health facility	(13.0)**	(50.0)**	-	-	-

* RDS adjusted proportion could not be calculated and the weighed proportion is shown instead.

**RDS adjusted proportion and weighed proportion could not be calculated and the non-adjusted/non-weighed proportion is shown instead.

***Multiple answers possible

Reason for choosing the place of care

No major changes were observed in the reasons for choosing the place of care, compared to baseline. The reasons most commonly mentioned at baseline, continue to be the most common at the end-line: Where they always go, the cost and (except for contraception) privacy.

Satisfaction

Satisfaction with the availability of SRH commodities and services was at end-line found to be quite high. Condom affordability and condom availability is considered by almost all FSW to be sufficient. The large majority of those who had an unwanted pregnancy in the past 5 years were satisfied or very satisfied with the availability of services. The majority were also very satisfied with the availability of other SRH services, in particular those offered at the Ashodaya clinic, such as STI care and HIV testing. Details on satisfaction with the availability of services are presented in Table 16.

Table 16: Satisfaction with the availability of services

Service	n	Crude %	RDS Adjusted %	95% CI
1.Condom affordability (N=415)				
Very affordable	409	98.6	-	-

Service	n	Crude %	RDS Adjusted %	95% CI
Somewhat affordable	5	1.2	-	-
Not affordable	1	0.2	-	-
2. Male Condom availability (N=415)				
Sufficiently	406	97.8	98.9	97-99.8
No opinion	9	2.2	1.2	0.2-3.0
Not sufficiently	0	0.0	0.0	-
No information	3	0.8		
3. Unwanted Pregnancy Services Availability (N= had an unwanted pregnancy in the past 5 years: 32)				
Very satisfied	25	78.1	-	-
Satisfied	5	15.6	-	-
A little satisfied	1	3.1	-	-
Not satisfied	1	3.1	-	-
Very satisfied/Satisfied	32	93.8	-	-
A little satisfied/Not satisfied	2	6.3	-	-
5. Contraceptive Services Availability (N= is currently using a non-barrier contraceptive method other than female sterilisation: 75)				
Very satisfied	62	82.7	-	-
Satisfied	10	13.3	-	-
A little satisfied	1	1.3	-	-
Not satisfied	2	2.7	-	-
Very satisfied/Satisfied	72	96.0	-	-
A little satisfied/Not satisfied	3	4.0	-	-
6. STI care services Availability (N= had an STI in the past 12 months and sought care: 98)				
Very satisfied	90	91.8	-	-
Satisfied	7	7.1	-	-
A little satisfied	1	1.0	-	-
Not satisfied	0	0.0	-	-
Very satisfied/Satisfied	97	99.0	-	-
A little satisfied/Not satisfied	1	1.0	-	-
7. HIV testing services availability (N= was ever tested for HIV: 412)				
Very satisfied	361	87.6	-	-
Satisfied	38	9.2	-	-
A little satisfied	11	2.7	-	-
Not satisfied	1	0.2	-	-
No information	1	0.2		
Very satisfied/Satisfied	399	96.8	-	-
A little satisfied/Not satisfied	12	2.9	-	-
No information	1	0.2		
8. HIV care services availability (N= is currently in HIV care: 36)				
Very satisfied	29	80.6	-	-
Satisfied	6	16.7	-	-
A little satisfied	1	2.8	-	-
Not satisfied	0	0.0	-	-
Very satisfied/Satisfied	35	97.2	-	-
A little satisfied/Not satisfied	1	2.8	-	-
9. SGBV care services availability (N= sought care for last forced sex episode: 6)				
Very satisfied	5	83.3	-	-
Satisfied	1	16.7	-	-
A little satisfied	0	0.0	-	-

Service	n	Crude %	RDS Adjusted %	95% CI
Not satisfied	0	0.0	-	-
Very satisfied/Satisfied	6	100.0	-	-
A little satisfied/Not satisfied	0	0.0	-	-

2.1.2 Focus group discussions

Following the DIFFER intervention, a second round of eight focus group discussions occurred. Women who participated in the FGDs were more aware of and had better access to SRH options at end-line. The second round of analysis focused on the awareness/access, acceptability, and sustainability of the intervention.

Socio-demographic characteristics

The information sheet (socio-demographic questionnaire) of the FGD participants revealed that the median age of the participants was 32.2 years and 55% were illiterate. Most of the FSW (70.6%) work in mixed settings of street and home. Almost 70% of the participants did not have any other source of income. The median number of children was 2. The mean number of clients in the last month was reported to be 15 and that of non-paying partners was 2.

Awareness and Access

> *Awareness on the ovarian cancer and sexual reproductive health is the only difference. Few years back we were not aware of the symptoms and causes for ovarian cancer, SRH etc. But now we can educate others. [Focus group participant, end-line]*

Through DIFFER, Ashodaya partnered with other hospitals to ensure access to non-stigmatized reproductive health services. Community leaders developed relationships with hospital staff and provided accompaniment to appointments to create a more welcoming environment, increase access to services, and minimize discrimination.

> *We know that we can avail the cervical cancer screening at KR hospital as well. But since we are not comfortable with it we had a meeting including community and Ashodaya staff, discussed of requesting Amruthakrupa hospital to provide with such services. We had called doctors and staff from there and had meeting with them, introduced them to the sex worker community here for which they did not hesitate and happily agreed to serve us. Similarly Ashakirana. Some of our community members go to Ashakirana and get the services. [Focus group participant, end-line]*

New SRH services increased knowledge of cervical cancer and access to testing among the women participants. FSW were able to come to Ashodaya to treat symptoms and were able to access screening and effective treatment for their cervical cancer. These new services also increased women's own commitment to regular screenings.

> *I came to Ashodaya clinic with stomachache, was not aware of its seriousness, after necessary tests they found a tumour and referred me to Asha Kirana hospital for operating the same. After the operation now, I make sure I get myself checked every month coming to the clinic here and am healthy and happy now. [Focus group participant, end-line]*

> *One of my friend who is also a sex worker had 3 tumours each of 100gms. She went to Amruthakrupa and doctor on screening fixed up a later date to remove it. Upon removal she is now relieved from the pain and healthy. Now she is able to work and she is also continuing to do sex work. [Focus group participant, end-line]*

Accompaniment, which has always been a cornerstone of Ashodaya's support services, continues to be an important part of the program, ensuring that women have support in navigating the health care system to attend their appointments.

> *Some of our community members hesitate to accompany any to the hospital, In such cases our counsellors at Ashodaya go with them to the hospital, get the screenings done and drop them back safe. [Focus group participant, end-line]*

Ashodaya's increased involvement in SRH services has led to a decrease in discrimination faced by FSW and access to non-judgemental, tailored care to meet the specific needs of FSW communities.

> *Yes several times. They never bother about us. They speak and treat us rudely. Make us wait for long time. These are the type of treatment what we used to get from other hospitals…*
>
> *But now it is not the same. Ashodaya is with us. Moreover we share such experiences when we come here. So the next we had to go to these government hospitals, which we seldom go, Ashodaya volunteer was there with us who made sure we got all the treatments and facilities with dignity. Happy about it. [Focus group participant, end-line]*
>
> *We approach them as a community member because there are nearly 7-8 members from Ashodaya who also work at K R hospital…*
>
> *There is no such discrimination over there, they treat us as common people. In addition to it, if they come to know that we are members of Ashodaya then we will be benefited with the hassle free & best treatment. [Focus group participant, end-line]*

Outreach also ensures that women can access support in their local communities, or travel to Mysore to access services, based on their preference.

> *We as a sex worker are not limited to one locality or city we do this work at different cities as well and then get contacts of our community members where we also talk to them and share the details of Ashodaya, which can help them in distress. Like we have our clinics and offices at Mandya, Madikeri, etc and our community members over there can avail all the benefits and help Ashodaya gives there as well. Many a times our contacts will be in some problem where I cannot reach in person, in such places Ashodaya has always been there for the community. [Focus group participant, end-line]*

Acceptability of SRH Services

Women expressed satisfaction with the new SRH services offered by Ashodaya and stated that they benefitted from this expansion of services.

> *Earlier Ashodaya used to work upon the prevention of HIV and other STIs but now it is also working for reproductive health, which we find as a great improvement in the services provided to us. [Focus group participant, end-line]*
>
> *Since we are into sex work, their chances are more for uterus related problems and it is a serious issue, so we need to get it treated. Therefore, we find these services as very helpful. [Focus group participant, end-line]*
>
> *Yes. There is a major improvement in the clinical services. Like we can get all the tests done here and there is easy access to medicines and the issues we have. It has eased us from reaching other doctors and hospitals where we cannot discuss our problems so openly. [Focus group participant, end-line]*

The free services were one of the major reasons for women's satisfaction with new SRH services provided by Ashodaya. The cost of treatment elsewhere has previously created barriers to accessing

these services. Furthermore, women pointed out that not charging for services did not negatively impact the quality of care.

> *Being a sex worker we hardly earn 500 a day where we have to take care of our children sometimes husband, and boyfriend. In such a situation taking care of our health is challenging. Ashodaya has always been for us where we get our regular health check up and thereby take care of our health. [Focus group participant, end-line]*

> *For instance, a blood check if done outside would cost us Rs.500 but the same will be done free of cost at Ashodaya office. Other than that we get free tablets, condoms, RMCs and doctor check-ups. You are required to pay Rs.100 as membership fee, which is enough to avail not only such medical benefits but also to get loan facilities from Ashodaya. [Focus group participant, end-line]*

> *I prefer Ashodaya rather than any other clinic because here treatment is free of cost and the monetary factor doesn't effect the quality of treatment in contrast to other clinics. [Focus group participant, end-line]*

Sustainability

As found in the Baseline FGDs, the women interviewed at end-line expressed a desire for Ashodaya to continue to offer new services onsite that would benefit their community.

> *We are satisfied with the facilities provided by Ashodaya to us, we request the organization to provide more and more health facilities to our community in future as well. Instead of referring us to government hospitals for further treatment if they bring about advancement in current facilities all under one roof, it will be helpful to our community members. [Focus group participant, end-line]*

2.1.3 Service statistics

> *Just because we are sex workers, people used to think our only problems were about HIV and STI. We are women first, though our job is sex work. We do have problems like other women. We need contraception as many of us cannot use condoms with our lovers. We need services like cervical cancer screening. I tested positive for cervical cancer, am treated and fine now. Ashodaya provided us all the services that are required for women. Even for those services that cannot be provided at Ashodaya, they make sure we're taken to hospital and provided the services... they indeed made us feel special. [Suma, a sex worker, Ex-Secretary, Ashodaya]*

The main service provider for the FSW in DIFFER was the Ashodaya clinic. For general population women (GPW), Ashodaya worked with Asha Kirana Hospital where the situation assessment documented the need for SRH services for HIV positive women. In this section, we present the FSW data from Ashodaya clinic and GPW data from Asha Kirana.

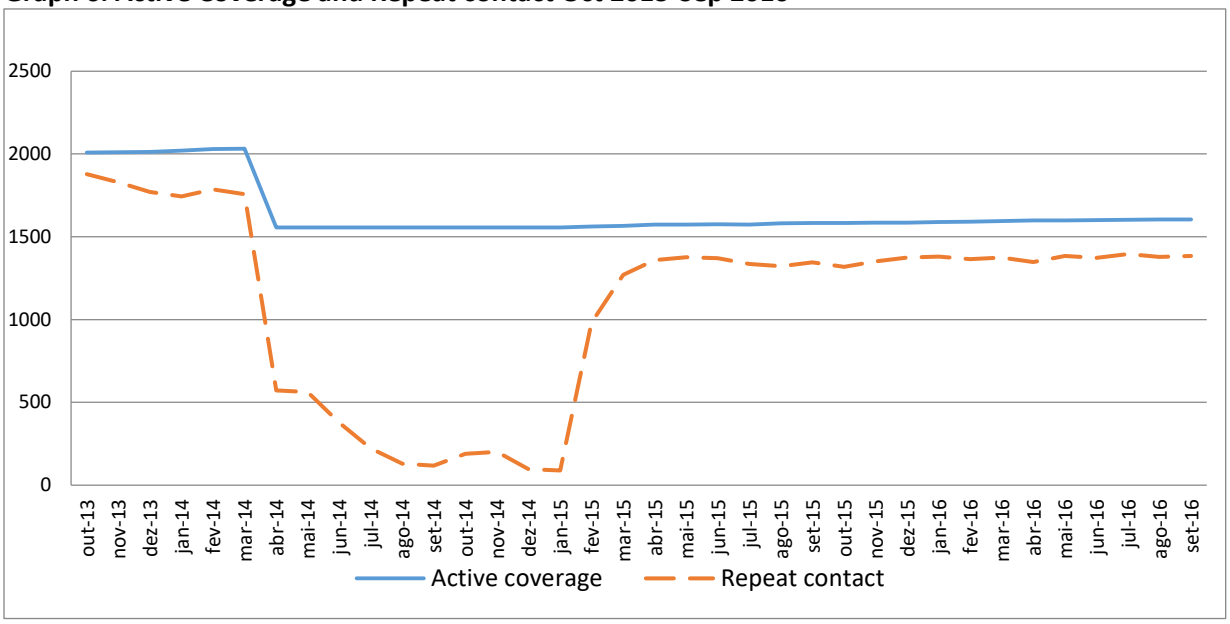
Ashodaya Clinic

Service statistics were collected between October 2013 and September 2016. Data found that most HIV/STI service utilization and outreach coverage was and continued to be high. The introduction of VIA testing throughout the project resulted in early detection of cervical cancer, follow-up, and treatment. DIFFER built on a well-established targeted intervention (TI) and generated demand for services beyond HIV/SRH. Involving community from planning to implementation resulted in high satisfaction and uptake of SRH-HIV services. Service statistics are detailed below. Overall there is a clear increasing trend in the number of visits at the Ashodaya clinic over the duration of the DIFFER intervention. These are most outspoken for family planning and cervical cancer screening, services that were not offered prior to DIFFER. We present here the data as per activities of DIFFER.

Peer Outreach Activities

Peer outreach has always been at the heart of the services offered by Ashodaya, with complete coverage reached. This is done as part of the existing TI. Graph 6 shows active coverage on a monthly basis. Of the total monthly active coverage, 86.2% is repeat contact. There is however a clear dip in activities and repeat contact during the period between April 2014 and March 2015, likely because of reduced funding during that period.

Graph 6. Active Coverage and Repeat contact Oct 2013-Sep 2016



Note: Active coverage is defined as using any of Ashodaya's available services. Repeat contact refers to being contacted and taking services from a peer educator at least twice in a month.

Condom distribution

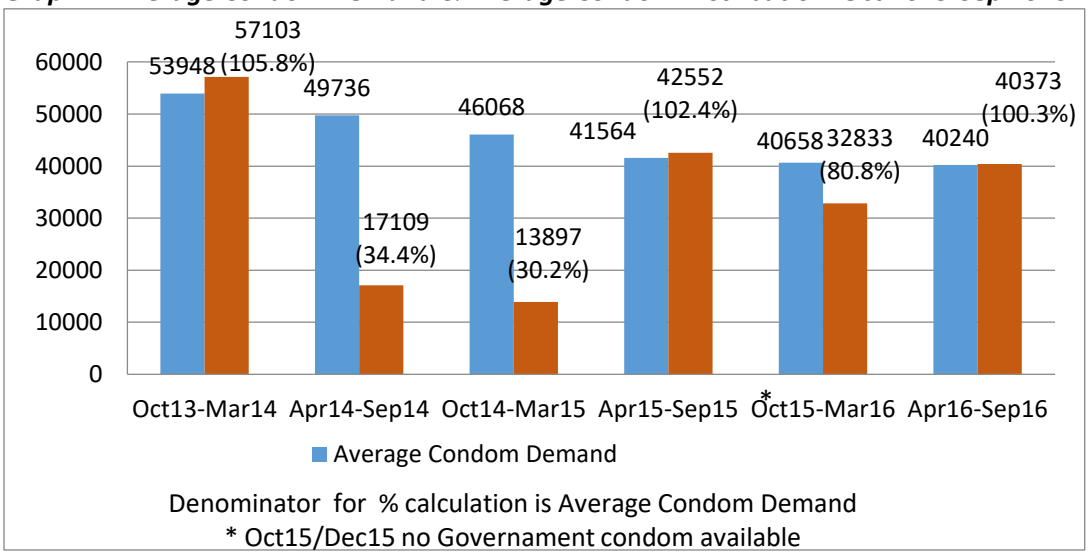
As far as condom distribution is concerned, Graph 7 shows condom demand per quarter and condoms actually distributed per quarter. Condom demand is calculated by using the following formula:

Condom demand per week per FSW= # active sex work days in a week X # sex acts per day

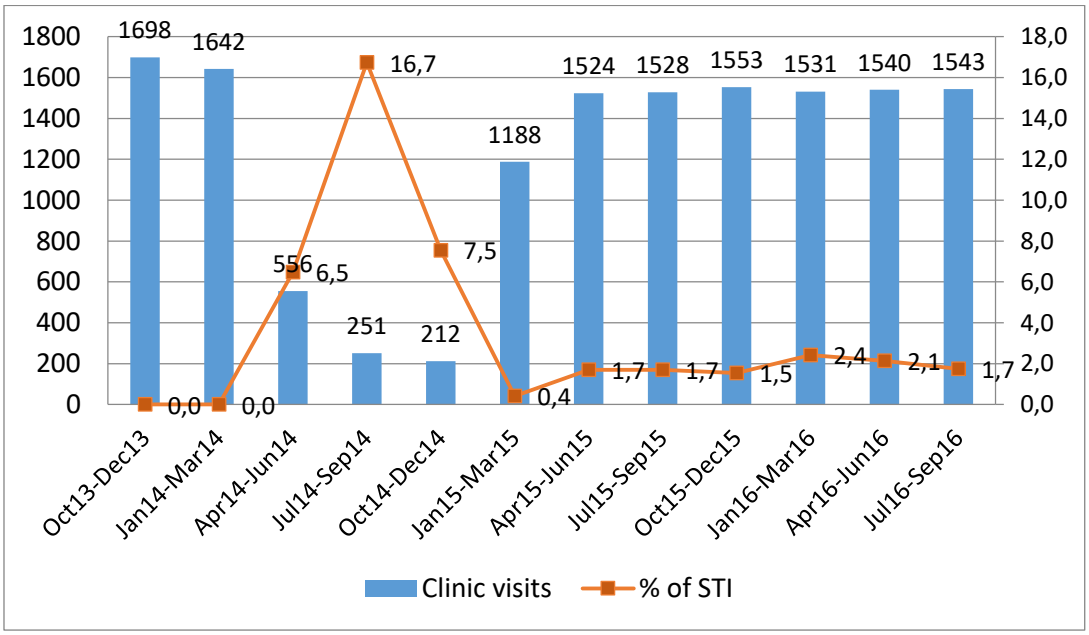
Condom demand per month per FSW= 4 X Condom demand per week per FSW

From the graph below, it is evident that condom distribution is matching (or even higher) the condom demand. However, similar to the previous graph (Graph 6), the period when there was decline in repeat contact, the condom distribution also shows a drastic reduction. This was mainly because government didn't supply condoms and therefore, there was less availability of condoms.

Graph 7. Average Condom Demand & Average Condom Distribution: Oct 2013-Sep 2016



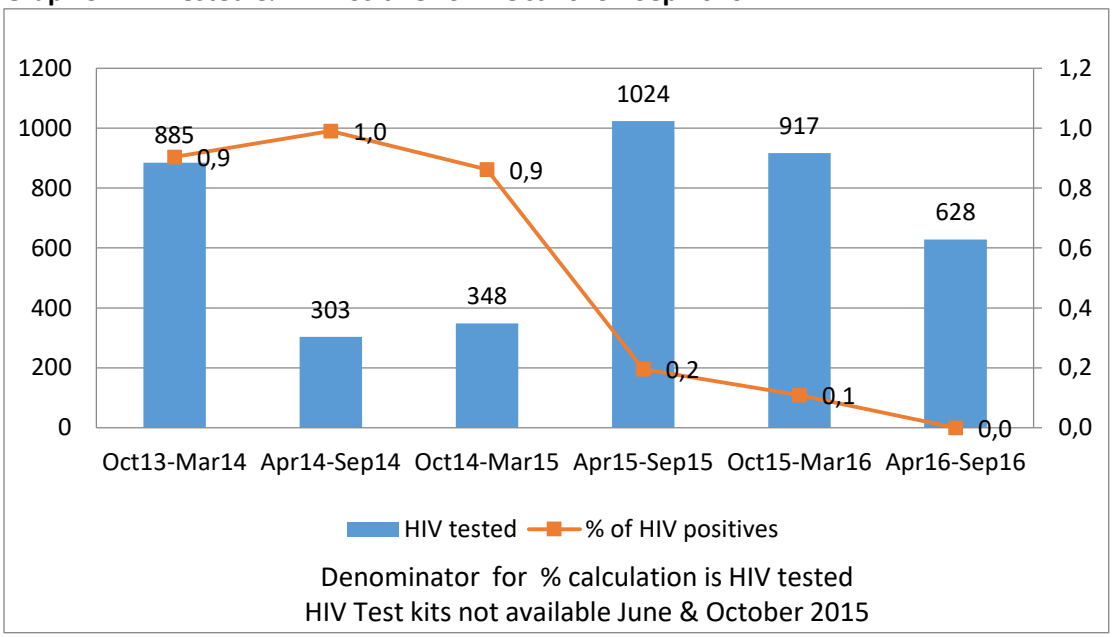
Graph 8. Clinic Visits & % of STIs Treated: Oct 2013-Sep 2016



STI care

Graph 8 shows the total number of clinic visits and the proportion of these that were identified and treated STI cases. During April 2014 to March 2015, there was no Government funding available for programming, hence clinic attendance was low. However, STI cases were proportionally high during that time. This shows that despite low clinic attendance, those who had STI were visiting clinics and seeking treatment. In continuation to the earlier graph, this could also be because of less availability of condoms during that period. During the project period a total 272 (16.9%) STI cases were treated.

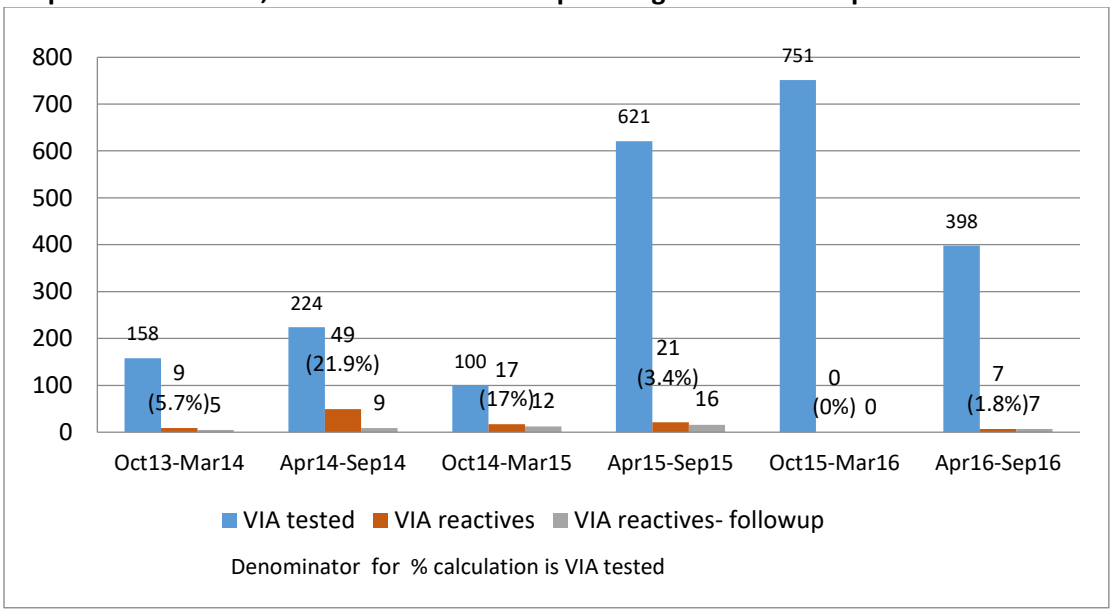
Graph 9. HIV Tested & HIV Positive FSW: Oct 2013 - Sep 2016



HIV testing and care

During the project period a total of 16 new HIV incidents were identified and a cumulative of 92 were registered to the ART centre. Among them, 43 are on ART (as per the treatment guideline requirement CD ≤300). Graph 9 shows from April 14 – October 2015, due to non-availability of HIV test kits, the number of HIV tests conducted were very low. Similar to the earlier graphs, this also points to the fact that at a time when condom availability was low (April 2014 – March 2015), both STI cases and HIV detection went up.

Graph 10. VIA Tested, Reactives and Follow-up Among FSW: Oct13-Sep16



Cervical cancer screening

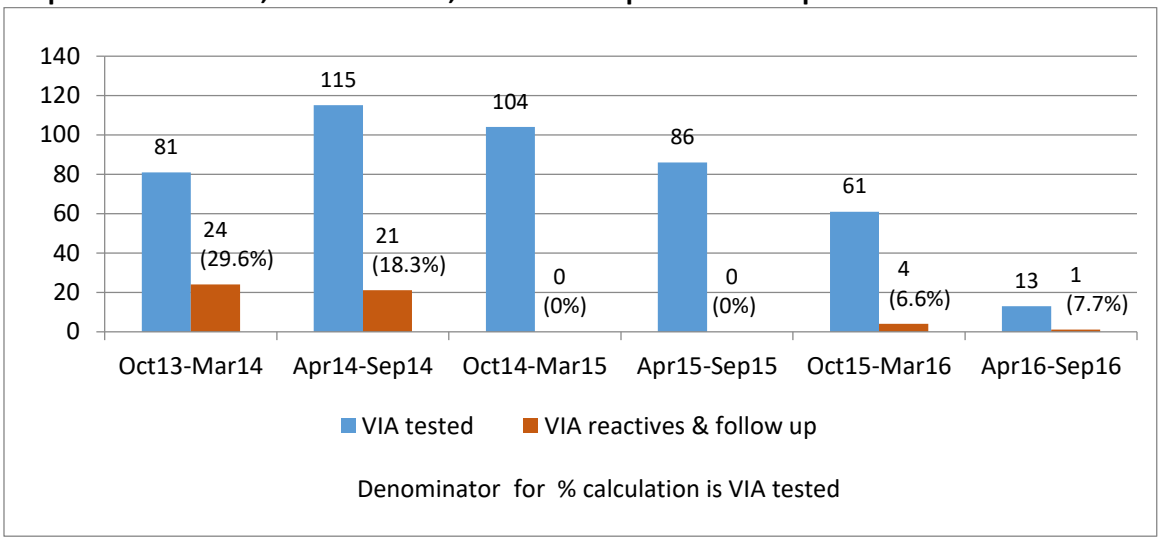
Graph 10 documents 6 monthly distribution of cervical cancer screening. During the project period, a total of 1107 FSW underwent VIA testing. Among them, 102 (9.2%) were reactive and among those

who were reactive, 49 (48.03%) FSW followed-up and 12 underwent biopsy (24.5% of followed up FSW). The rest of the FSW did not require biopsy and the necessary STI kits were given.

Asha Kirana Well Women's Clinic

Ashodaya has supported a Well Women's Clinic at Asha Kirana, a local hospital providing services to the HIV+ community. During a needs assessment (an exit interview with the clients), it was documented that there is a need for SRH services, especially cervical cancer screening using VIA, STI screening, and condom promotion. Graph 11 shows the number of women tested for VIA.

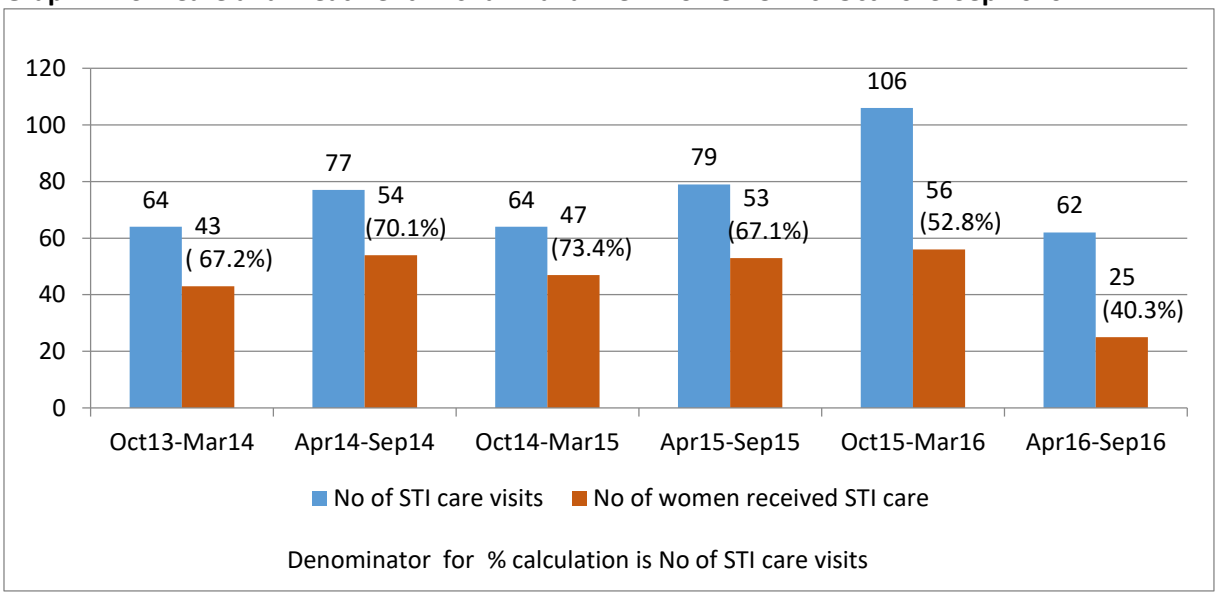
Graph 11. VIA Tested, Reactive Tests, and Follow-Up: Oct 2013-Sep 2016



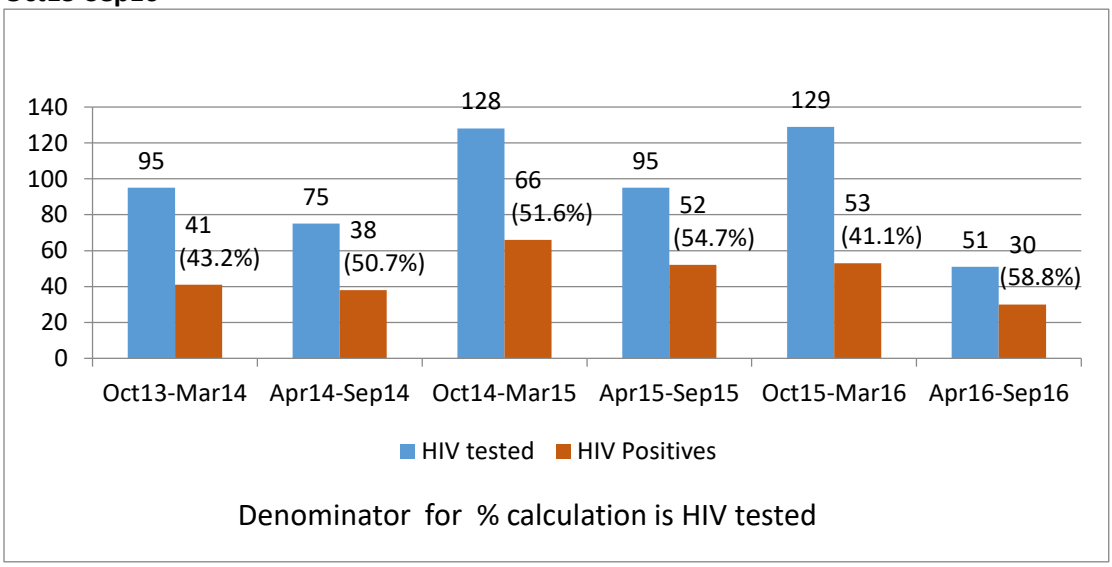
From October 2013 to September 2016, the clinician at Asha Kirana who received VIA training through the DIFFER project, tested 414 HIV positive women with a 12.1% (50 women) reactive rate. Asha Kirana provided follow-up immediately. All 50 women underwent biopsy and among them, 22 were referred for further treatment with a high percentage reported to have stage 1-3 cervical cancer. From September 2014 to March 2016 another doctor assumed this role, with only two positive reactions out of 225 tested. Comparison of the VIA reactive incidence among HIV+ FSW and HIV+ GPW indicates a higher incidence in GPW than among FSW. This may be due to the frequency of STI treatment among the Ashodaya FSW in contrast to GPW. This is an area where the Ashodaya DIFFER team has encouraged Asha Kirana to conduct further studies. During the period between October 2013 and March 2016, there was a steady increase in most services offered at Asha Kirana. In particular, the number of women in HIV care and on ART increased substantially.

During the project period, 455 GPW attended Asha Kirana's Well Women Clinic. Among them, 278 women were diagnosed with an STI (61.1%) and treated. 573 GPW underwent HIV testing, and among them 280 (48.9%) women were found to be HIV positive. All women who tested positive were registered in an ART centre and 155 women (55.4%) are on ART.

Graph 12. STI Care and Treatment - Asha Kirana Well Women Clinic: Oct 2013-Sep 2016



Graph 13. HIV tested and positives among general population- Ashakirana- Oct13-Sep16



2.1.4 Key informants, Stakeholders and Providers feedback

Findings from the key informant interviews explored the themes of acceptability and need, and sustainability and scalability. During Baseline, 10 key stakeholders were interviewed and 9 were interviewed at end-line.

Acceptability and Need

While policy documents have mentioned the importance of integrated service delivery, none have actually documented "how to implement" such an intervention. Most stakeholders felt that this approach of integration has served well for FSW and marginalized communities, as well as for GPW.

> *Ashodaya's work related to DIFFER has been timely and relevant. They provided messages on FP, cervical cancer, abortion not only to their FSW community but also HIV-positive women…*

They promoted VIA, took special care for those who tested positive for subsequent follow-up. They even trained our doctors on VIA screening. I'm glad that they have provided services beyond HIV to sex workers… Earlier there was no model, no program has shown how to do this. Ashodaya has shown how all the services can be provided… [Key informant interview, Stakeholder/government policy maker]

Basically we would be able to provide add-on services. And when these services are provided, especially to persons with HIV, they will be far better than what they were. Any additional services like given they (people) are benefited … Irrespective of funding or no funding, we wish to continue doing that. We have found it very beneficial to lots of HIV-positive women who come to our hospital.... [Key informant interview, Physician, Asha Kirana Hospital]

Ashodaya has demonstrated how to successfully integrate SRH and HIV service delivery for the first time. Strategic advocacy with different stakeholders elicited positive responses from them to provide integrated HIV/SRH services to FSW, including screening, counselling, and treatment. Health managers, health providers, and community workers found the program to be very effective.

It's a very important project. With Ashodaya's intervention, we started routine screening for cervical cancer for HIV+ women. We are seeing a lot of women being reactive for VIA. Early detection is leading to early treatment. We are happy that we are providing the services to them and they are happy not only for cancer screening but also for FP services. [Key informant interview, HIV Care Physician from a centre]

Importantly, it is also an appropriate time to share these findings and advocate with NACO and the National Health Mission (NHM), as they are currently revising their SRH strategies.

This is a critical time for TI funding. So, it's appropriate to provide all services that can be delivered at the grassroots level in a comprehensive way. We are mobilizing the community for HIV services, and we should offer them other SRH services that they require. Or else we may see a huge rise in cervical cancer among FSW....Through this approach we can provide services under one roof… [Key informant interview, SH from state government]
This (VIA) can be used at PHC level, health campuses, etc. When there are gaps in pap smear facilities, why not use this for early detection/screening. This should be discussed and decided…[Key informant interview, SH from district level]

Findings from the key informant interviews also found that FSW appreciated the integrated service and the demand for new services continues.

Ashodaya was only providing STI treatment and condoms, but now I started getting advice on pregnancy, got tested for cervical cancer, even counselling referral in case I needed an abortion. I feel happy my organizations is giving me more health related services then before.... [Key informant interview, FSW from Ashodaya]

Sustainability and Scalability

Strategic advocacy with the State AIDS Control Society led to the development of integrated monitoring tools and fostered project ownership at both the state and district levels.

During our visits, we worked out the monitoring tools with Ashodaya. We used our existing tools. We discussed with them about new indicators. It was very much possible to add new indicators in the existing formats.... so you see there are things which are readily available and can be used for scaling up... [Key informant interview, SH from SACS, TSU]

District and state level stakeholders considered DIFFER's community-led integrated service delivery approach highly reliable. Most stakeholders felt this model should be scaled up and that Ashodaya could play an important role in this scale up.

> *They've already trained our physicians. Based on Ashodaya's experience Ashodaya Academy can do a training program of CBOs and other organizations which are implementing HIV programs in the state. KSAPS should advocate with NACO to integrate SRH and HIV program… Send us your proposal, we will take it up…. [Key informant interview with SH from SACS, TSU]*

NACO and NHM should support an integrated HIV/SRH model, with proactive engagement of the UN, bilateral, and other donors. This will require advocacy with the Indian medical community to support the prevention of cervical cancer, including the use of VIA and other low-cost diagnostics tools, as well as strengthening the role of auxiliary health personnel to provide integrated services. A dedicated flow of funding is needed to retain community engagement in service delivery and utilization.

Ashodaya has already integrated SRH and related services into their targeted intervention and has advocated with KSAPS to develop indicators in their reporting formats to capture data on SRH, along with HIV/STI data. The government of India has mentioned in their strategy document NACP IV that SRH will be integrated along with HIV prevention, treatment, care, and support. Accordingly, there are processes in place at the national level to develop a comprehensive SRH package and protocols and build capacities of healthcare providers, including counsellors, to roll out the integration. Once this process is put in place the integration of HIV and SRH services will be scaled across the country. According to statements from the NACP IV strategy document: "The program will strengthen the service delivery approaches, including effectiveness of the current outreach models in varied settings, peer education, STI management/sexual and reproductive health… Sexual and reproductive health service package and protocol will be developed by the National Government in consultation with various divisions and experts. The protocol will focus on RMC, presumptive treatments, partner treatment, and counselling on SRH, follow up, etc."

> *Referral should not be a problem as peer educator will mobilize women for both services, SRH as well as HIV related services… So outreach and mobilization should not be difficult, but when it comes to referrals to other institutions for tests… If you can mark a copy of your proposal to NACO to our Project Director, it will be good. ……we can ask for scaling it up in Karnataka. I fully agree that both these services must be integrated. [Key informant interview, Karnataka State AIDS Prevention Society representative]*

2.1.5 Responses to the evaluation questions

The DIFFER intervention proved highly effective in scaling up access to cervical cancer screenings and treatment, and family planning, as well as maintaining an already well established condom distribution system, STI screenings and treatment, HIV testing (bi-annually) and peer outreach and accompaniment supports. Importantly, FSW and key stakeholders were extremely satisfied with the provision of these new SRH services and have expressed an interest in further scaling up services.

Ashodaya's Intervention philosophy involved a flexible approach to work with a rapidly changing sex work environment. It prioritized FSW' needs and focused on identifying service "gaps" to move towards comprehensive service delivery, rather than single service care. This involved a move from vertical services (as provided by government) to an "integrated package" of services. Ashodaya collaborated with their partners (such as Family Planning Association of India, Asha Kirana) on the intervention process. Extensive discussion with Ashodaya community members and the Ashodaya Board was an integral step in identifying "priority issues". In this way, DIFFER built on a well-established community mobilization/HIV/STI prevention model. Strategic advocacy at the State & District levels

(Health &WCD) was conducted to integrate required services with the TI, and establish linkages with government and private service providers, including placement of Health Care Navigators.

Specifically, Ashodaya:

1. **Strengthened existing community mobilization** & **peer outreach** – changing context for sex worker – network/home/cell based only.
2. **Strengthened existing HIV/STI service delivery** – individualized records, increased training for all providers – introduced VIA screening & referral for cervical cancer, developed integrated monitoring tools.
3. **Introduced long-acting family planning methods** (Depo-Provera) – reinforced use of condoms for dual protection – increased counselling focus.
4. **Referrals and Linkages** – continued existing work with Ministers, Government Hospitals, trained and placed health care navigators, focused on partners for family planning (esp. abortions, sterilization), referrals for cervical cancer.
5. **Sexual & Gender Based Violence** – strengthened screening in clinic & field, trained counsellors and peers on risk identification, identified referral sites, worked with other "key stakeholders" (e.g. lodge owners, police, boyfriends etc.).

2.1.6 Conclusions

Mysore is characterised by an already well-mobilized FSW community, including a FSW organisation (Ashodaya Samithi) with a membership of over 8000 sex workers. Targeted HIV and STI interventions among FSW, including an SW-led clinic, have been on-going for a long time and achieved high coverage. DIFFER therefore operated as a TI-plus, by adding SRH services to a well-established sex worker-led intervention. Findings from DIFFER support incorporation of SRH services in the existing service delivery model that focusses on HIV/STI. Further work should focus on continuing to improve access to cervical cancer screening services and treatment, as well as advocacy at the local and national levels to support the scale up of SRH and STI/HIV services in an integrated way across the state and country.

2.2 Mombasa, Kenya

2.2.1 Cross-sectional surveys

2.1.1.1. Socio-demographic characteristics

The socio-demographic characteristics of the participating FSW in the first and second cross-sectional survey are presented in Table 17 and 18. Table 17 presents the unadjusted data and Table 18 the proportions corrected for the RDS sampling bias.

FSW were overall similar in age and nationality between the two surveys. There were relatively more FSW who reported to have been previously married/cohabiting and now being single, and less who reported to have never been married/cohabiting than in the first CSS. However, this could be a result of measurement bias, because the question was not asked in the same manner in the two surveys.

There were slightly more FSWs from Changamwe and less from Island. There was a very large difference in the proportion reporting to have been residing less than 3 years in their current residence, but this is most probably due to measurement bias. In the second survey, this question was only asked to those FSW who had previously reported not to be native from Mombasa. In the analysis, those native from Mombasa were all considered as have been residing more than 3 years, hence the very large number.

Table 17: Socio-demographic characteristics of FSW - Unadjusted data

Characteristic	1st CSS (N=400)		2nd CSS (N=403)	
	n	%	n	%
Age (years)				
Median	26		26	
Q1 – Q3	23-31		23-31	
Range	18-49		10-47	
<=20	50	12.5	42	10.4
21-25	119	29.8	127	31.5
26-30	126	31.5	109	27.1
31-35	52	13.0	67	16.6
>=36	53	13.3	57	14.1
No information	0	0.0	1	0.3
Nationality				
Kenyan national	387	96.8	391	97.0
Foreign	13	3.3	4	1.0
Unknown	0	0.0	8	2.0
County where residing				
Kisauni	114	28.5	121	30.0
Island	87	21.8	55	13.7
Changamwe	97	24.3	117	29.0
Likoni	102	25.5	103	25.6
Outside Mombasa	0	0.0	3	0.7
No information	0	0.0	4	1.0
Years living in current residence				
Median	2.2		7.5	
Q1 – Q3	0.9-7		3.9-14.4	
Range	0.8-39		0.3-32.2	
<3years	214	53.5	33	8.2
>=3 years	179	44.8	360	89.3
Unknown	7	1.8	10	2.5
Was away from residence				

Characteristic	1st CSS (N=400)		2nd CSS (N=403)	
	n	%	n	%
In the past year	176	44.0	191	47.4
Present relationship				
Single. never married/ cohabiting	257	64.3	170	42.2
Married/cohabiting and living with partner	6	1.5%	7	1.7
Married/cohabiting, but living apart	2	0.5%	3	0.7
Single. previously married	135	33.8%	222	55.1
Unknown	0	0.0%	1	0.3
Present relationship				
Single, never married/cohabiting	257	64.3	170	42.2
Married or cohabiting	8	2.0	10	2.5
Single. previously married	135	33.8	222	55.1
Unknown	8	2.0	1	0.3

Table 18: Socio-demographic characteristics of FSW - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
Age (years)				
<=20	11.6	7.5 – 16.3	13.4	8.5-18.8
21-25	30.6	24.6 – 37.5	28.9	23.0-34.9
26-30	29.0	23.5 – 34.7	28.9	22.8-35.3
31-35	15.7	11.0 – 21.1	14.4	10.1-19.1
>=36	13.0	9.3 – 17.2	14.5	10.2-19.6
Place of origin				
Kenyan	97.3	95.5-98.9	98.5	96.8-99.7
Foreign	2.7	1.1 – 4.4	1.5	0.3-3.2
Years living in current residence				
<3 years	57.6	51.1-63.9	88.8	83.6-93.3
>= 3 years	42.4	36.1-48.9	11.2	6.7-16.5
Present relationship				
Single, never married/cohabiting	61.8	55.1 – 67.7	45.7	38.7-52.3
Married or cohabiting	1.2	0.3 – 2.3	2.8	1.0-4.7
Single, previously married/cohabiting	37.1	31.1 – 43.7	51.5	45.1-58.6

2.1.1.2. Sex work characteristics

Comparing the number of sex acts with clients between the two surveys (Table 19 and 20), the responses were very similar when asked about the last week, but different when asked about the last month. The latter question is however very susceptible to reporting bias, and it doesn't necessarily reflect a real difference.

The average amount of money received for sex in the past month is quite similar, certainly when taking into account that also this question is very susceptible to reporting and measurement bias. The way the question was asked and the broad range of responses given indicate that some FSWs may have interpreted the question as the average they charge for each sex act, and others as the average they gained from sex work in the past month.

The proportion that reported to have another income than sex work was similar across the two surveys.

Table 19: Sex worker characteristics of FSW - Unadjusted data

Characteristic	1st CSS (N=400)		2nd CSS (N=403)	
	n	%	n	%
No of commercial sex acts in the past week				
Median	6		7	
Q1 – Q3	4-12		3-12	
Range	0-60		0-70	
<4	90	22.5	99	24.6
4-6	118	29.2	97	24.1
7-14	102	25.5	118	29.3
>=15	90	22.2	81	20.1
No information	-	-	8	2.0
No of commercial sex acts in the past month				
Median	25		20	
Q1 – Q3	15-40		11-38	
Range	0-400		1-300	
<18	97	24.3	152	37.7
18-20	130	32.5	46	11.4
21-25	110	27.5	34	8.4
>25	63	15.8	162	40.2
No information	-	-	9	2.2
Average amount received for commercial sex (KSH)				
Median	8000		10000	
Q1 – Q3	5000-15000		5800-20000	
Range	300-100000		2-90000	
Average amount received for commercial sex (EUR)				
Median	67.8		88.5	
Q1 – Q3	42-127		51-177	
Range	2.5-848		0-797	
Has other source of income				
Yes	168	42.0	164	40.7
No	230	57.5	227	56.3
No information	2	0.5	12	3.0

Table 20: Sex worker characteristics of FSW - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
No of commercial sex acts in the past week				
<4	25.9	20.2-31.5	27.1	20.8-34.0
4-6	32.0	26.3-38.3	23.7	17.9-29.0
7-14	24.3	18.8-29.9	29.5	23.9-35.6
>=15	17.8	13.4-22.6	19.6	14.7-25.0
No of commercial sex acts in the past month				
<18	22.4	17.1-27.8	43.2	36.4-50.1
18-20	33.4	27.5-39.7	11.2	7.7-15.7
21-25	26.4	21.4-31.9	6.1	3.5-9.1
>25	17.8	13.2-22.7	39.5	32.6-46.4
Has other source of income				
Yes	42.6	36.1-49.0	39.7	32.8-46.3

2.1.1.3. Number of sex partners

The median number of sex partners reported in the past week was much lower than in the first CSS. However, this is most probably due to a differential reporting bias, particularly because in the first CSS many FSW reported a higher number of sex partners than they had reported to have had sexual contacts and the number of partners was probably overestimated.

The number of clients in the past month as reported by the FSW was very similar between the two surveys, although that in the first survey they reported relatively more first-time clients and less regular clients than in the second. It is not excluded that this is because of a different classification of what is considered a first-time and a regular client tough. It also has to be noted that in the first survey the recall period was 3 months and this number was then divided by three to estimate the number per month.

Comparison of having had non-paying partners is difficult, because the different recall periods in the two surveys. In the first CSS the recall period was 3 months and it was assumed that if they had a regular or occasional non-paying partner in the past 3 months they also had one in the past month. This could explain the much larger proportions of FSW who reported this type of partners in the first survey than in the second.

Table 21: Number of sex partners

Characteristic	1st CSS (N=400)		2nd CSS (N=403)	
	n	%	n	%
Total No of sex partners in the past week				
Median	10		5	
Q1 – Q3	6.5-15		3-10	
Range	0-120		0-70	
1-7	136	34.0%	266	66.0
8-14	114	28.5%	67	16.6
>=15	144	36.0%	59	14.6
No information	6	1.5%	11	2.7
No of clients in the past month				
Median	15		15	
Q1 – Q3	9-26		8-26	
Range	1-200		1-200	
<=8	96	24.0	98	24.3
9-15	85	21.3	106	23.8
16-27	102	25.5	86	21.3
>=28	96	24.0	91	22.6
No information	21	5.3	22	5.5
No of first-time clients in the past month				
Median	10		6	
Q1 – Q3	4-23		2-16	
Range	0-150		0-180	
0-4	105	26.3	157	39.0
5-14	127	31.8	124	30.8
>=15	166	41.5	107	26.6
No information	2	0.5	15	3.7
No of regular clients in the past month				
Median	2		6	
Q1 – Q3	1.3-4		3-10	
Range	0-120		0-183	
0-2	224	56.0	90	22.3

Characteristic	1st CSS (N=400)		2nd CSS (N=403)	
	n	%	n	%
3-5	93	23.3	103	25.6
6-9	34	8.5	77	19.1
>=10	49	12.3	121	30.0
Unknown	0	0.0	12	3.0
Had a non-paying partner in the past month				
Yes	242	60.5	138	34.2
No	157	39.3	180	44.7
No information	1	0.3	85	21.1
Had a regular/steady non-paying partner in the past month				
Yes	211	52.8	159	39.5
No	189	47.3	198	49.1
No information	0	0.0	46	11.4
Had an occasional non-paying partner in the past month				
Yes	98	24.5	48	11.9
No	301	75.3	274	68.0
No information	1	0.3	81	20.1

Table 22: Number of sex partners- Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
Total No of sex partners in the past week				
1-7	38.6	31.0 - 46.8	71.0	64.5-76.7
8-14	26.3	21.1 – 31.7	15.5	112-20.4
>=15	35.1	28.1 – 41.6	13.5	9.4-18.0
No of clients in the past month				
<=8	28.6	22.0-35.6	23.5	16.3-31.1
9-15	23.9	18.0-29.5	34.6	28.4-41.6
16-27	27.4	21.9-33.4	21.1	16.0-26.8
>=28	20.2	15.5-25.1	20.9	15.8-26.4
No of first-time clients in the past month				
0-4	27.1	18.3 – 37.1	40.6	33.7-47.2
5-14	31.0	24.6 – 38.3	33.8	27.3-40.5
>=15	41.9	32.2 - 52.4	25.5	19.9-31.8
No of regular clients in the past month				
0-2	61.9	55.8-68.2	26.7	21.0-33.2
3-5	21.3	16.5-26.6	28.2	22.2-34.2
6-9	7.2	3.6-11.5	18.3	13.5-23.4
>=10	9.7	6.7-13.3	26.9	21.3-32.6
Had a non-paying partner in the past month				
Yes	59.2	52.6-65.4	34.7	28.3-41.7
Had a regular/steady non-paying partner in the past month				
Yes	51.7	44.9-58.3	37.1	30.4-44.6
Had an occasional non-paying partner in the past month				
Yes	24.0	17.7 – 30.7	11.6	7.5-16.1

2.2.1.1 Use of HIV/SRH commodities and services

Condom use

Comparison of condom use at last sex act with clients was complicated because of the large number of participants who did not respond to these questions. In the first CSS, participants had only

responded on condom use with the last client they had. These were mostly first-time clients and only four were regular clients. Condom use with regular clients had therefore not been possible to measure. In the second CSS, only 259 of the 403 FSW responded the question about condom use at last sex with a first-time client. Of the 385 FSW who had reported to have had regular clients, 353 responded to the question about last condom use and 32 did not respond. It is not unlikely that the prevalence of condom use amongst the non-respondents differs from the respondents, and care therefore has to be taken in comparing the figures.

Comparison of condom use with non-paying partners was also difficult, in the second survey the variable of condom use at last sex was only asked once and it was not clear to which of the two partners it applied. It was assumed that it applied to the first of the two non-paying partners about whom questions were asked. Many of the FSWs who had reported to have had an occasional non-paying partner had no response on the condom use question. Because of these reasons, there is a very high risk of selection and measurement bias, in addition to the well-known risk of reporting bias, and comparison is very risky.

The proportion of FSW who did not report any unprotected sex in the past month, with none of the partners that were asked for, increase significantly, but care has to be taken because of the limitations described above. In particular the important number of FSW who did not provide any information on condom use with certain type of partners may inflate these proportions substantially. The only conclusions that we can make are that condom use with clients appears to be high, but that condom use with non-paying partners persists to be too low.

The same problems apply to the questions about knowledge of non-paying partners' HIV status. It was not always clear to what type of partner the question applied. The proportion who reported to have known the HIV status of the last non-paying partner appears to have increased very substantially, which could reflect a real change, but care has to be taken because the high level of reporting and measurement bias.

The proportion of FSWs who reported to have ever had a condom breakage did substantially and significantly decrease. Also this question suffers from reporting bias, but it could off course indicate a real change.

The self-reported ever use of a female condom increased substantially, although not statistically significantly at the 5% cut-off.

STI care

Substantially (and statistically significantly) more FSWs reported having had abnormal genital symptoms in the second CSS, but this could be due to a different perception of what was meant with 'abnormal'. The higher proportion was completely because of a higher number reporting an abnormal vaginal discharge, which is very subjective, and the proportion reporting genital ulcers was actually less in the second CSS.

The proportion who sought care for these genital symptoms was substantially higher in the second survey, although not statistically significant.

HIV testing

All HIV testing indicators increased substantially. At baseline most FSW had reported to have ever tested, and that proportion increased to almost 100% (an increase that was just not statistically significant when using the 5% threshold (p=0.067)). The proportion tested in the last 3 months increased the most, and also the proportions tested in the past 6 and 12 months increased statistically very significantly. This indicates that FSWs are now more regularly tested than before.

HIV care

Substantially and significantly less FSW reported to be HIV positive in the second survey. It could mean that the HIV prevalence in the current FSW population is much lower than in 2013, but self-reported HIV status is highly susceptible to reporting bias and care has to be taken in making conclusions.

The number of FSW reporting to be HIV positive was too small to make any relevant comparisons in regards to being enrolled in HIV care or ART.

Composite HIV service use index

Calculating the same index as at baseline (combining consistent condom use with all partners, care seeking for last STI episode, HIV testing in the last 6 months and being in HIV care), we note a substantial and significant increase. Care has to be taken tough because of the important level of bias in the consistent condom use indicator. Nevertheless, it is not unexpected that this indicator increases because of the substantial increase in HIV testing.

Table 23: Use of HIV/SRH commodities and services by FSW –Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%	N	%			
Condom use at last sex with: (N=had this type of partner in the past month)							
Any client	384	87.7	364	98.5	4.20	1.94-9.07	<0.001
New client	371	87.6	259	(98.8)**	17.9	3.9-81.7	<0.001
Regular client	-	-	350	97.0	-	-	-
Occasional partner	77	72.9	33	(66.7)**	0.50	0.15-1.67	0.257
Regular partner	189	61.7	107	50.8	0.62	0.32-1.19	0.151
Always used condoms in past month with last: (N=had this type of partner in the past month)							
Regular client	85.4	275	344	90.2	5.05	2.03-12.6	0.001
Occasional partner	78	42.0	16	(67.8)*	1.86	0.35-9.90	0.462
Regular partner	102	54.5	101	24.3	0.33	0.15-0.73	0.006
Knows HIV status of : (N=had this type of partner in the past month)							
Last non-paying partner	246	38.3	166	70.7	4.15	2.35-7.33	<0.001
Last regular partner	197	41.8	109	82.6	6.06	2.78-13.3	<0.001
Consist condom use with all partners							
Yes	396	63.9	397	77.2	1.68	1.12-2.53	0.012
Had ever condom break							
Yes	397	55.2	392	41.8	0.55	0.38-0.80	0.002
Ever used female condom							
Yes	399	16.6	395	24.6	1.39	0.90-2.16	0.140
Abnormal discharge or genital ulcer in past 12 months							
Yes	392	29.6	394	44.2	1.65	1.13-2.43	0.010
Care sought for last STI/RTI syndrome (N=had discharge or ulcer in past year)							
Yes	75	87.6	140	95.6	2.40	0.63-9.12	0.198
Ever tested for HIV							
Yes	400	94.8	396	98.3	3.34	0.92-12.2	0.067
When last tested for HIV (N=did not test positive for HIV before that period)							
Less than 3 months	373	44.5	290	72.0	3.51	2.34-5.24	<0.001
Less than 6 months	379	70.9	353	87.6	3.87	2.31-6.50	<0.001
Less than 12 months	382	82.7	380	94.3	4.14	2.04-8.40	<0.001
Result of last test (N=ever tested for HIV)							
Positive	363	17.6	292	5.8	0.31	0.17-0.58	<0.001
Currently using HIV care services (N= HIV positive)							
Yes	41	88.8	25	(92.0)**	1.03	0.03-31.6	0.986
On ART	41	76.9	25	(80.0)**	0.56	0.12-2.64	0.453

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%	N	%			
Used all HIV services she needed							
Yes	400	43.7	400	67.6	2.50	1.72-3.65	<0.001
Currently using contraception (N= not wanting to get pregnant, not pregnant, and able to conceive)							
Yes	388	98.4	379	93.8	0.28	0.09-0.91	0.035
Main contraception method used (N=currently using contraception)							
Injectable contraceptives	371	25.9	364	34.2	1.51	1.02-2.24	0.041
Oral contraceptives	371	6.4	364	8.0	1.12	0.57-2.20	0.744
IUD	371	0.8	364	(0.08)**	0.56	0.01-34.6	0.784
Implant	371	33.0	364	32.9	1.03	0.67-1.57	0.897
Condom	371	33.3	364	23.2	0.59	0.38-0.90	0.015
Female sterilization	371	0.6	364	1.6	3.17	0.37-26.8	0.289
Currently using a non-barrier modern contraceptive method (N= not wanting to get pregnant, not pregnant, and able to conceive)							
Yes	379	65.6	379	72.6	1.46	0.96-2.22	0.080
Uses dual method (N=using non-barrier method)							
Yes	248	33.1	278	53.5	2.26	1.45-3.54	<0.001
Uses dual method (N= not wanting to get pregnant, not pregnant, able to conceive and not sterilised)							
Yes	379	20.8	367	40.0	1.29	0.84-1.99	0.244
Ever used emergency contraception							
Yes	400	38.1	152	37.7	0.89	0.62-1.30	0.556
Ever got pregnant while didn't want to get pregnant in the last five years							
Yes	345	30.6	343	45.0	1.90	1.26-2.85	0.002
Action taken for unwanted pregnancy (N=had unwanted pregnancy in the past 5 years)							
Went to a health facility	122	21.9	137	16.1	0.53	0.22-1.26	0.149
Kept the pregnancy	122	70.8	137	77.2	-	-	-
Found other solution	122	7.3	137	6.7	-	-	-
Ever tested for cervical cancer							
Yes	399	14.4	397	21.2	1.50	0.89-2.52	0.127
Ever tested for cervical cancer(N= older than 30 years)							
Yes	122	21.1	122	26.0	1.38	0.66-2.85	0.389
Forced to have sex in the past 12 months							
Yes	399	14.9	322	12.7	0.77	0.41-1.44	0.407
Condom use at last forced sex incident (N=Was forced to have sex in the past 12 months)							
Yes	63	26.2	37	(48.7)**	2.46	0.65-9.24	0.180
Sought medical care for last forced sex incident(N=Was forced to have sex in the past 12 months)							
Yes	62	34.4	36	(66.7)**	3.12	0.72-13.5	0.126
Used all SRH services she needed							
Yes	391	40.9	391	44.3	1.28	0.89-1.85	0.186
Used all HIVSRH services she needed							
Yes	400	18.5	400	30.3	1.92	1.26-2.93	0.002

* RDS adjusted proportion could not be calculated and the weighed proportion is shown instead.

**RDS adjusted proportion and weighed proportion could not be calculated and the non-adjusted/non-weighed proportion is shown instead.

Contraception

The proportion of FSW reporting to use a (modern) contraceptive method was very high at baseline and was significantly less in the second survey. However, of these, significantly less reported to use condoms only as contraceptive method, and the proportion reporting to use a non-barrier method substantially increased (although not enough to be statistically significant at the 5% threshold).

We also observe that relatively more FSW reported to use injectable contraceptives compared to baseline. The proportions using other methods remained relatively stable.

Relatively more FSWs spontaneously mentioned both a non-barrier contraception method and condoms for contraception (dual method). But care has to be taken because this variable is very susceptible to reporting bias.

The proportion to report ever having used emergency contraception remained stable.

Unintended/unwanted pregnancies

Significantly and substantially more FSWs reported to have gotten pregnant while they didn't want to in the past 5 years. An important proportion (about 20%) did however not answer this question and it is very susceptible to reporting bias.

Of those who reported such a pregnancy, relatively less went to a health facility than at baseline, but this difference was not statistically significant. Considering that the legal status and the availability of termination of pregnancy did not change over the past years, it was not expected to see an increase.

Cervical cancer screening

A substantial larger proportion of FSW reported to have ever been screened for cervical cancer, but the increase was not statistically significant at the 5% threshold.

Sexual violence

A similar proportion of FSW reported to have been forced to have sex in the past year. Relatively more of those who were forced reported that a condom was used and the proportion that sought medical care was twice as high as at baseline, but the numbers were too small to exclude that this is not due to statistical chance.

Composite index of the use of SRH services other than HIV/STI

The index, that includes the use of a non-barrier contraception method, ever have been screened for cervical cancer if older than 30 years, and having sought medical care for last forced sex, increased slightly because of the increase in the use of a non-barrier contraception method and of cervical cancer screening services. The increase was however not sufficient to be statistically significant.

Overall composite index

The overall index, including all services, did substantially and significantly increase, but care has to be taken in its interpretation because of the reasons mentioned above, when discussing the increase in the HIV service use index.

2.2.1.2 Stigma and discrimination

Slightly more FSW reported to disclose that they are a FSW, when visiting a public health facility, but the change is not very large and not statistically significant.

The proportion of FSWs who reported that they feel treated as everyone else at public health facilities was already very high at baseline and this did not change.

Table 24: Stigma and discrimination–Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%	N	%			
Discloses as being a FSW when visiting public health services							
Yes	373	26.3	391	30.4	1.20	0.80-1.80	0.384
Feels treated like everyone else, when visiting public health services							
Yes	376	91.8	393	92.4	1.15	0.51-2.60	0.731

2.2.1.3 Peer Outreach

Of only 151 FSW data were available on exposure to peer education. Almost all of these (149/151) were FSW who had responded that they had a contact with a peer educator in the past year, and we therefore assume that all FSW who had no data filled out were FSW who did not have a contact.

Considering that this assumption is correct, the proportion of FSW who reported that they had a contact did not substantially change, but the proportion who reported that this educator was a fellow FSW peer educator increased enormously. While at baseline about two thirds of the educators were none-FSW educators (and therefore not really peer educators), this proportion reduced to less than 10% in the second survey. Self-reported exposure to peer education by fellow FSWs increased therefore substantially and statistically very significantly, although that it is still only about 30%.

A substantial and statistically very significant increase was also observed in some of the services offered by the peer educators. Condoms are now said to have been received from the peer educators by almost all FSW and also referral for HIV testing and STI care is much more commonly reported.

Table 25: Exposure to peer education–Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%	N	%			
Had contact with a peer educator in the last 12 months							
Yes	389	32.6	400	34.3	0.89	0.62-1.29	0.549
Had at least 10 contacts with a peer educator in the last 12 months (all FSW)							
Yes	390	5.7	367	4.7	0.71	0.38-1.34	0.289
Peer educator was a FSW (N=had contact with a peer educator)							
Yes	172	38.8	136	93.9	20.0	6.27-64.0	<0.001
Had contact with a FSW peer educator in the last 12 months							
Yes	398	12.7	387	30.6	2.36	1.56-3.56	<0.001
Services or information received from peer educators (N=had contact with a peer educator)							
General HIV/STI prevention	167	70.1	131	73.4	1.12	0.57-2.26	0.731
Condoms	167	56.9	140	(92.9)**	6.99	2.86-17.1	<0.001
Referral for STI treatment	167	6.3	129	45.8	10.9	4.4-26.9	<0.001
Referral for HIV testing	167	21.8	133	52.1	3.25	1.71-6.19	<0.001

**RDS adjusted proportion and weighed proportion could not be calculated and the non-adjusted/non-weighed proportion is shown instead.

2.2.1.4 Where FSW obtained SRH care

When asked where they usually obtain male condoms, FSW reported substantially and significantly less health facilities (both public and private) than at baseline, and relatively more most other sources (although that none of these latter differences were statistically significant).

In regard to where they normally go for healthcare, public health facilities continue to be the most commonly reported place, but many more FSW reported the ICRH DICs than at baseline.

When asked where they last got their (non-barrier) contraceptive method, where they went first for their last STI episode, and where they were last tested for HIV, we observe a pattern that targeted services (the DICs) are always substantially and significantly more reported in the second survey than at baseline, and other (public and private) health facilities are less reported. Even if these questions might suffer reporting and measurement bias, it appears to indicate that the DICs are a more common source of HIV/SRH services than 3 years ago.

The number of FSW in HIV care is too small to make any valid comparison.

For cervical cancer screening we observe an opposite trend as for contraception, STI care and HIV testing. Public health facilities are significantly more reported and targeted services less. Possibly because cervical cancer screening has been rolled out to more public health facilities, or because more FSW are tested at public health facilities in the context of HIV care.

Also the number of FSW who were victim of forced sex is too small to make any valid comparison of where they sought care.

Table 26: Where HIV/SRH commodities and services were sought

	RDS adjusted %				
	1st CSS	2nd CSS	OR	95% CI	p-value
Condoms (N=all)***	N=400	N=398			
Public health facilities	42.8	31.0	0.66	0.45-0.95	0.026
Private health facilities	6.9	2.9	0.37	0.14-0.94	0.037
Targeted clinics	-	9.2	-	-	-
Pharmacy/ Chemist	33.3	39.2	1.34	0.90-2.00	0.146
Shop/Supermarket/Petrol station	27.6	32.7	1.36	0.92-2.00	0.124
Café/Bar/Night club/Hotel	13.3	20.8	1.45	0.88-2.40	0.143
Market/Stand/Street vendor	1.4	1.0	0.55	0.10-3.01	0.494
Peer Educators/ CHW	9.0	9.6	1.13	0.62-2.07	0.685
Organisations	6.4	12.0	1.48	0.83-2.66	0.185
Friends	2.7	7.0	0.77	0.00-2042	0.947
General health care (N=all)	N=400	N=400			
Public health facility	78.6	66.6	0.69	0.46-1.02	0.061
Private-for-profit health facility	17.4	17.0	0.84	0.52-1.35	0.473
Targeted services	1.5	18.3	12.2	5.31-27.9	<0.001
Pharmacy/ Chemist	2.5	4.2	1.26	0.33-4.77	0.738
Traditional healer	(0.2)*	0.4	2.70	0.50-14.5	0.249
Contraception (N=using non-barrier contraception method)	N=247	N=274			
Public health facility	56.0	44.4	0.78	0.50-1.22	0.277
Private health facility	21.4	19.3	0.88	0.51-1.51	0.639
Targeted services	5.4	19.7	3.12	1.60-6.29	0.001
Pharmacy/ Chemist	6.8	13.7	1.81	0.75-4.37	0.184
STI care (N=sought care for last STI episode)	N=64	N=130			
Public health facility	54.6	44.3	0.76	0.34-1.71	0.503
Private health facility	17.3	21.3	1.05	0.38-2.93	0.924
Targeted services	(5.4)*	28.5	5.15	1.68-15.8	0.004
Pharmacy/ Chemist	(6.4)*	(4.6)**	-	-	-
Place originally from	14.3	-	-	-	-
HIV testing (N=was tested in the past 2 years)	N=326	N=381			
Public health facility	49.9	47.4	1.07	0.73-1.58	0.723
Private health facility	17.0	20.6	1.11	0.65-1.88	0.705
Targeted services	10.6	20.8	1.75	1.02-3.00	0.042
Community VCT	9.2	10.7	1.26	0.67-2.35	0.468
Outside the Mombasa area	4.8	-	-	-	-
Other	8.3	0.5	0.06	0.02-0.17	<0.001
HIV care (N=is currently in HIV care)	N=32	N=23			
Public health facility	(50.0)*	(78.3)**	-	-	-
Private health facility	(42.7)*	(21.7)**	-	-	-
Place originally from	(5.1)*	0.0	-	-	-
Cervical cancer screening (N=Was ever tested for cervical cancer)	N=49	N=100			
Public health facility	(36.9)*	63.6	3.64	1.38-9.58	0.009

	RDS adjusted %				
	1st CSS	2nd CSS	OR	95% CI	p-value
Private health facility	(19.5)*	8.6	0.44	0.13-1.52	0.192
Targeted services	(38.8)*	19.3	0.72	0.27-1.92	0.507
SGBV care (N=sought care for last forced sex)	N=25	N=23			
Public health facility	(80.0)**	(69.6)**	0.96	0.11-8.26	0.968
Private health facility	(4.0)**	(4.4)**	-	-	-
Targeted services	(4.0)**	(17.4)**	-	-	-
Other	(12.0)**	(8.7)**	-	-	-

* RDS adjusted proportion could not be calculated and the weighed proportion is shown instead.
**RDS adjusted proportion and weighed proportion could not be calculated and the non-adjusted/non-weighed proportion is shown instead.
***Multiple answers possible

2.2.1.5 Reasons for the choice of place of care

Comparison of the reasons for choosing a particular place of care was not always easy because the sometimes low numbers. Nevertheless, some shifts were observed. Cost was less often mentioned than at baseline and quality of care, privacy and friendly personnel more often.

2.1.1.4. Satisfaction with the availability of HIV/SRH services

Appreciation of the affordability of the male condom is quite low. A substantial proportion (19%) find them not affordable and another quarter somewhat affordable. Only 38% reports to get condoms for free. In regard to the availability of the male condom, there are no complaints. Only 3% found them not sufficiently available. This is not the case for the female condom. Only 19% found them sufficiently available and almost three quarters said they are not sufficiently available.

Appreciation of the availability of services for unwanted pregnancies are more difficult to interpret because a substantial proportion of the FSWs did not have a response recorded. Of those that had an unwanted pregnancy in the past 5 years, 16% did not provide an answer. Of those that provided an answer the large majority was satisfied or very satisfied, and only about 4% said they were not. This is surprising because termination of pregnancy is in principle not available in Mombasa.

The availability of contraceptive services, STI care, HIV testing services, HIV care and SGBV services is considered as good. Very few FSW said to be not or a little satisfied with their availability. It has to be noted that for STI care and HIV care an important proportion did not have an answer recorded.

Table 27: Satisfaction with the availability of HIV/SRH services

Service	n	Crude %	RDS Adjusted %	95% CI
Condom affordability (N=403)				
For free	149	37.0	37.7	30.7-44.1
Very affordable	77	19.1	19.2	13.8-25.4
Somewhat affordable	94	23.3	24.5	18.8-30.5
Not affordable	68	16.9	18.5	13.0-24.1
No information	15	3.7		
Male Condom availability (N=403)				
Sufficiently	378	93.8	-	-
No opinion	2	0.5	-	-
Not sufficiently	14	3.2	-	-
No information	9	2.2		
Female Condom availability (N= ever used a female condom: 99)				
Sufficiently	19	19.2	-	-
No opinion	4	4.0	-	-

Service	n	Crude %	RDS Adjusted %	95% CI
Not sufficiently	73	73.7	-	-
No information	3	3.0		
Sufficiently	19	19.2	13.3	5.9-23.4
No opinion/ Not sufficiently	77	77.8	86.7	76.6-94.1
No information	3	3.0		
Unwanted Pregnancy Services Availability (N= Has been pregnant in the past 5 years: 216)				
Very satisfied	62	28.7	-	-
Satisfied	68	31.5	-	-
A little satisfied	5	2.3	-	-
Not satisfied	2	0.9	-	-
No information	79	36.6		
Very satisfied/Satisfied	130	60.2	-	-
A little satisfied/Not satisfied	7	3.2	-	-
No information	79	36.6		
Unwanted Pregnancy Services Availability (N= had an unwanted pregnancy in the past 5 years: 142)				
Very satisfied	55	38.7	-	-
Satisfied	60	42.3	-	-
A little satisfied	3	2.1	-	-
Not satisfied	2	1.4	-	-
No information	22	15.5		
Very satisfied/Satisfied	115	81.0	-	-
A little satisfied/Not satisfied	5	3.5	-	-
No information	22	15.5		
Contraceptive Services Availability (N=Uses currently a contraceptive method: 367)				
Very satisfied	234	63.8	-	-
Satisfied	120	32.7	-	-
A little satisfied	3	0.8	-	-
Not satisfied	3	0.8	-	-
No information	7	1.9		
Very satisfied/Satisfied	354	96.5	98.2	96.5-99.6
A little satisfied/Not satisfied	6	1.6	1.8	0.4-3.5
No information	7	1.9		
STI care services Availability (N= had an STI in the past 12 months: 174)				
Very satisfied	44	25.3	-	-
Satisfied	18	10.3	-	-
A little satisfied	0	0.0	-	-
Not satisfied	0	0.0	-	-
No information	112	64.4		
HIV testing services availability (N=403)				
Very satisfied	255	63.3	65.8	58.8-73.0
Satisfied	135	33.5	32.1	25.2-39.3
A little satisfied	3	0.7	0.9	0.0-2.4
Not satisfied	3	0.7	1.1	0.1-2.9
No information	7	1.7		
Very satisfied/Satisfied	390	96.8	97.9	95.6-99.5
A little satisfied/Not satisfied	6	1.5	2.1	0.5-4.4
No opinion/ No information	7	1.7		
HIV care services availability (N= tested positive for HIV: 27)				
Very satisfied	18	66.7	-	-
Satisfied	4	14.8	-	-
A little satisfied	0	0.0	-	-
Not satisfied	0	0.0	-	-

Service	n	Crude %	RDS Adjusted %	95% CI
No information	5	18.5		
SGBV care services availability (N= sought care for last forced sex incident: 24)				
Very satisfied	15	62.5	-	-
Satisfied	7	29.2	-	-
A little satisfied	1	4.2	-	-
Not satisfied	0	0.0	-	-
No information	1	4.2		
Very satisfied/Satisfied	22	91.7	-	-
A little satisfied/Not satisfied	1	4.2	-	-
No information	1	4.2		

2.2.2 Focus group discussions

Knowledge of SRH services

Generally, the participants were knowledgeable of the different types of SRH services and were able to list them. When asked about the meaning of sexual and reproductive health services, the participants mainly associated this with family planning, cervical cancer and STI's.

Family planning and contraception

In regard to family planning services, participants could identify the condom drawings and differentiate between male and female condoms. In addition, majority indicated their preference for the male condoms because: it prevents unwanted pregnancies, HIV, and STI's. When prompted, one of the SW noted that it is a must to have male condoms when dealing with clients. It was also indicated as the most used and widely available method of contraception. In addition, the participants noted that the female condoms took a longer time to insert in comparison to the male condoms.

"Because when you go to the field, you must have carried a condom; there are those who want condoms and there are others who do not want condoms" (Respondent 10, SWFGD).

"The male condoms we understand it because of sex work, like when we go to a club, we use them when we get a client like how we can use them…" (Respondent 6, SWFGD).

"It's the one that is available most because when you go to hospitals and you need it, that is what you are given. In most services, when you go for testing, we are given those ones" (Respondent 3, SWFGD).

"The man, compared to the female, for the female one you need to take time before it can be used. But the male one can be used immediately" (Respondent 2, SWFGD) .

Other family planning methods that were mentioned included: jadelle (implant), coil, and injections. The participants were aware of the locations that these methods are administered within the body. Emergency pills were also mentioned and the participants were knowledgeable on when they should be used and in what circumstances. In addition, lubricants were also mentioned as important during sex work.

"In a year you are supposed to use them two times (Respondent 10, SWFGD).

I think those are given to those probably cases like rape. You go to the hospital when perhaps you have been raped, there is that emergency pills you are given to open like ... like probably there is an infection, or HIV. Just like that" (Respondent, SWFGD).

"Lubricant…during the sexual act, sometimes someone dries a lot... …so you are forced to apply that down there to lubricate during the sexual act" (Respondent 8, SWFGD).

Sexual and gender based violence services

Another service that was mentioned by the participants as a form of SRH was gender based violence. While some of the respondents seemed knowledgeable of the steps that should be taken in case one experiences GBV, some indicated that they were not willing to report it. Peer educators were mentioned as important when the SW experience GBV as they are able to support and guide them on how to take action.

"If he hurts you, you have to go and meet with your peer educator, explain then there is a form that you fill and when you go to the hospital it is when the doctor tells you where to go and if it is someone you know, you can report, if it is someone you do not know, there nothing you can do" (Respondent 8, SWFGD).

"For example, you have been raped, you are supposed to visit a health care facility before you take a bath, or before you change your cloths, so that if it is to follow up, the person who did the act, can be easy to be found" (Respondent 2, SWFGD).

When some of the participants were asked what they would do in case of GBV, they stated that they would just leave or keep quiet.

"I just leave him" (Respondent 4, SWFGD).

"We keep quiet" (Respondent 9, SWFGD).

Cervical cancer screening

Cervical cancer screening services were also listed and some of the participants explained their importance and the number of times that an individual should be screened. However, the group indicated that the services are free and easily accessible in different health facilities.

"I wanted to say about testing for cancer" (Respondent 8, SWFGD).

"For me how I understand cervical cancer screening services, they are also not for paying, you do not pay, you personally agree to receive them and they are given to everyone, and they help a lot if you know early you can be helped and treated before it becomes complicate, you can be helped" (Respondent 3, SWFGD).

"And then it is important, after every year, someone goes for checkup, go to be tested your kizazi (cervix) it is important. In fact right now cancer is there a lot. I can give you an example of there is a friend of mine that I used to talk to about screening for cervical cancer; she never took it serious, of importance. But when she afterwards went to be tested she was found with it, so that is why I encourage you, it is important to go for checkup after one year, your kizazi (cervix) must be tested after one year" (Respondent 8, SWFGD).

However, the sex workers indicated that there should also be breast cancer screening services and they felt that it was an addressed need.

"Yeah testing of breasts too you have not given because sometimes you can be in a club and you are beaten with a bottle, or you have been suckled a lot by a man…You are drunk you are suckled a lot, now it is needed to test breast cancer a lot too" (Respondent 4, SWFGD).

Sexually transmitted diseases services and care

Syphilis was the most mentioned STI in all the SWs groups. Moreover, the participants were aware of the actions to take in case one discovers that they have STIs.

"Also it (syphilis) effects, when you are pregnant you could give birth to a child who has it in the eyes" (Respondent 10, SWFGD).

"...sexually transmitted diseases, now is incase if you see those signs…if you see signs, it is important to visit…to visit a health care facility immediately" (Respondent 8, SWFGD).

And it is important to visit with your partner cause if you are treated…if you are treated alone you will be healed but if you repeat with him, him he has the virus?" (Respondent 4, SWFGD).

However, there were some misconceptions as some of the participants indicated that it only affects men.

"It only gets men, and it can be spread to women" (Respondent 2, SWFGD).

<u>HIV care (ART, PEP, and HTS)</u>

The participants had knowledge on HIV and were able to correctly explain what PEP, ART, and HTC meant.

"…*It is given at a time of…maybe someone has been raped, so it is…you are given (PEP) within a certain period, so that the virus is not able to get into blood, have you understood?" (Respondent 8, SWFGD).*

"ART is usually used on someone who already has the virus and has been put on that treatment of getting drugs depending on how the doctor has advised them" (Respondent 2, SWFGD).

"...that HTC is done at…as in it is voluntary, that is someone goes at their own will…goes at their own will, you go if you want, you are not forced and also…the advice that you are given their helps if you are found to have the virus, how you will deal with it, if found without, how you will protect yourself" (Respondent 3, SWFGD).

<u>Post-abortion care and unwanted pregnancies</u>

There was a consensus among the participants on importance of seeking medical care when one gets an unwanted pregnancy. Additionally the participant noted that post-abortion care should involve a good diet and rest in an effort to regain the energy lost.

"For me what I see, these unwanted pregnancies if you find out you have it, it is good to visit a doctor for advice, to advice you on what to do and also advice you if…if like R1 said, if you decide to abort, do not abort it using the methods of within here, abort in hospital, to be aborted well so that you are not harmed afterwards, and also if you decide to keep it, you are also advised on how you can live with it and care for it, things like that…" (Respondent 3, SWFGD).

"It is good also to visit a health facility for checkup, because a pregnancy can be terminated, you relax and then later own develop complications on the kizazi (cervix) side" (Respondent 4, SWFGD).

"Ee eating well and then have a body rest, reduce the work that you used to do so as to regain energy and blood in your body" (Respondent 1, SWFGD).

Places to seek SRH services

When asked about the places that they seek SRH services, the respondents mentioned Chemists, private and public facilities, drop-in centres and guest houses. Additionally, condoms are also obtained from peer educators. There was a preference for government facilities as the services are free. Moreover, condoms and emergency contraceptives were obtained from chemists.

"That is where (government hospitals) we get them without money (for free)" (Respondent 10, SWFGD).

"It is government because they give ARVs for free" (Respondent 8, SWFGD).

"=guest house=, they put them in the club where we work" (Respondent 6, SWFGD).

"Drop in centre or public hospital, you can go to the private too but you will pay" (Respondent 1, SWFGD).

The preference for drop-in centres as sources of SRH services was because the services are free and the participants are assured of privacy and non-discrimination.

"Those in =Drop in centre= are free, and then here in =Drop in centre= it will just be free and there are no many questions too (Respondent 3, SWFGD).

…supposed to…there is one person that you will get used to now one that will not ask you questions, that is even if you go and tell them give me e-pill, they just gives you. They sell to you without many questions you…you go your own way and do your stuff, and come back when you want again, that way. Habit too, you are supposed to get used to one place, not everywhere" (Respondent 3, SWFGD).

"And also if you choose a =Drop in centre= like this one now, here the way it is…it is good because you are sure the people who will attend to you are qualified people. Because, these are people you are sure, that is they have studied for, they are not…they do not just tell you things, they are professionals" (Respondent 3, SWFGD).

Access to services

Availability of SRH services

There was a consensus among the groups that the SRH services are sufficiently available as there are many places that the sex workers can seek these services. However, the participants noted that sometimes there are stock outs. Although these stock outs occur, they do not last for long periods.

"Here at the drop center, I had come for the family planning injection and was told they had not gone to take medicines, there weren't. But I still saw dates were still going to pass so I went =Mtongwe clinic= and I got the family planning injection" (Respondent 4, SWFGD).

"Eee, when I came the doctor said they have not yet brought the metal rods used for removing, now they gave me one week I go and come back then I would find they have co…come, but I didn't come back. I had to go to another hospital to get it removed because it was hurting me a lot" (Respondent 8, SWFGD).

"Most those normally don't disappear much. They cannot exceed like one week. Condoms cannot miss even if you came whatever day you can't miss condoms. Those lubes can be there but also they are expired, others normally don't take, they can stay here until they expire when here, mmm" (Respondent 6, SWFGD).

Improvement of availability of services in the previous two years

The participants had varying opinion regarding whether the access and availability of the services had changed in the previous two years. Some participants noted that it takes longer to get the services as they have to get referral through the peer educators. One of the respondents gave a story of an incident where she was asked for money to access services despite referral by a peer educator.

"The project is not any better because it takes long, sometimes we go to peer educators and we are given referral forms to go to the hospital. When you get there you are told they do not know about them (the forms) sometimes we are told, "go to =Ganjoni=" when you get there, there is no treatment…It has been disturbing us a lot. If we had our own drop-in center, where we can go as sex workers" (Respondent 8, SWFGD).

"It has not improved because there is a day I was sick, I had some discharge. So I went to my peer educator and was referred here in =Chaani=. I came and found the doctor. The doctor told

me I was sick. I expected him to give me medicine, because I am with a peer educator…that one's peer, to give me free medicine, he asked for money. I was surprised why he was asking me for money, he told me the =ICRH= project is no longer here, it has moved out. I told him it was okay I would come back next time. I went back to my peer and she told me to come back and tell him that I have been sent by this person. I came back and said I have been sent by xxxx, he said he did not know anyone like that, so I was sent to =Learning Site=" (Respondent 1, SWFGD).

Another respondent noted that the services had not improved as stock outs are still there.

"There are days you might go and find there isn't or the shindano (injection) is not there, then you are told to go and come another day" (Respondent 4, SWFGD).

Some of the participants who indicated that the services had improved explained that the sex workers are no longer afraid to seek services due to the training that they have received.

"That has improved because people have been taught a lot they have stopped being afraid of coming out, so it has improved" (Respondent 9, SWFGD).

"…there is training that is…right now depending on the training you will get them a lot. It is not like in the past the teachers were a little but for now it is like…now you came with this new education. There are those that we saw earlier own with other matters (Respondent 9, SWFGD).

The participants also indicated that some of the services that they paid for two years back were currently available for free. Moreover, there is availability of door-to-door services.

"You see by 2014 like you have said I was prostituting in =Nairobi= we used to buy that one whole packet, I don't know where people got them and bought to you in the hood, you buy at 100 bob. But for now there is no prostitute who buys condoms, so for me I would say it has been improved" (Respondent 5, SWFGD).

"Eee I can also add they have been improved on another side of… you know back then if you wanted to know your status you had to get to physically get to a centre but nowadays people have volunteered going door to door. They are actually sought and their doors knocked people to be tested, and people become very willing they be tested, people are tested a lot these days" (Respondent 10, SWFGD).

"Then those times if you wanted to know your status when you go to the hospital you may pay 100 bob to be tested but now its free" (Respondent 9, SWFGD).

In regard to the quality of services that the participants received, majority of the participants expressed their satisfaction. Quality was perceived in terms of the advice or counselling received while obtaining the services.

"*…I met a good doctor who tested me well, they gave ne advice…" (Respondent 1, SWFGD).*

"Me the last time I came here the testing time for those tests I wanted was short, but now if I personally have a problem, the person testing me had time with me for sitting, talking, that is in short they could give me there time, I told them my problems, then we discussed, they convinced me after we finished I left" (Respondent 9, SWFGD).

Reception at government facilities

Stigma and discrimination

The participants were asked to describe their experiences when seeking for services in government facilities. Majority of the participants complained that they experience long ques and waiting times when they visit government facilities with some having to wait for a whole day to get the services. In some instances, one has to bribe the healthcare providers to be served fast. Additionally, it was clear

from the discussions that some of the healthcare providers in these facilities treat them with contempt especially after discovering that they are sex workers. As a result, there was a consensus among the participants that they would rather seek the services in drop-in centres where they are treated and served well.

"It is…if you go early, you will get there and could be number one, two, three; but once people know that this is the day that it will be free, someone would rather wake up early. People get up as early as four am to queue, take a number then go back home. They know that treatment starts at eight, she will come back at eight" (Respondent 1, SWFGD).

"Uu-hu, anyone you must know someone for you to be treated, without knowing someone, you can stay there the whole day and you do not get assistance" (Respondent 8, SWFGD).

"A sex worker wants somewhere they are attended to very fast, without knowing someone, you have to bribe or sent to come back tomorrow, you line up until tomorrow" (Respondent 6, SWFGD).

"…those ones do not have time, mostly they are in you will hear them in stories, if you peep they tell you, "stay out a little", on looking there is nothing of importance they are doing, so in short they despise us (Respondent 6, SWFGD).

"I prefer those hospitals like these drop in center because you know as a prostitute sometimes you get an STI even three times in a year, when you go back to (government facility name) you will find the doctor is the same and they will feel like you…you are used to it, but as long as these ones (drop in) know you deal with prostitutes they understand you faster. Maybe you… this same week you came itchy, next week I have urine problems, the other one… you maybe have… if you are moving around these governmental hospitals you must feel shy but here even if am infected today, maybe the condom has burst I will still come because I know they will understand me because he knows my job (Respondent 5, SWFGD).

"They have contempt; they want to test your blood, by bad luck the blood spills. 'you... don't... do not pour that blood on me' "(Respondent 4, SWFGD).

According to the sex workers, they are not denied the services directly but they are treated with contempt or told to come later for the services once the healthcare providers discover that they are sex workers.

"They look at you as if you are not important. The questions they ask you, it is like what you are doing is not good or will treat you like you are just not important" (Respondent 8, SWFGD).

"You are not denied but you are taken round and round, you are asked to come back the following week; you come back that week till you give up and go to private" (Respondent 5, SWFGD).

"You are denied but you are not denied directly…" (Respondent 2, SWFGD).

"Even for example let's say…….if you go and they know that you are a sex worker; it is not easy for them to help you" (Respondent 1, SWFGD).

<u>Disclosure about sex work</u>

Majority of the sex workers do not disclose about their work when they visit government facilities for fear of discrimination. One of the participants noted that once they disclose that they are sex workers they are directed by the healthcare to come back with their partners which they find challenging.

"You know sometimes you want to be open with someone you can tell them the type pf work you do, next time when you go there, she mentions, "this one her job is sex work", she will not take

you seriously, she already knows this one, even if I counsel them she will go if I do not counsel she will still go, now you see that is despising…" (Respondent 9, SWFGD).

"That is when you told him that you are a sex worker then that is they put up a despise, let's say now if you ask them sexual issues due to the work we do relates to sex now they look at it as if you are the cause so they do not help you" (Respondent 1, SWFGD).

"Why are you a sex worker?" They ask you questions like that, "why do you do sex work?" "What do you lack to be a sex worker?" So you even shy from asking questions like…" (Respondent 9, SWFGD).

"My reason for going to governmental hospitals and lack to identify myself, at the governmental hospital when you identify yourself you are told to bring your partner, now I am a prostitute I sold my vagina and got infected, where will I go to get that partner? [Laughing]. Eee I would rather just come here already because here (Dices) I will not be asked for a partner because they know I don't know the partners names now where will I get him?" (Respondent 5, SWFGD).

Trends in government hospital attendance

Majority of the respondents either noted that the services in government hospitals had deteriorated in the past two years or remained the same. However, hospital attendance may have increased as the number of sex workers in Mombasa has been increasing.

"The attending to people, they do not change they are still the same; if it is rudeness they still have the same…" (Respondent 8, SWFGD).

"I can say that they have increased in number because nowadays sex workers are free as opposed to back then" (Respondent 7, SWFGD).

"The part of drugs are increasingly deteriorating. On the part of drugs, it has absolutely deteriorated" (Respondent 8, SWFGD).

Peer outreach

Generally, the feedback on peer outreach was positive as the sex workers acknowledged the impact of peer education activities. It was clear that they are usually in close contact with the peer educators and get education that affects behaviour change. The important role that peer educators play in referring the peers for health services was also recognized.

"Personally it is different; my peer educator could come to my place once or twice a week" (Respondent 8, SWFGD).

"And then also they taught us a lot of things, things about behavior change, if maybe you had many partners, you reduce… you reduce and protect yourself from the virus…if you are negative you continue to live negative" (Respondent 8, SWFGD).

"If it is closed mostly we have peer educators with us in the hood, you can contact them. If it is something possible they can assist and if they don't have they will also… you will have to be patient until the following day" (Respondent 5, SWFGD).

"I was telling you, okay you will be tested now why wouldn't you be comfortable, remember when you come get tested here and are found positive you get referred and joined with a peer educator and there are referrals and you get referred by a HTC doctor" (Respondent 7, SWFGD).

Peer educators were majorly identified as a source of health related information such as HIV, STIs, family planning and contraception, and cervical cancer screening. They also help in advising the sex workers on where they can get health services. In addition, they are seen as a source of moral support to their peers as they also offer advice on personal issues.

"She mobilizes me then she tells me about these diseases, to use these whatever… Using Norplant, condoms" (Respondent 3, SWFGD).

"She only teaches me how to use condoms, she teaches me how, I mean, how condoms help; about family planning. Then mine could see me every day, once she comes from work she comes to look at me and find out if I have been mistreated…" (Respondent 1, SWFGD).

"They teach us about condoms, they ask us about the challenges that we experience in our work and how, when I am with a client, the amount of money that I should ask for and also teachings on family planning" (Respondent 8, SWFGD).

"They also, they helped me to know where to get these services like where I will get condoms, where I will be tested for viruses, where I will be treated when I will have a problem" (Respondent 2, SWFGD).

"It's like this of these services here. The services they offer, they tell you what you feel… [Laughs]. They educate us on the services available here like coming for this cervical cancer screening, condoms, those STIs, HIV tests and other diseases" (Respondent 9, SWFGD).

Over the past two years, there has been an improvement of peer outreach activities. The sex workers acknowledged that they have been reached and helped by the peer educators in the previous two years. Moreover, the peer educators have become better experienced in providing counselling and support to their peers.

"*They have become many all over, even we have other areas in the grass roots, people are backwards but even there they have been reached with the peer educators, they have really been helped" (Respondent 8, SWFGD).*

"Because those peer educators nowadays they have been put up to the neighborhood, that is you can be in the house, you are surprised there they are they have come at the door the start teaching you, in the past there wasn't that…" (Respondent 4, SWFGD).

"In my opinion I would say they have improved because in the beginnings you know when you start a job and you are new at that job you must be confused a little. At the beginning they were not serious but now I think their maybe their offices are also serious and now they also have that experience… so for now they have improved" (Respondent 5, SWFGD).

Community mobilization

Majority of the sex workers were not knowledgeable of any group in Mombasa that represented the rights of the sex workers. However in one of the FGD's a group of paralegals in Kisauni were mentioned as an FSW rights group. In case of gender based violence, ICRH dices were mentioned as a source of help on how to take action.

"=*Sauti ya kinamama=, =Kisauni peer educators=, they have a group that can help you, and they have…those what are they called, this lawyers…paralegals…"(Respondent 8, SWFGD).*

"Maybe if you have been raped, and you do not know where to start, those neighborhood lawyers (paralegals) will help you, they will take you at every place you are needed to go to get help" (Respondent 8, SWFGD).

" If one thinks you have been sexually abused, you'll need to come like here =Learning Site= or make a phone call. Now you will get an advocate who will help, you will be served until you are fine. So you feel you're free" (Respondent 1, SWFGD).

Nearly all the sex workers expressed their dissatisfaction in regard to how their rights are defended in Mombasa. Moreover, the national and county police officers were identified as the major source of

oppression toward the sex workers. It was clear that there was lack of protection from the police and this was identified as a major gap that needs to be addressed.

> *"Because even if I have got a problem now, let us say we have gone to report to the police, when a police knows that am a sex worker, he will not help me, I must go to find someone to follow up for me" (Respondent 1, SWFGD).*

> *"Right now I don't see something we have been represented by, when we go around you stand by the roadside you are caught, you will go to court and pay a fine unless you bribe five hundred you alight because you think if you go to court you will maybe pay two thousand. So I don't see anything we have maybe been that defended by maybe these services" (Respondent 5, SWFGD).*

> *"Then navy even the one who has beaten you will not know them they have worn other things remaining only the eyes. Now even if you called those ICRH to come and help you, they all be put at a parade to choose who has beaten you, who will you chose and they have worn even ninjas" (Respondent 5, SWFGD).*

Interestingly, the sex workers noted that getting badges identifying them as sex workers would be effective in eliminating police oppression and brutality. However, this might not be a feasible option as sex work in Kenya is illegal.

> *"I am also for that thought that people be given budges of identifying you are a sex worker because if I also ass like my colleague number two has said, mostly in our area in mtongwe when it gets to that time, maybe around nine you want to get a matatu to go hustle then like that you are caught and maybe beaten. Now I would also contribute the badge issue be looked into" (Respondent 1, SWFGD).*

> *"You know the good thing about those badges is even when you meet the police at night they don't catch you. When you show them that one if they have arrested you when you produce it and show them they let you off the vehicle. Now those will also assist greatly" (Respondent 10, SWFGD).*

Furthermore, they did not think that their rights are better presented than they were in the previous two years. Majority of the sex worker felt that the representation of their rights is currently worse than it was previously due to the increasing oppression from the police.

> *"Right now it's much worse, why, you have left home at around nineish, it's the time of getting yourself ready to leave, when you just get to the road the police are there. The beatings start there, now will you really go or come back?" (Respondent 8, SWFGD).*

> *"Nowadays its worse people are being arrested more it needs you just leave early you organize yourself earlier if its leaving here you leave earlier you don't meet with those police because they don't want to know, once they've caught you" (Respondent 4, SWFGD).*

2.2.3 Key informant interviews

Feasibility of the intervention

Technical and operational feasibility

All the members of policy and community advisory boards that were interviewed indicated that the intervention was both operationally and technically feasible. The peer outreach activities were able to scale up the access of reproductive health services by the sex workers as they would mobilize the peers and link them up to health facilities. In addition, the creation of the policy board made the DIFFER activities easier to run due to the support received. One of the policy members indicated that the intervention was feasible because it was 'friendly'. This referred to the fact that both groups were sex workers enhancing sharing of information.

In terms of the targeted clinical services, it was noted that there was an increased number of clients that sought the services provided in the health facilities. Linking of the peers to health facilities was also made possible through the peer educators.

Legal feasibility

In regard to the legal feasibility of the intervention, it was noted that the government and the Kenyan constitution call for the provision of health services to every person without discrimination. Moreover, it was indicated that there has been more focus on the provision of SRH services to key population in an effort to curb HIV and STIs.

Despite abortion being illegal in Kenya, one of the key informants noted that targeting family planning services would ensure that the number of unwanted pregnancies are zero.

The illegality of sex work in Kenya was also noted as a challenge. Nonetheless, the participants noted that the constitution assures every Kenyan that they will receive healthcare services regardless of their gender, income or employment status.

Appropriateness and relevance of the intervention

Coherence with national policies

Generally, all the components of the intervention were thought to be coherent with the national policies. It was noted that during the development of the intervention, every aspect was factored in to ensure coherence with national guidelines and the reproductive health bill. The peer education component for example, was borrowed from youth peer education approach which is widely accepted by the ministry of health.

Endorsement by policy makers

The respondents agreed that all the packages of the DIFFER intervention were well accepted by policy and decision makers apart from unwanted pregnancies. One of the key informants emphasized the need to disseminate DIFFERs achievements and successes to make it more acceptable

Acceptability of the package by local health managers, health providers and community workers

The intervention was acceptable to the three cadres and this was due to the trainings received prior to it being implemented.

In addition, one of the key informants highlighted the fact that the healthcare providers' level of acceptance of the intervention may be affected by their personal beliefs or attitudes toward sex workers. It was also noted that the intervention could be more acceptable by the health providers who were involved during the training as opposed to those that were not.

Acceptability for the beneficiaries/users

There was an agreement among the key informants that the intervention was widely acceptable by the users of the services. This is largely due to the increase of number of clients receiving the SRH services.

Responsiveness to the target group

The intervention was able to respond to the needs of the sex workers as they were given a wide range of SRH services to choose from according to their needs.

However, there were two main challenges that were noted in terms of the sex workers accessing services. First, the operating hours of the facilities were not suitable as some of the peers were not able to access services at night since the hospitals were closed. Second, there was discrimination of the sex workers in the health facilities.

Gaps not addressed by the intervention

There was no follow up services in case the clients required further investigation and treatment. Additional payments were requested from the sex workers in such a case as the tests and treatments are not available freely.

The intervention did not bring the regular partners of sex workers on board. It was noted as important to bring the partners on board as this would ensure more success.

Another unaddressed gap was the lack of incorporating mobile outreaches in the DIFFER intervention. One of the respondents noted the importance of offering services at the hotspots as it was more convenient for the sex workers and would ensure increased utilization.

Sustainability and scalability

Financial sustainability

In response to the sustainability of the differ project, the training of the healthcare workers and the peer educators at the beginning of the implementation phase was commended as it will ensure that the services continue being provided. However, the respondents noted that financial sustainability would only be possible if the county government agrees to take over and adopt the intervention. In regard to the monthly stipends of the peer educators, support will be required from the county government to ensure financial sustainability.

Institutional sustainability

The fact that the health care providers were trained on the DIFFER intervention will ensure that it is sustainable within the current healthcare and community levels. Since the healthcare providers will be providing the services as part of their normal work, the DIFFER activities have a high likelihood of continuation. One of the respondents noted that they have been encouraging the healthcare workers to continue with the DIFFER activities.

Scaling up or replication

One of the major strengths of the DIFFER intervention is its ability to be replicated in various regions due to its incorporation and capacity building of the healthcare providers. This is because the healthcare providers can share their data and experiences to others working in different regions. One of the key informants mentioned that it could be replicated in Kisumu region which has similar social structures as Mombasa (beach life and influx of tourists).

2.2.4 Peer educator discussions

Feasibility of peer education activities

Generally the peer educators' appreciation of peer education was positive as most of them recognized the positive impact that their work had on sex workers. In the case of GBV, the peer educators noted that their presence made it possible for the sex worker to report cases. It has also ensured that the sex workers know their rights. The referral system by the peer educators was also commended and appreciated.

> ***"****If like let's say suppose if someone has been oppressed by her client. She may have found a find but have not had a good understanding. It could be they have agreed but on getting there the client has changed so she now knows that if the client has gone against their agreement, she has her rights and there are ways that she should follow to keep him from being oppressing here again. Because a while back they used to ignore, there was a lot of ignorance for someone could be mistreated but could not talk about it as they were afraid and there was stigma, someone has done something wrong to them but they will keep quiet because they say, if they tell someone that person would have known her secrets. So many have been helped because they have gotten to know their rights as a, as sex workers" (Respondent 3, Peer educator FGD, Group 1).*

"It satisfies well as we educate them, i.e. for example if you educate someone about condom she comes for condom here and uses so I get satisfied as I gave that education" (Respondent 4, Peer educator FGD, Group 2).

"I have benefited a lot because of the information I got first personally to empower me together with my fellow sex workers out there. Something that those mine have benefited from is on stigma and when a sex worker gets an STIs and has gone to the hospital like a Government Hospital and explain, "I have this problem", you know sex worker have many challenges and maybe in a month she has come with the same condition, there they will see as if "you are too much" and going there and saying, "I sell sex and I have this" and the stigma will be there; but DIFFER trained us that there are those referrals where we can bring them here or take them to=Learning Site=,so at least when she gets there she feels welcomed" (Respondent 2, Peer educator FGD, Group 1).

"It was not that easy but you encourage yourself and that you have volunteered to educate your colleagues (peers) you have to have any challenges so that they can get educated as you are educated, so it forces you to keep on going on since when you go others will insult you but the more they insult you as you continue educating them, the more you become one" (Respondent 4, Peer educator FGD, Group 1).

The ability of the sex workers to listen to the peer educators was dependent on the level of rapport created upon encounter.

"*It depends. First you know a girl who does sex work has many things. By the time you approach her at the hot spot you must create a good rapport with her because you meet her there and she has gone to look for clients and there you are u want to talk to her to tell her we have this project and this and she tells you to wait for another day for now she is at work and remember there at work when she gets a client at her kileo (drunkard state)and there you have to look for her after and still she will be intoxicated so you have to look for her another time again so that you make her comfortable so that you explain to her" (Respondent 10, Peer educator FGD, Group 2).*

The fact that the peer education services were provided by fellow sex workers was critical in ensuring that the sex workers were reached and educated. This is because the peer educators were able to talk to the sex workers while at work.

"*To me I can't say it was easy as such but being that we ourselves are sex workers and those are our colleagues, maybe if you have gone to job at night and maybe you have a friend who is also a sex worker so it should by the time you haven't get a client you can make a rapport when you are at work at night. You can talk to her" (Respondent 9, Peer educator FGD, Group 2).*

The peer educators agreed that the workload was manageable and they were able to combine the peer education with other activities. They stated that peer education activities never prevented them from doing other jobs.

"*You see, before a person is recruited as a peer educator you are told this isn't job it's volunteering. And by volunteering = ICRH= has put in place strategies and time it meets with their peer educators. So it cannot make you do not do your other stuff. Still you can do your stuff and still continuing with peer education, even still when doing your own work you can continue doing peer education. Because let's say you are doing job at a saloon, not all there are sex workers , but that peer education we were taught its must you give to our peers and general population that it's a must we educate on issues, our sensitization on issues on HIV, Cervical cancer screening,. I don't see if it can prevent you, you do your job as well as doing peer education" (Respondent 10, Peer educator FGD, Group 2).*

It was clear from the discussions that the hotspots that the peer educators were allocated were accessible and nearby and hence transport was not a limitation. This proximity made the implementation activities more effective.

> *"I can say, when we were trained we were allocated hotspots which are nearby and do not have to use fare (money/transport) for that distance when going" (Respondent 5, Peer educator FGD, Group 1).*

Despite these achievements, there were some challenges that the peer educators stated that need to be addressed. One of the challenges mentioned was meeting the targets set by the DIFFER project and it was difficult to achieve the set number of peers per peer educator.

> *"First, we were given a number of one hundred (target), when we had reached one hundred, we are told we are supposed to add everyone to reach three hundred, three hundred which was a very big challenge, you get those three hundred peers at the same venue without colliding with you fellow peer educator. It will be a lie even if at each hotspot there are a hundred and when she moves from here and she goes to where my fellow peer educator does not know her, will register her so getting those three hundred is difficult. We tried the hundred but those three hundred was a big challenge" (Respondent 6, Peer educator FGD, Group 1).*

Another challenge was resistance from some of the female sex workers. Some argued that the peer educators had to pay the sex workers to listen to the education.

> *"Sometimes you can go to the club you know when you are talking to the peer just like this they resist. So I will welcome her to a table maybe buy her a drink and I tell her "welcome I want to treat you today", you sit and tell the waiter "today give me one". So in that process of chatting that's when the story about project comes in between" (Respondent 5, Peer educator FGD, Group 1).*

> *"…But the challenge is that when you go to looking for them they tell you, "go away" because they say, "you have been given money to each and you are getting information from me" So they don't give you information and you argue (kusumbuana), if she gives you she will give you very wrong information which is not, when you look for her by calling the number, she is not available" (Respondent 5, Peer educator FGD, Group 1).*

Appropriateness and relevance of peer education

<u>Trainings received by peer educators</u>

Based on the discussions with the peer educators, the training not only had a major impact on them but on their peers. They were able to learn more about their rights as sex workers and educate their peers. It was also noted that the peers continued to educate other sex workers that were not reached by the peer educators. Additionally, the training on condom use was effective as some of the sex workers who did not know how to use them were able to learn.

> *"Me what satisfied me was on the side of my rights, when you are oppressed by clients there are steps that am supposed to follow and get my rights apart from clients there is harassment by policemen that we go through a lot outside there and I have my rights that am supposed to follow. That information has been of great importance a lot" (Respondent 3, Peer educator FGD, Group 1).*

> *"To add on her concerning the rights, there is one thing that I did not realize concerning violence but it happens a lot and in that people have their rights, peers has been easy for them to talk about and to be helped" (Respondent 2, Peer educator FGD, Group 1).*

> *"If I may add on condom. That condom use was very important because many people only see condoms but do not like to use it and they also do not know how to use it. You could use it*

wrongly and it will not help you, you would rather not have used it. Therefore training on condom use has also been of great importance" (Respondent 7, Peer educator FGD, Group 1).

"To me things to do with peer educators aren't bad because me as a peer educator when I educate my peer, remember that there may be someone whom I cannot reach but my peer can educate her fellow and that fellow to educate another in the sense that we normally have fliers when we are at the field that we normally give our peers. These fliers we give them then they give their friends. The message in that flier will be on a channel it flows. So it's not entirely the responsibility of my peer that the other person is reached. I will tell her to look for her fellow sex worker of and her also to look for another one" (Respondent 10, Peer educator FGD, Group 2).

It was also evident from the discussions that the trainings had impact on the sex workers ability to report sexual and gender based violence. The peer educators noted that the sex workers are now more free in reporting such incidences.

"*(Laughing) on the other side when I talk about gender based. This days sex workers are free to talk when a client abuses them sexually at the place where they do sex work. They are ready to talk and we explain to them what someone needs to do when they experience violence, where they are supposed to report. For now it's not hard for a sex worker to come out and say they have been violated" (Respondent 7, Peer educator FGD, Group 2).*

Notably, the peer educators noted the need to have regular refresher trainings to be up to date with the changes in any guidelines and technologies related to reproductive health services.

"In my opinion I see they covered but according to these days technology improves like every day. So in my opinion I would say if they could train us once then we do refresher training so that when anything new comes up they could be updating us because like now I hear there is oral testing. We only know these normal testing strips but now there is a new technology we have been hearing which you test using your mouth. At least we could be aware that there is a new technology that is in place. We know we lag behind but our on the forefront so it could have put in place strategies that after one month or two months there is a training" (Respondent 10, Peer educator FGD, Group 2).

<u>Peer educators activities</u>

Generally, the peer education activities were viewed as relevant and appropriate. According to the peer educators, the sex workers see them as their confidants and this makes them able to encourage the sex workers to seek adequate services. The group appreciated the ability of these activities to ensure that the peer educators follow up the sex workers to ensure that they get important services such as HTS. Furthermore, the referral for services was commended as it has ensured that the sex workers benefit from free services and health education. The distribution of condoms has led to increased use of condoms among the sex workers.

"It's satisfying because, as a teacher not that you teach and they are gone, when they are gone you will find that someone calls eeeh "so and so I have this and this problem and can I come to you we talk?", and she comes we talk, that means they were of importance that is why that person calls us and come to tell you her problems, then there is also that confidence of your peer" (Respondent 5, Peer educator FGD, Group 1).

"Another thing that was very important to me, was walking with the VCT counselor within the street/hood. We go in their homesteads, there are some people who are there and want to be tested but the distance of coming to VCT they cannot, so following them up in the street/hood it was another very important thing" (Respondent 5, Peer educator FGD, Group 1).

"Eeeh on my side it has helped because there are so many people and peers who have benefited. Maybe someone had a problem and don't know where to go for free help. On our side our peers have really benefited from free services, health education and how to use protection properly" (Respondent 9, Peer educator FGD, Group 2).

"I can say we have increased the usage because for example my peer calls me to take for her condoms yet she is someone who knows the =Drop Inn= , she herself can come for them here =Drop Inn= to pick and go and use them" (Respondent 7, Peer educator FGD, Group 2).

"What I can add is to say, the first thing is to thank so much DIFFER. Because since DIFFER was introduced to =Likoni= services have increased. In the past we only had HTC only. Family planning was only Depo and pills but when DIFFER was introduced here services like Norplant and cervical cancer screening were made available. Now I can say services have increased since DIFFER was started" (Respondent 10, Peer educator FGD, Group 2).

However, the group noted challenges in referral to some of the facilities and the sex workers would miss services as the healthcare providers were not available. In some cases, the sex workers are requested to pay for services in the health facilities despite the peer educators telling them that they are free. This affects the integrity of the peer education activities.

"But there are challenges that we are going through here is =Chaani= or here in =Chaani= you get referrals, you get there are many peers who want treatment when they come to the doctor, the doctor comes once, the day when the doctor comes you have not found anyone to refer her there. The doctor comes on Thursday, the doctor spends the whole day alone but the day you want the doctor" (Respondent 8, Peer educator FGD, Group 1).

"There is one thing and that you write for someone referral to come here and see the doctor, when she comes here to be attended to she is asked for money. And that money the sex worker are being asked for. And I told the doctor that she is coming, until now some peers sometimes see us as liars, we do give them false promises" (Respondent 9, Peer educator FGD, Group 1).

<u>Ashodaya visit</u>

Majority of the respondents did not seem to be aware about the visit from the people from Ashodaya. Additionally, those that knew about the visit did not find it relevant.

"They came to office but when they came to =Likoni= they were only shown that this is the =DIC= but they didn't say bring peers educators we know them and tell us what they are doing. They only came and were told this is =Likoni DIC= only and it was only one person who came" (Respondent 10, Peer educator FGD, Group 2).

"It had no significance whatsoever because we never interacted with them" (Respondent 4, Peer educator FGD, Group 2).

Effectiveness of peer education activities

<u>Impact of peer education activities on the uptake of services among sex workers</u>

It was clear from the discussion that peer educators activities had a significant impact on the sex workers. The participant reported that the level of acceptability of condom use had increased and the sex workers always use condoms. However, the use of lubes did not seem to have increased.

"People have accepted condoms, they have accepted condoms and they are using them a lot, the problem is lubs, people are seeing it's difficult to apply lubs, maybe in the process of having sex" (Respondent 9, Peer *educator* FGD, Group 1).

"Me on my side with regards to condom distribution, sex workers always use condoms" (Respondent 2, Peer educator FGD, Group 1).

"Most of my referrals are using family planning so I can say that they are following up" (Respondent 5, Peer educator FGD, Group 1).

"As I had explained at that time if there were family people come once per year. Now when we began this =Drop Inn= it made it like they come for them every day and it's not delaying. They will come every day" (Respondent 3, Peer educator FGD, Group 2).

"Yeah it helped them; I mean that information that we were giving them, you just know we were given family planning lessons, now we are not taught HIV only, also family planning" (Respondent 6, Peer educator FGD, Group 1).

All the peer educators also agreed that sex workers use SRH services more due to the DIFFER intervention.

"What I can add is to say, the first thing is to thank so much DIFFER. Because since DIFFER was introduced to =Likoni= services have increased. In the past we only had HTC only. Family planning was only Depo and pills but when DIFFER was introduced here services like Norplant and cervical cancer screening were made available. Now I can say services have increased since DIFFER was started" (Respondent 10, Peer educator FGD, Group 2).

When asked about the sex workers prefer to go for these services, majority of the respondents agreed that most sex workers prefer to seek services at the drop-in centres as opposed to government health facilities. The negative customer care at government facilities was cited as the major reason why sex workers prefer drop-in centres.

"In my opinion, my peers like here very much. Because when I tell them I want to refer them to (government facility name) she tells you aaaah doctors there are rude, when you get there they tell you this uuh-hh (Disagreement) then take this fare and go there (drop-in center) then the doctors welcomes her well. (Respondent 3, Peer educator FGD, Group 2).

"In addition, sex worker knows when she comes here, the doctor CO and the one in reception will receive her well. But when she thinks of going to government hospital, when you get there at six in the morning its full. So when someone imagines aaaah… to queue and here people are free moving. Someone enters as she gets out so someone will prefer here than going to queue" (Respondent 10, Peer educator FGD, Group 2).

"Yeah, a separate on so that someone comes here directly, she does not pass by there, go and queue, it becomes like =Likoni= in =Likoni= there is a Drop-in where they go to directly. The workers there are yours and they know what kind of people they are dealing with. Now, you are welcomed in a good way and you feel happy. By the time you get there, there could be some things which you may not have known, you will be treated for STI, you will have VCT done, even cancer screening, counseling; I mean a Drop-in is very important" (Respondent 5, Peer educator FGD, Group 1).

<u>Impact of ICRH activities in public health facilities</u>

According to the participants, there were minimal impacts on the services at public facilities. In term of the referral system, the peer educators noted that the doctors are sometimes not present at the facilities. Discrimination in these facilities was also reported to be rampant forcing the sex workers to opt for the drop-in centers or private facilities.

"Ee, also doctors, just the same way my peer said they are important because in =Mkomani= they have doctors who treat. There was a time I was had five referrals and there was no doctor to treat, I went and said in the office. I went and reported to the office and I was told if there was no doctor to do this, let her go and get treated by xxxx. They went and got treated but my referrals were nowhere to be found. So in my data it was seen I had ticked referrals that I had

taken but when checking, there are no referrals, so it shows there is nothing that has been done. (Respondent 5, Peer educator FGD, Group 1).

"People are complaining because you refer someone, she comes and there is no doctor, she is discriminated, you are sick and thus stays with her illness" (Respondent 1, Peer educator FGD, Group 1).

"So when we have something like a Drop-in, I will also feel confident. I won't struggle I will know there is a place I can be helped. When DIFFER ends in case I have a problem maybe I will go to the =Learning Site=" (Respondent 3, Peer educator FGD, Group 1).

2.2.5 Provider Interviews

Characteristics of the healthcare providers

A total of ten healthcare providers were interviewed and they included: two clinical officers, six registered nurses, one community health nurse and one HTS counsellor. All were from the DICs operated by ICRH. The average age of the respondents was 41.5 years. Eight had attained a diploma as the highest education level, one a higher diploma and one a degree. Respondents had an average of 16 years of experience as healthcare providers, ranging from two years to 30 years. All the respondents provided SRH services in their respective health facilities and they had more than two years' experience in their current departments.

Health talks

All the healthcare providers had held or attended health talks on SRH issues during the course of the project. Most of them reported to holding the talks on a daily basis. When asked whether their talks addressed FSW specific issues, only three of the respondents indicated so. The other HCPs noted that their talks were majorly directed to SRH issues in the general population which also included sex workers.

Information discussed during the sex talks included cervical cancer screening, STI management and treatment, family planning, HIV, and HTS.

One of the healthcare providers who had not had sex talks directed to the SWs emphasized the need to have an FSW support group within the facility to enhance dissemination of information specifically targeting the sex workers.

Meetings with the FSW community

Seven of the healthcare providers had meetings with the representatives of the SW community in the course of the project. The respondents reported to have has two or more meetings with sex worker representatives. The HTC counsellor for example, regularly had meetings with the peer educators and peer supervisors during outreaches.

The healthcare providers that attended such meetings included the clinical officers, nurses, and HTC counsellors.

Information discussed during such meetings included provision of SW friendly services, services to be provided under the DIFFER project, role of the community and policy advisory board, and milestones

Referral systems

Based on the discussions, it was evident that there are referral systems for the SWs to seek SRH services. The sex workers are linked from the community to the health facilities by the community health volunteers and the peer educators. The CHVs have specific referral form that they give the individuals seeking health services. Additionally, the peer educators have a referral book/form that they use to refer the peers to health facilities.

Referral between the public facilities and DIC was also reported. The referral form from the DICs also contains the name of the drop in centre that the client was referred from. The ICRH HTC counsellor also noted that there was a referral system in place to refer the FSW between the facility and the DICs.

However, the other healthcare providers were not aware about the existence of a referral system from the public facility to the DICs.

Majority of the FSW are referred for family planning services and management of STIs. Other services include post-abortion care.

HTS counsellor

Only three of the facilities had a HTS counsellor supported under the DIFFER intervention. These facilities were open every weekday for 8 hours a day. In regard to the population getting the HTC services, the three facilities catered for the general population with no specific focus to the sex workers.

Furthermore, the attendance to the HTS clinics by the sex workers was recorded in a specific Ministry of Health logbook for sex workers.

Attendance of the health facility by the FSW

It was clear from the discussion that most of the sex workers do not disclose their work when they visit the health facilities. Nonetheless, it was noted that older sex workers are more likely to disclose their work compared to the younger ones. One of the healthcare providers recognized the importance of building a good rapport with clients to enable them disclose that they are sex workers.

Stigma was cited as the major reason why the clients do not disclose that they are sex workers.

It was difficult to estimate the number of sex workers seen per month in the facilities as most do not disclose that they are FSWs. However, the healthcare providers noted that they serve about 15 SW workers in a month.

Majority of the sex workers mostly seek STI management, family planning, and CCC services (ART and HTC) when they visit public health facilities. Additionally they also seek other non SRH services such as TB diagnosis and management and child welfare services when they attend the facilities.

Feasibility of the DIFFER intervention activities

<u>Implementation of SW friendly care</u>

All the healthcare providers were in agreement that it was possible to implement sex worker friendly care during the course of the DIFFER intervention. This was attributed to the support from the government and regular evaluation by the program staff. Additionally, the presence of the linkage/referral system and the non-judgmental attitudes by the healthcare providers made the activities easier to implement.

Since the health talks also included the general population, it was difficult to focus on SW specific issues. Such talks were only possible in the DICs as they the audience included the peers, peer educators and their supervisors.

<u>Holding meetings with SW representatives</u>

Meetings with the SW representatives were reported not to be feasible in public facilities during the course of the project. When called for meetings, the sex worker representatives were not willing to wait for the healthcare providers to attend to emergences first before the meeting. Furthermore, the sex workers would at times not keep appointments when called for such meetings. However, this was possible in the DICs due to the good relationship they had with the staff and the ability of the peer educators to mobilize the groups.

Using referral systems

There were challenges in regard to the usage of referral systems for the FSWs, majority of the participants reported challenges. The failure of the sex workers to disclose their work when visiting the public facilities made it difficult for the healthcare providers to assess the effectiveness of these systems. Referral from the DIC to the facilities was perceived as being easy because the forms were recognized. However, there were challenges in referring clients from the public facilities to the DICs as the FSW served there were unwilling.

Feasibility of services at the DIC

Generally, extending the opening times at the DICs was report to be feasible except for the fact that the FSW would no report on time. Likewise, expanding the range of services was also possible as the DICs were able to introduce services that were not originally offered in their sites. The moonlight clinics were easy to implement as they DIC staff got assistance from the peer educators and supervisors.

Sustainability of DIFFER activities

The free services were reported by the healthcare providers to be sustainable as the government will continue offering them even after the DIFFER intervention period ends. However, the healthcare providers noted that there is likely to be challenges in terms of the STI treatment drugs as they are not offered freely within the facilities. Therefore, more support is required to ensure that the FSWs receive drugs from the facilities.

Challenges facing public facilities provision of SRH services to FSW

Three major challenges were identified by the healthcare providers: sex workers unwillingness to wait to be served, shortage of staff, and stock outs especially for STI treatment drugs. The shortage of drugs was a challenge that was highlighted by all the healthcare providers in the public facilities and they emphasized that there needs to be financial support to ensure that these drugs are always available.

Suggestions to address the challenges included provision of free medication by ICRH to the public facilities and building of SW only clinics in the public facilities. However, these might not be practical due to financial challenges.

2.2.6 Client exit interviews

Data was collected from four facilities, Chaani HC, Tudor Hosp, Likoni Hosp and Kisauni HC, which had also participated in the baseline survey. From these facilities, 100 women who were exiting after receiving SRH services were interviewed by trained research assistants. The following is the analysis of the data obtained from these women.

Table 28: Sociodemographic characteristics of the participants (N=100)

Variables	Frequency	Percent
What is the highest level of education completed		
None	3	3.0
Primary incomplete	15	15.0
Primary Complete	29	29.0
Secondary incomplete	7	7.0
Secondary complete	33	33.0
Any tertiary level	12	12.0
Missing	1	1.0
Are you currently working?		
Yes, employed full/part time/self	48	48.0
No, unemployed	38	38.0
Housewife	13	13.0
Other	1	1.0

Religion		
Christian	85	85.0
Muslim	15	15.0
Present relationship: Married living together		
Yes	56	56.0
No	39	39.0
Missing	5	5.0
Present relationship: Married living apart		
Yes	4	4.0
No	91	91.0
Missing	5	5.0
Present relationship: Not married living with partner		
Yes	4	4.0
No	91	91.0
Missing	5	5.0
Present relationship: Regular visiting partner		
Yes	15	15.0
No	81	81.0
Missing	4	4.0
Present relationship: Single no current partner		
Yes	10	10.0
No	85	85.0
Missing	5	5.0
Present relationship: Separated		
Yes	5	5.0
No	90	90.0
Missing	5	5.0
Present relationship: Divorced		
No	95	95.0
Missing	5	5.0
Present relationship: Widowed		
Yes	2	2.0
No	93	93.0
Missing	5	5.0
Do you have one primary sexual partner or do you have any other casual partners?		
One regular/primary partner	88	88.0
Casual partners only	2	2.0
None single	10	10.0

*some variables have multiple responses

Of the 100 women who consented to participate in the exit interview, the mean age was 26.3 years with a median of 25 years, mode 23 years and range of 25 (18-43) years. Only 3% did not have formal education with 40% having some form of secondary education. 48% had some form of employment and majority, 85% were Christians and 56% were married, table 28.

Table 29: Selected variables regarding reasons for visiting the clinic and associated costs (N=100)

Variables	Frequency	Percent
What are the reasons for visit today to clinic: Wanted FP		
Yes	36	36.0
No	62	62.0
Missing	2	2.0

Variables	Frequency	Percent
What are the reasons for visit today to clinic: Had STI symptoms		
Yes	7	7.0
No	91	91.0
Missing	2	2.0
What are the reasons for visit today to clinic: Had pain in abdomen		
Yes	2	2.0
No	96	96.0
Missing	2	2.0
What are the reasons for visit today to clinic: HTC		
Yes	3	3.0
No	95	95.0
Missing	2	2.0
What are the reasons for visit today to clinic: Antenatal care		
Yes	7	7.0
No	91	91.0
Missing	2	2.0
What are the reasons for visit today to clinic: Antenatal care: HTC		
Yes	17	17.0
No	81	81.0
Missing	2	2.0
What are the reasons for visit today to clinic: SGBV		
Yes	11	11.0
No	87	87.0
Missing	2	2.0
What are the reasons for visit today to clinic: Came for HIV care/ART follow up		
Yes	12	12.0
No	85	85.0
Missing	3	3.0
What are the reasons for visit today to clinic: Cervical cancer screening		
Yes	1	1.0
No	95	95.0
Missing	4	4.0
What are the reasons for visit today to clinic: other		
Yes	2	2.0
No	95	95.0
Missing	3	3.0
Why did you come to this clinic, and not another one?: Referred here by another facility		
Yes	3	3.0
No	96	96.0
Missing	1	1.0
Why did you come to this clinic, and not another one?: Closest facility		
Yes	45	45.0
No	53	53.0
Missing	2	2.0
Why did you come to this clinic, and not another one?: Only clinic I know		
Yes	5	5.0
No	93	93.0
Missing	2	2.0
Why did you come to this clinic, and not another one?: I like the services I get here		

Variables	Frequency	Percent
Yes	49	49.0
No	49	49.0
Missing	2	2.0
Why did you come to this clinic, and not another one?: I like providers here		
Yes	29	29.0
No	69	69.0
Missing	2	2.0
Which clinic or services did you receive today? FP		
Yes	24	24.0
No	64	64.0
Missing	12	12.0
Which clinic or services did you receive today?:HTC		
Yes	33	33.0
No	56	56.0
Missing	11	11.0
Which clinic or services did you receive today? PHC		
Yes	10	10.0
No	79	79.0
Missing	11	11.0
Which clinic or services did you receive today?:Antenatal care		
Yes	12	12.0
No	74	74.0
Missing	14	14.0
Which clinic or services did you receive today?:STI		
Yes	20	20.0
No	69	69.0
Missing	11	11.0
Which clinic or services did you receive today? HIV care/ART		
Yes	3	3.0
No	85	85.0
Missing	12	12.0
What other services have you used in this clinic over the past year? FP		
Yes	33	33.0
No	47	47.0
Missing	20	20.0
What other services have you used in this clinic over the past year? HTC		
Yes	46	46.0
No	45	45.0
Missing	9	9.0
What other services have you used in this clinic over the past year? PHC		
Yes	43	43.0
No	48	48.0
Missing	9	9.0
What other services have you used in this clinic over the past year? Antenatal care		
Yes	14	14.0
No	76	76.0
Missing	10	10.0
What other services have you used in this clinic over the past year? STI		
Yes	17	17.0
No	74	74.0

Variables	Frequency	Percent
Missing	9	9.0
What other services have you used in this clinic over the past year? HIV care/ART		
Yes	2	2.0
No	88	88.0
Missing	10	10.0
Did you pay for any of the services you received		
Yes	35	35.0
No	65	65.0
How do you normally reach the clinic?		
Matatu (public transport)	30	30.0
Taxi	2	2.0
Motor bike taxi	16	16.0
Walk	51	51.0
Car	1	1.0
How did you pay for your transport here today and all the other costs you may have had to meet?		
Own savings/regular income	40	40.0
Partner/household member gave the money	21	21.0
Family member not living in the same household gave the money	1	1.0
Other	4	4.0
Missing	34	34.0
Are all the services available all the time here, or do you need to come on different days for different services?		
All available on same day	72	72.0
Need to come on different days	20	20.0
Do not know	5	5.0
Missing	3	3.0
During your consultation today, were you referred to any other provider for other services?		
Yes	39	39.0
No	60	60.0
Missing	1	1.0
If yes, was this referral to another service/ department in this facility or to another facility? (N=39)		
Another dept/service in this facility	35	89.7
Another facility	3	7.7
Missing	1	2.6
Did you receive this additional service today, or do you have to come back on a different day? (N=39)		
Different provider, same day	33	91.7
Told to come back another day	1	2.8
Missing	2	5.6
Do you plan to go to that referral place?		
Yes	1	1.0
No	2	2.0
If no, why not?		
No time	3	3.0
Other	1	1.0
Did you feel like your consultation with the health care provider today was confidential and private		

Variables	Frequency	Percent
Yes, all of it	76	76.0
Some, but not all	10	10.0
No	14	14.0
How did the providers treat you today, during your visit?		
Very well	87	87.0
Not very well	10	10.0
Missing	3	3.0

*Some variables have multiple responses

The five commonest reasons for visiting the medical facility were to seek services for FP, 36%, HIV testing during pregnancy 17%, HIV care 12%, sexual and gender based violence 11% and STI treatment 7%; table 29. Only one woman had visited the facility for cervical cancer screening. The women had chosen to visit the particular facility because it was closest to them, 45%, or they liked the services, 49% or they liked the providers there, 29%. 24% of the women received FP services, 33% HIV testing and 20% STI services. 33% of the women had used the facility before for FP, 33%, HIV testing, 46% and STI 17% services. 35% of the women were asked to pay, the mean amount paid is Kshs 625.00, mode, Kshs 50 and range 10-15,000. Average income per household was Kshs 14,446, mode 15,000 with a range of 1,000 to 66,000. The participants gave several areas of improvement. Most of them were about more training of the clinical staff, increasing the numbers of providers, expanding space to reduce overcrowding as well as making sure medications are always available.

Average time to get to the clinic was 32 minutes with a mode of 30 minutes. The mean amount paid for transportation was Kshs 37 with a mode of 30 and range of 200 which is consistent with the facility being near those who used them. Average time spent at the facility was 79 minutes with a mode of 60 minutes.

Table 30: Family planning services

Variables	Frequency	Percent
How many children do you currently have?		
0	20	20.0
1	38	38.0
2	27	27.0
3	9	9.0
4	2	2.0
5	1	1.0
6	1	1.0
Missing	2	2.0
Was your last pregnancy planned? (N=98)		
Yes	45	45.9
No	42	42.9
Has no children	11	11.2
Do you want to become pregnant now?		
Yes	9	9.0
No	58	58.0
Currently pregnant	33	33.0
Do you currently use a method to prevent pregnancy yourself/with your partner? (N=67)		
Yes	58	86.6
No	7	10.4
Not sexually active/no partner	2	3.0
If yes, what method are you/your partner currently using? (N=58)		

Variables	Frequency	Percent
If yes, what method are you/your partner currently using? (N=58)		
2-month injectable (NET-EN)	2	3.4
3-month injectable (Depo)	27	46.6
Combined oral contraceptive pills	8	13.8
Progestin-only contraceptive pills	2	3.4
IUD	3	5.2
Male condoms	8	13.8
Emergency contraception	1	1.7
Sterilization	1	1.7
Diaphragm	1	1.7
Norplant	14	24.1
Which family planning methods do you think are available at this clinic? (N=85)		
2-month injectable	4	4.7
3-month injectable	66	77.6
Combined oral contraceptive pills	45	52.9
Progestin-only contraceptive pills	27	31.8
IUD	26	30.6
Male condoms	27	31.8
Female condoms	12	14.1
Emergency contraception	4	4.7
Diaphragm	12	14.1
Sterilization	8	9.4
Norplant	25	29.4
Are there any other FP methods you have heard about that you would like to have available at this clinic? (N=66)		
2-month injectable	3	4.5
3-month injectable	6	9.1
Combined oral contraceptive pills	6	9.1
Progestin-only contraceptive pills	5	7.6
IUD	8	12.1
Male condoms	10	15.2
Female condoms	7	10.6
Emergency contraception	4	6.1
Sterilization	11	16.7
Diaphragm	7	10.6
Norplant	10	15.2
In any of last year's family planning visits at this or other clinic did a provider offer you:		
HIV testing and counselling (HTC)		
Yes	59	59.0
No	34	34.0
Missing	7	7.0
Genital examination, when the provider examines your genitals with their hands		
Yes	7	7.0
No	85	85.0
Missing	8	8.0
Genital examination using an instrument put inside your vagina		
Yes	5	5.0
No	86	86.0
Missing	9	9.0
Pap smear, or test for cervical cancer screening		

Variables	Frequency	Percent
Yes	6	6.0
No	87	87.0
Missing	7	7.0
Male condoms		
Yes	16	16.0
No	77	77.0
Missing	7	7.0
Demonstration on how to use a male condom		
Yes	19	19.0
No	74	74.0
Missing	7	7.0
Female condoms		
Yes	6	6.0
No	87	87.0
Missing	7	7.0
Demonstration on how to use a female condom?		
Yes	10	10.0
No	82	82.0
Missing	8	8.0
Dual method use (condoms plus another method)		
Yes	16	16.0
No	76	76.0
Don't Know	1	1.0
Missing	7	7.0
Have you ever heard of emergency contraception/morning after pill?		
Yes	72	72.0
No	27	27.0
Other	1	1.0
If yes, where would you go if you wanted to get it? (N=72)		
This Clinic	13	18.1
Another clinic	4	5.6
Hospital	2	2.8
Pharmacy/chemistry	56	77.8
If yes, have you ever used it before? (N=72)		
Yes	26	36.1
No	46	63.9
Where would a woman living in your area go if she wanted a Post abortion care services?		
Chaaani HC	4	4.0
Kisauni HC (MCC)…..	6	6.0
Tudor District hospital	8	8.0
Likoni district hospital	14	14.0
Other	29	29.0
Don't know	27	27.0
Missing	12	12.0
Do you feel you could speak with a provider here to get information/advice on Post abortion care services?		
Yes	68	68.0
No	30	30.0
Missing	2	2.0
If no, why not? (N=30)		

Variables	Frequency	Percent
you would be treated badly	4	13.3
you feel providers are against Post abortion care services	5	16.7
you are afraid someone will find out you were pregnant	1	3.3
Other	2	6.7
Have you heard of medical abortion (where a nurse or doctor gives a woman medicines to take that cause abortion safely?)		
Yes	61	61.0
No	38	38.0
Other	1	1.0
Have you heard of women buying such medicines themselves to cause abortion?		
Yes	80	80.0
No	20	20.0

*Some variables have multiple responses

Twenty percent of the women did not have children while 65% had 1-2 children. 42% of the women had a pregnancy which was not planned, though not comparable is similar to the finding from Kenya Demographic and Health survey of 2014 (KNBS 2015). Of those not pregnant, 58% were using a contraceptive method. Of those using FP, 27% were on Depo-Provera. About 66% of the women said the facility had Depo-Provera, 45% combined pills, 27% progestin only pills and 12% female condoms. 72% had heard about emergency contraception of whom, 56% would like to get the pills from Pharmacy or chemist. 68% reported they felt comfortable to talk to somebody in the facility about post abortion care. 61% had heard about medical abortion and 80% said they had heard of women buying such medicines to procure abortions, table 30.

Table 31: STI and HIV prevention

Variables	Frequency	Percent
Have you ever had a discussion about protecting yourself from STI/HIV infection with a provider at this facility?		
Yes	69	69.0
No	31	31.0
Have you ever heard of a female condom before?		
Yes	79	79.0
No	20	20.0
Missing	1	1.0
If yes, have you ever tried using one? (N=79)		
Yes	9	11.4
If yes, where did you get the female condom from? (N=9)		
This Clinic	2	22,2
Another	1	11,1
Pharmacy/chemist	2	22,2
Friend	2	22,2
Do you think you would ever use a female condom?		
Yes	22	22.0
No	59	59.0
Not sure	9	9.0
Never seen/don't know about them	7	7.0
Missing	3	3.0
Did you get any female or male condoms during your visit today?		
Yes, female condoms from provider	1	1.0
Yes, male condoms from provider	2	2.0
Yes, male condoms from dispenser	1	1.0

Variables	Frequency	Percent
No	94	94.0
Missing	2	2.0
How often do you use male condoms?		
Never use them	47	47.0
< 50% (less than half the time)/ Rarely	20	20.0
About 50% (half the time)/ Sometimes	5	5.0
>50% (more than half the time but not every time)/ Most of the time	11	11.0
100% (always/ All of the time	10	10.0
Missing	7	7.0
Where do you get male condoms from?:This Clinic		
Yes	16	16.0
No	32	32.0
Total	48	48.0
Missing	52	52.0
Where do you get male condoms from?:Another clinic		
Yes	3	3.0
No	44	44.0
Total	47	47.0
Missing	53	53.0
Where do you get male condoms from?:Pharmacy/chemist		
Yes	20	20.0
No	27	27.0
Total	47	47.0
Missing	53	53.0
Where do you get male condoms from?:Shop		
Yes	6	6.0
No	41	41.0
Total	47	47.0
Missing	53	53.0
Where do you get male condoms from?:Friend		
Yes	2	2.0
No	45	45.0
Total	47	47.0
Missing	53	53.0
Where do you get male condoms from?:Community worker		
No	47	47.0
Missing	53	53.0
Where do you get male condoms from?:other		
No	35	35.0
Other	13	13.0
Total	48	48.0
Missing	52	52.0
If you use condoms, do you use condoms just for preventing sexually transmitted infections including HIV or do you also use them for preventing pregnancy?		
For preventing STIs/HIV only	10	10.0
For preventing pregnancy only	8	8.0
For preventing STIs/HIV and pregnancy	24	24.0
Other	1	1.0
Total	43	43.0
Missing	57	57.0
Did you use a condom during your last sexual intercourse?		

Variables	Frequency	Percent
Yes, male	12	12.0
Yes, female	15	15.0
No	7	7.0
Total	34	34.0
Missing	66	66.0
If no, why did you not use a condom?		
Had none available	5	5.0
Partner would not wear one	1	1.0
Want to get pregnant	1	1.0
Partner and I never use condoms	1	1.0
I don't use condoms with that partner	4	4.0
Other	3	3.0
Total	15	15.0
Missing	85	85.0
Have you heard anything about the potential for male circumcision to prevent STIs, including HIV?		
Yes	68	68.0
No	30	30.0
Total	98	98.0
Missing	2	2.0
Has your partner been circumcised?		
Yes	51	51.0
No	6	6.0
No partner	4	4.0
Don't know/unsure	2	2.0
Total	63	63.0
Missing	37	37.0

*Some variables have multiple responses

Sixty nine percent of the participants had discussion on prevention of STI and HIV. 79% had heard about female condom of whom only 9% had tried to use them. 22% reported they would consider using female condoms in future. Only two women received any form of condom during their clinic visit. 47% of the participants had never used condoms. 20% of those who reported use used condoms <50% of the time and only 10% reported 100% condom use. Of those who had used condoms before, 24% used for prevention of pregnancy and STI (dual protection) and 27% had used a condom (male or female) during the last sex act. 37% did not respond to question on circumcision of their partner with while 51% reported their partner was circumcised, table 31.

Table 32: Cervical cancer screening

Variables	Frequency	Percent
Have you ever had a test for cervical cancer prevention		
Yes	21	21.0
No	75	75.0
Not sure	3	3.0
Total	99	99.0
System	1	1.0
If yes, who suggested the test?		
The provider	11	11.0
I asked for the test	8	8.0
Peer educator	1	1.0
Total	20	20.0

Variables	Frequency	Percent
System	80	80.0
When did you receive the results of the test?		
The same day	10	10.0
Never	1	1.0
More than a day later	3	3.0
Total	14	14.0
System	86	86.0
What was the result of your test?		
Negative/normal	12	12.0
System	88	88.0
If yes, what treatment did you receive?		
LEEP (electrocautery	1	1.0
System	99	99.0
What do you know about cervical cancer?		
Nothing	56	56.0
It is caused by a virus	4	4.0
It is curable	20	20.0
It is incurable	1	1.0
It is preventable	6	6.0
Other	10	10.0
Total	97	97.0
System	3	3.0

Only 21% of the women said they had test for cervical cancer prevention with only 8 of the women reporting they had asked for the test themselves. Of the 20 women, 10 got their results the same day. None of them had any cervical lesion from what they reported. 20% of the women said cervical cancer is curable while 56% said they know nothing about cervical cancer. These findings reflect the fact that there is no organized population based cervical cancer screening program in Kenya. Any screening which occurs is opportunistic.

Table 33: HIV testing

Variables	Frequency	Percent
Were you offered an HIV test today?		
Yes	39	39.0
No	59	59.0
Total	98	98.0
System	2	2.0
Have you ever had an HIV test, today or any other time?		
Yes	98	98.0
System	2	2.0
If client has had an HIV test: when was the last time you were tested?		
Today	40	40.0
Within last 6 months	35	35.0
Over 6 months but <1year	9	9.0
Between 1-2 years ago	8	8.0
More than 3 years ago	7	7.0
Total	99	99.0
System	1	1.0
Where have you been tested?: ANC/PMTCT this clinic		
Yes	37	37.0
No	60	60.0
Total	98	98.0

System	3	3.0
Where have you been tested?: ANC/PMTCT other facility		
Yes	7	7.0
No	91	91.0
Total	98	98.0
System	2	2.0
Where have you been tested?: HTC this clinic		
Yes	38	38.0
No	59	59.0
Total	98	98.0
System	3	3.0
Where have you been tested?: HTC other facility		
Yes	7	7.0
No	91	91.0
Total	98	98.0
System	2	2.0
Where have you been tested?: NGO		
Yes	4	4.0
No	95	95.0
Total	99	99.0
System	1	1.0
Where have you been tested?: Private facility		
Yes	3	3.0
No	86	86.0
Other	8	8.0
Total	98	98.0
System	3	3.0
Why did you take the test?		
Provider suggested test	49	49.0
Private insurance	8	8.0
I asked for test	32	32.0
Other	9	9.0
Total	98	98.0
System	2	2.0
Have you received your results of your test?		
Yes	97	97.0
No, they did not give them to me	1	1.0
Did not receive them yet	1	1.0
Total	99	99.0
System	1	1.0
I would like to ask you if you would be prepared to share the results of your HIV test with me.		
Positive	24	24.0
Negative	63	63.0
Did not wish to disclose	3	3.0
Total	90	90.0
System	10	10.0
Has your partner been tested for HIV?		
Yes	56	56.0
No	14	14.0
Don’t know	11	11.0
Total	81	81.0

System	19	19.0
Did the provider ask you to encourage your partner to come for testing?		
Yes	73	73.0
No	18	18.0
Don't know	3	3.0
Total	94	94.0
System	6	6.0
Do you know your partner's HIV status?		
Yes	61	61.0
No	13	13.0
Total	74	74.0
System	26	26.0

*Some variables have multiple responses

Overall, 98% of the women reported they had been tested for HIV at some point in their life. 39% of the women were offered HIV testing during the index visit, table 6. 40% of the women were tested during the index visit. 49% women took the test because health care provider suggested while 32% specifically asked for the test. Of those willing to share their HIV results, 24% were HIV positive, 63% HIV negative and only 3% did not want to disclose their status. 56% reported their partner had been tested for HIV. 73% of the women reported they were encouraged to ask their partners to be tested for HIV, table 33.

Table 34: HIV/ARV services

Variables	Frequency	Percent
Are you currently taking ARVs?		
Yes	22	22.0
No	4	4.0
Total	26	26.0
System	74	74.0
Did the provider ever offer you a pap smear or cervical test?		
Yes	6	6.0
No	17	17.0
Total	23	23.0
System	77	77.0
Did the provider talk to you about condom use?		
Yes	14	14.0
No	9	9.0
	77	77.0
If you get contraception from FP service in this or another clinic, does the FP service provider you normally go to know you are HIV positive?		
Yes, I told them	6	6.0
Yes they asked	1	1.0
No, they don't know	1	1.0
I don't know if they know my HIV status	1	1.0
Total	9	9.0
System	91	91.0
Were you given any family planning advice when your status was confirmed or when you started ARVs?		
Yes, at both points	6	6.0
Yes, when status confirmed only	7	7.0
Yes, when started ARVs only	1	1.0

No	6	6.0
Total	20	20.0
System	80	80.0
What advice was given to you?:Advised to use contraception		
Yes	10	10.0
No	3	3.0
Total	13	13.0
System	87	87.0
What advice was given to you?:Advised not to get pregnant		
Not applicable	87	87.0
No	2	2.0
Personal choice	4	4.0
Use COIL	2	2.0
Use CONDOMs	4	4.0
THREE MONTHS INJECTION – Depo Provera	1	1.0
What advice was given to you?: Advised not to get pregnant		
Yes	1	1.0
No	13	13.0
Total	14	14.0
System	86	86.0
What advice was given to you?:Advised not to get pregnant until CD4 count increased		
Yes	4	4.0
No	9	9.0
Total	13	13.0
System	87	87.0
What advice was given to you?:Advised to seek counselling before getting pregnant		
Yes	5	5.0
No	9	9.0
Total	14	14.0
System	86	86.0
What advice was given to you?:Advised about risks of getting pregnant		
Yes	2	2.0
No	12	12.0
Total	14	14.0
System	86	86.0
What advice was given to you?:Advised that it is ok to have children once ARV treatment started		
Yes	1	1.0
No	13	13.0
Total	14	14.0
System	86	86.0
What advice was given to you?:Advised that it is ok to have children with management of disease		
Yes	1	1.0
No	13	13.0
Other	2	2.0
Total	16	16.0
System	84	84.0
What advice was given to you?:Advised to stop having sex		
Yes	1	1.0
No	13	13.0
Total	14	14.0

System	86	86.0
How has your HIV status affected your decision to have no more children?: I have been told not to have them		
Yes	1	1.0
No	18	18.0
Total	19	19.0
System	81	81.0
How has your HIV status affected your decision to have no more children? I am worried they may get sick/ die		
Yes	4	4.0
No	14	14.0
Total	18	18.0
System	82	82.0
How has your HIV status affected your decision to have no more children? I am worried about my health		
Yes	5	5.0
No	13	13.0
Total	18	18.0
System	82	82.0
How has your HIV status affected your decision to have no more children? I have children already		
Yes	10	10.0
No	9	9.0
Total	19	19.0
System	81	81.0

*Some variables have multiple responses

Of the women who participated, 26 would be considered HIV positive since 22 said they were on ARVs and 2 were not, table 34. As previously noted, only 24 women who had been tested before said they were HIV positive. Of those on HIV positive, only 6 were offered pap smear test. 77% of the women were talked to by the provider about condoms. Only 9 women responded to the question of whether their FP providers know their HIV status with 6 of them reporting that they informed their providers. Only one woman reported that she was advised not to get pregnant while 5 were advised to get counselling before they become pregnant. One woman was advised to stop having sex. Four women were worried if they get children, they may get sick and die while 5 said they worry about their health and 10 said they already had children, table 7. HIV stigma is still a big problem in Kenya. It also seems there are health care providers who may be misadvising HIV infected persons since there are no recommendations in Kenya for women who are HIV positive to stop sex or not to have children. Integration of cervical cancer screening is still poor even in setting such as HIV services given women who are HIV infected are more likely to have premalignant lesions or HPV infection than general population. There are government efforts to scale up cervical cancer screening among women who are HIV infected (MOH ART guidelines 2015).

Table 35: Sexual and Gender-based Violence Services (SGBV

Variables	Frequency	Percent
During your visit today, did the provider ask if you have ever experienced physical violence		
Yes	3	3.0
No	95	95.0
Total	98	98.0
System	2	2.0
In the past one year, have you ever experienced sexual and gender based violence?		

No	2	2.0
System	98	98.0

*Some variables have multiple responses

Only three women reported that the health care providers asked them if they had ever experienced physical violence and none of them had experienced sexual and gender based violence in the past one year, table 35. In Kenya, there is no policy on screening for SGBV though KDHS 2014 shows that about 45% of women age 15-49 have experienced physical violence since age 15, and 20% experienced physical violence within the 12 months prior to the survey (KNBS 2015).

Table 36: Values, beliefs, attitudes and satisfaction

Variables	Frequency	Percent
It is hard to talk to health providers because they shout at clients or do not treat them with respect		
strongly agree	8	8.0
somewhat agree	16	16.0
Not sure	1	1.0
somewhat disagree	28	28.0
strongly disagree	45	45.0
Total	98	98.0
System	2	2.0
The government is not doing enough to stop people that are spreading HIV		
strongly agree	14	14.0
somewhat agree	14	14.0
Not sure	10	10.0
somewhat disagree	28	28.0
strongly disagree	32	32.0
Total	98	98.0
System	2	2.0
The health providers are doing their best for people with STIs, including HIV		
strongly agree	62	62.0
somewhat agree	32	32.0
Not sure	3	3.0
somewhat disagree	1	1.0
Total	98	98.0
System	2	2.0
Men should be involved in family planning with their partners		
strongly agree	77	77.0
somewhat agree	17	17.0
Not sure	2	2.0
strongly disagree	2	2.0
Total	98	98.0
System	2	2.0
Men should be educated on condom use because otherwise they will never use condoms		
strongly agree	83	83.0
somewhat agree	9	9.0
Not sure	5	5.0
strongly disagree	1	1.0
Total	98	98.0
System	2	2.0

Variables	Frequency	Percent
There is no need to have termination of pregnancy services in this community because this community believes in saving lives		
strongly agree	58	58.0
somewhat agree	22	22.0
Not sure	5	5.0
somewhat disagree	6	6.0
strongly disagree	7	7.0
Total	98	98.0
System	2	2.0
I was greeted warmly today		
strongly agree	90	90.0
somewhat agree	8	8.0
Total	98	98.0
System	2	2.0
Staff were friendly		
strongly agree	83	83.0
somewhat agree	11	11.0
Not sure	1	1.0
somewhat disagree	2	2.0
strongly disagree	1	1.0
Total	98	98.0
System	2	2.0
The nurses/doctors were easy to understand		
strongly agree	88	88.0
somewhat agree	9	9.0
somewhat disagree	1	1.0
Total	98	98.0
System	2	2.0
The nurses/doctors listened to me		
strongly agree	90	90.0
somewhat agree	7	7.0
somewhat disagree	1	1.0
Total	98	98.0
System	2	2.0
Staff were helpful in providing information		
strongly agree	78	78.0
somewhat agree	13	13.0
Not sure	1	1.0
somewhat disagree	5	5.0
strongly disagree	1	1.0
Total	98	98.0
System	2	2.0
I felt free to ask questions		
strongly agree	74	74.0
somewhat agree	15	15.0
Not sure	2	2.0
somewhat disagree	3	3.0
strongly disagree	4	4.0
Total	98	98.0
System	2	2.0
I was provided all the information I wanted during today's consultation		

Variables	Frequency	Percent
strongly agree	78	78.0
somewhat agree	12	12.0
somewhat disagree	7	7.0
strongly disagree	1	1.0
Total	98	98.0
System	2	2.0
My consultation was private		
strongly agree	71	71.0
somewhat agree	12	12.0
somewhat disagree	6	6.0
strongly disagree	9	9.0
Total	98	98.0
System	2	2.0
The nurses/doctors ensured me about confidentiality		
strongly agree	67	67.0
somewhat agree	10	10.0
Not sure	2	2.0
somewhat disagree	3	3.0
strongly disagree	16	16.0
Total	98	98.0
System	2	2.0
The waiting time was reasonable		
strongly agree	62	62.0
somewhat agree	17	17.0
Not sure	1	1.0
somewhat disagree	13	13.0
strongly disagree	5	5.0
Total	98	98.0
System	2	2.0
The staff treated me with respect		
strongly agree	89	89.0
somewhat agree	8	8.0
Not sure	1	1.0
Total	98	98.0
System	2	2.0
I would like to come back to this clinic/hospital again		
strongly agree	94	94.0
somewhat agree	4	4.0
Total	98	98.0
System	2	2.0
I would recommend this clinic/hospital to a friend		
strongly agree	91	91.0
somewhat agree	6	6.0
Total	97	97.0
System	3	3.0
Have you ever become involved in a casual relationship with a man because he provided you with		
Yes	21	21.0
No	71	71.0
Total	92	92.0
System	8	8.0

Variables	Frequency	Percent
If yes, have you done this 3 times or more in the past 6 months?		
Yes	6	6.0
No	16	16.0
Total	22	22.0
System	78	78.0

Twenty four percent of the women somewhat to strongly agreed that it was hard to talk to health care providers because they shout at clients while 45% strongly disagreed, table 36. 28% somewhat to strongly agreed that government was not doing enough to stop people who are spreading HIV while 32% strongly disagreed. 98% somewhat to strongly agreed that health providers are doing their best for people with STI including HIV. 77% and 83% strongly agree that men should be involved in family planning with their partners and be educated on condom use respectively. Only 7% strongly disagreed that there should be no termination of pregnancy services. 83% to 90% strongly agreed that they were warmly received or staff were friendly or they were easy to understand. 74-78% strongly agreed that they received useful information or information they needed or they felt free to ask questions during their consultation. 71% strongly agreed that the consultation was private and 67% were assured of confidentiality. 62% strongly agreed that waiting time was reasonable. 89% strongly agreed they were treated with respect, 94% would like to come back to the same facility and 91% would recommend a friend. 21% said they have had a casual relationship of whom 6 had such relationship in the past 3-months, table 9.

Table 37: Empowerment

Variables	Frequency	Percent
I do this work because I have to.		
Agree	24	24.0
Disagree	25	25.0
Total	49	49.0
System	51	51.0
I do this work because I will get in trouble if I don't.		
Agree	17	17.0
Disagree	32	32.0
Total	49	49.0
System	51	51.0
I do this work because I get reward or benefit if I do it.		
Agree	38	38.0
Disagree	11	11.0
Total	49	49.0
System	51	51.0
I do this work because I personally think it is the right thing to do, whether or not others agree.		
Agree	46	46.0
Disagree	3	3.0
Total	49	49.0
System	51	51.0
I do this work because I enjoy it.		
Agree	40	40.0
Disagree	9	9.0
Total	49	49.0
System	51	51.0
I do this work so that others won't get mad at me.		

Variables	Frequency	Percent
Agree	6	6.0
Disagree	43	43.0
Total	49	49.0
System	51	51.0
I do this work because I want people to like me.		
Agree	4	4.0
Disagree	45	45.0
Total	49	49.0
System	51	51.0
I do this work because it is personally important for me.		
Agree	46	46.0
Disagree	3	3.0
Total	49	49.0
System	51	51.0
I do this work to please other people.		
Agree	2	2.0
Disagree	47	47.0
Total	49	49.0
System	51	51.0
I do this work because I need the money.		
Agree	49	49.0
System	51	51.0
You mentioned that you do the particular work that you do "because you will get in trouble if you did not". Who will you get in trouble with?		
Regular partner /husband	3	3.0
Other household members	1	1.0
Other members of your community/relatives out of the household	1	1.0
Employer, boss or colleagues	1	1.0
Other	8	8.0
Total	14	14.0
System	86	86.0
You mentioned that you do the particular work that you do "to please other people". Who do you want to please?		
Regular partner /husband	1	1.0
Other members of your community/relatives out of the household	1	1.0
Total	2	2.0
System	98	98.0
I do not work because I can't.		
Agree	5	5.0
Disagree	45	45.0
Total	50	50.0
System	50	50.0
I do not work because I will get in trouble if I do.		
Agree	1	1.0
Disagree	49	49.0
Total	50	50.0
System	50	50.0
I do not work because I do not think it is something valuable.		
Agree	1	1.0
Disagree	49	49.0
Total	50	50.0

Variables	Frequency	Percent
System	50	50.0
I do not work because other people tell me not to do so.		
Disagree	50	50.0
System	50	50.0
I do not work because I personally think it is the right thing to do, whether or not others agree.		
Agree	1	1.0
Disagree	49	49.0
Total	50	50.0
System	50	50.0
I do not work because I don't enjoy doing it.		
Disagree	50	50.0
System	50	50.0
I do not work because others might get mad at me if I do.		
Disagree	50	50.0
System	50	50.0
I do not work because I want people to like me.		
Disagree	50	50.0
System	50	50.0
I do not work because it is not personally important for me to work.		
Disagree	50	50.0
System	50	50.0
I do not work because I am trying to please other people.		
Disagree	49	49.0
System	51	51.0
You mentioned that you did not work "because you will get in trouble if you do". Who will you get in trouble with?		
Regular partner /husband	1	1.0
Other	1	1.0
Total	2	2.0
System	98	98.0
Would you like to change anything in your life at this point in time?		
Yes	79	79.0
No	19	19.0
Don't Know	1	1.0
Total	99	99.0
System	1	1.0
Who do you think will contribute most to any change in your own life?		
You	46	46.0
Your partner/family	22	22.0
Your community	4	4.0
Government	3	3.0
6	4	4.0
Total	79	79.0
System	21	21.0
On which step are you today?		
1	8	8.0
2	1	1.0
3	9	9.0
4	12	12.0
5	31	31.0

Variables	Frequency	Percent
6	20	20.0
7	8	8.0
8	1	1.0
9	3	3.0
10	6	6.0
Total	99	99.0
System	1	1.0
On which step are most of your neighbours today?		
1	3	3.0
2	6	6.0
3	11	11.0
4	13	13.0
5	32	32.0
6	9	9.0
7	9	9.0
8	6	6.0
10	8	8.0
Total	97	97.0
System	3	3.0
On which step will you be in five years' time?		
2	2	2.0
3	1	1.0
4	1	1.0
5	4	4.0
6	5	5.0
7	9	9.0
8	12	12.0
9	18	18.0
10	46	46.0
Total	98	98.0
System	2	2.0

Fifty one percent of the women did not respond to the question on work. 24 of the 49 women agreed that they do the work they do because they have to. 17 agreed that they do the work they do because if they did not, they would get in trouble while 38 said they do it because they get reward or benefit. 46 out of 49 do they work they do because they personally think it is the right thing to do whether or not others agree, or it is personally important for them. 40 out 49 do it because they enjoy the work while 6 do it because others won't get mad with them and 4 because they want people to like them. 49% do the work because they need money. Of the 17 who do the work to avoid getting onto trouble, 14 specified who they want to avoid trouble with. 3 women want to avoid trouble with regular partner/husband, table 37.

Only 5 women of the not working agreed that they don't because they can't. All the 50 women not working disagreed that they do not work because other people have told them not to work or they do not enjoy working or other people will get mad with them or to be liked.

79% of the women would like to change something in their life. Several items were mentioned like getting a good paying job, changing jobs, buying a piece of land, making a house or go back to school to further education. Of the 79, 46 said they will be the biggest contributors to the change they want with 22 sitting partner and family and only 3 said government would be responsible. On a scale of 1 to

10, 51% were between 5 and 6. 45% said their neighbour were between step 4 and 5. 76% said they will be in step 8-10 in the next 5-years.

2.2.7 Responses to the evaluation questions

What was the main effect of the intervention on the use of HIV/SRH services and commodities by FSWs? (Effectiveness)

Despite some methodological issues in the second cross-sectional survey, we can conclude that there was definitely an increase in HIV testing, probably also in the use of the female condom and of non-barrier contraception, and possibly also in STI care and cervical cancer screening. These increases appear to be mostly a result of a higher uptake at the DICs, rather than at the public health facilities.

These findings were supported by what the participants of the FGD and peer educator discussions said. Overall FSW were greatly satisfied with the availability of services, but still face important barriers when accessing the public health services, such as long waiting times, stock-outs, persistent stigmatisation and being asked bribes. Most FSW therefore still do not disclose to be a FSW when visiting public health facilities, which was said by health care providers to be an important impediment in providing services adapted to their needs. Also the DICs are affected by stock-outs of those commodities supplied by the government.

The CSS demonstrated a substantial increase in peer outreach coverage, but it is still insufficient. FGD participants who had been in contact with peer educators, greatly appreciated their services, and also the peer educators . Little effect was seen on community mobilisation.

Was the intervention feasible/ practicable to implement? (Feasibility)

The designed intervention was mostly implemented as planned, although that it has to be mentioned that a key service, identified by the FSW as lacking during the situational analysis, namely termination of pregnancy, could not be included because being illegal in Kenya. Also, the expansion of the peer outreach could not be done as planned because of lack of sufficient resources, and not all FSW are open to the peer education. Nevertheless, the feasibility of the designed intervention is considered good, if the necessary resources are made available.

Was the intervention in accordance with national policies and guidelines, and acceptable to providers, health managers and policy makers? (Adequacy, from the perspective of policy makers, health managers and service providers)

The implemented intervention, and its different components, was in complete alignment with the national strategies and policies. Kenya is one of the few countries in Africa that has developed guidelines for HIV/STI programs with sex workers. The government endorses a model of having peer outreach, combined with targeted clinics, such as applied by ICRH-K. Also the activities to make the public health services more FSW-friendly are fully endorsed.

Gaps identified as having been insufficiently addressed by the intervention included more mobile clinics and involvement of FSWs' regular partners.

Sustainability and replicability (Is the intervention financially and institutionally sustainable on a long-term, and can it be rolled out on a larger scale?)

The component of making public health services more FSW-friendly is considered sustainable because requiring little additional resources, and could possibly be replicated nation-wide. The targeted interventions, both community-based and health facility-based, are however completely dependent on mostly short-term, project-based funding from external donors and the government has currently no intention to fund these.

2.2.8 Conclusion

ICRH-K successfully implemented the designed intervention, combing a strengthening of the targeted community outreach and drop-in clinics, with the training of health care providers in FSW-friendly services at public facilities and establishing referral mechanisms between both. A clear effect was seen on the uptake of targeted services, but not (yet) on the uptake of services at public health facilities. Access to these services continues to be hampered by long waiting times, stock-outs and bad reception by providers, and FSW clearly prefer the targeted services. Sustainability of these targeted services is however not ensured because being overly dependent on short-term project-based funding.

2.3 Tete, Mozambique

2.3.1 Cross-sectional surveys

Initially 8 seeds were recruited (3 full-time Zimbabwean FSW, 3 full time Mozambican FSW and 2 occasional Mozambican FSW; 5 from Tete City and 3 from Moatize), but 5 additional seeds were added because the initial seeds did not recruit enough participants and the chain was dying out.

2.1.1.5. Socio-demographic characteristics

Table 28 presents the results of the socio-demographic characteristics of the 404 recruited FSW and compares them to the characteristics of the 311 FSW who were recruited in the baseline cross-sectional survey (CSS) that was done in 2013-2014. Table 29 presents the characteristics adjusted for the respondent-driven sampling bias.

Table 38: Socio-demographic characteristics of FSW - Unadjusted data

Characteristic	1st CSS (N=311)		2nd CSS (N=404)	
	n	%	n	%
Age (years)				
Median		29		29
Q1 – Q3		24-33		24-34
Range		16-64		15-52
<=20	38	12.2	47	11.6
21-25	70	22.5	87	21.5
26-30	79	25.4	121	30.0
31-35	74	23.8	71	17.6
>=36	50	16.1	78	19.3
Nationality				
National	78	25.1	120	29.7
Zimbabwean	211	67.9	200	49.5
Other	22	7.1	84	20.8
Place of primary residence				
Moatize	153	49.2	173	42.8
Tete	158	50.8	198	49.0
Other	0	0.0	33	8.2
Years living in current residence				
Median		2		3.7
Q1 – Q3		1.1-4		1.7-16.3
Range		0-38		0-42
<3years	163	52.4	168	42.2
>=3 years	148	47.6	230	57.8
Was away from residence				
In the past year	102	32.8	104	32.2

Characteristic	1st CSS (N=311)		2nd CSS (N=404)	
	n	%	n	%
Present relationship				
Single, never married/ cohabiting	114	36.7	88	21.8
Married, living with husband	2	0.6	3	0.7
Living together as if married	8	2.6	7	1.7
Married/cohabiting, but living apart	3	1.0	8	2.0
Single, previously married	184	59.1	298	73.8
Present relationship				
Single, never married	114	36.7	88	21.8
Married or cohabiting	13	4.2	18	4.5
Single, previously married	184	59.2	298	73.8

Table 39: Socio-demographic characteristics of FSW - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
Age (years)				
<=20	16.2	8.6-23.7	17.6	11.8-23.9
21-25	20.6	15.0-26.2	25.6	19.4-32.4
26-30	26.9	19.8-34.0	28.9	22.6-35.7
31-35	19.6	14.2-24.9	14.3	10.1-19.0
>=36	16.7	11.3-22.1	13.6	9.1-18.9
Nationality				
Foreign	67.3	58.7-75.3	62.7	55.8-70.5
National	32.7	24.8-40.4	37.3	29.5-44.2
Place of primary residence				
Moatize	51.9	43.8-59.1	31.5	26.0-38.1
Tete	48.1	40.9-56.2	59.8	52.8-66.1
Other	0	-	8.7	4.8-13.0
Years living in current residence				
<3 years	54.7	47.0-62.3	45.9	38.9-53.2
>= 3 years	45.3	37.7-53.0	54.1	46.8-61.1
Present relationship				
Single, never married	32.6	25.6-39.9	26.8	20.8-33.3
Married or cohabiting	8.0	2.9-14.7	3.1	1.5-5.3
Single, previously married	59.4	51.6-67.2	70.0	63.5-76.3

Overall, the participants of the second CSS had similar characteristics as the participants of the first CSS. The median age was in both surveys 29 years, with the age group 21-30 years accounting for about half of the total. The large majority was of foreign origin (mostly from Zimbabwe) in both surveys, although that in the second there were slightly more Mozambicans (37% vs. 33%).

About half of the participants were from Tete City and the other half from Moatize, but after adjusting for the sampling bias the proportion from Tete was much larger in the second survey (60% vs. 48%). In addition, a substantial number of FSW responded in the second survey that their primary residence was neither in Tete or Moatize, while none did in the first survey. This might indicate that the understanding of what was meant with 'primary residence' differed between the two studies. The FSW who responded that they reside elsewhere were all recruited in Tete city and we can assume that the majority of these were at the time of the survey residing in Tete city, making the difference even bigger.

The proportion of FSW reporting to be living in their current place of residence three or more years was higher in the second survey (54% vs. 45%). However, the question was not asked in the exact same way and we cannot exclude that this is the reason for the measured difference[1].

The proportion of FSW reporting to be either married or living with someone as if married was similar in both surveys, but the proportion to report to have been previously married/cohabiting and now being single is larger (70% vs. 59%) and the proportion reporting to never have been married/cohabiting smaller 3% vs. 8%).

2.1.1.6. Sex worker characteristics

FSW of the second CSS reported a much higher number of commercial sex acts (Table 30 and Table 31). The median number of contacts with clients in the past week was twice as high (20 vs. 10), and even more for the past month (80 vs. 30). This could indicate that FSW have now on average more clients than at baseline, but it could also be due to a differential selection bias between the two surveys. Another explanation, that we cannot exclude, is that there was a difference in reporting bias between the first and second CSS. Most probably it is a combination of all three factors.

The average amount charged for a commercial sex act was slightly lower in the second CSS (100 MZN vs. 150 MZN). When converting Mozambican metical to Euro the difference becomes more substantial, because of the devaluation of the metical between the first and second CSS. The reduction is somewhat surprising because one would expect prices to rise over time; however, Tete province did see a reduction in commercial mining activity over the implementation period, which could have led to lower incomes, and less potential clients. It could therefore reflect a real change, but it cannot be excluded that the difference is a result of selection and/or reporting bias. The proportion of FSW who had another source of income, besides sex work, was similar across the two surveys (around one fifth).

Table 40: Sex worker characteristics of FSW - Unadjusted data

Characteristic	1st CSS (N=311)		2nd CSS (N=404)	
	n	%	n	%
No of commercial sex acts in the past week				
Median	10		20	
Q1 – Q3	7-20		10-50	
Range	1-500		0-700	
<6	60	19.3	49	12.1
6-10	116	37.3	67	16.6
11-15	48	15.4	50	12.4
>=16	87	28.0	238	58.9
No of commercial sex acts in the past month				
Median	30		80	
Q1 – Q3	20-50		33-166.5	
Range	2-750		1-980	
<16	50	16.1	32	7.9
16-25	69	22.2	32	7.9
26-40	90	28.9	62	15.4
>=41	102	32.8	274	67.8
No information	0	0.0	4	1.0
Average amount charged for commercial sex (MZN)				
Median	150		100	

[1] In the first survey all FSW were simply asked 'How long have you lived in your current residence?'. In the second survey, they were first asked where they were born and FSW who reported to have been born outside Tete-Moatize were asked when they arrived in Tete-Moatize.

Characteristic	1st CSS (N=311)		2nd CSS (N=404)	
	n	%	n	%
Q1 – Q3	100-200		50-200	
Range	30-40000		25-20000	
Average amount charged for commercial sex (EUR)				
Median	3.4		1.8	
Q1 – Q3	2.3-4.6		0.9-3.7	
Range	0-92.0		0.5-374.5	
Has other source of income				
Yes	60	19.3	88	21.8
No	251	80.7	315	78.0
No information	0	0.0	1	0.3

Table 41: Sex worker characteristics of FSW - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
No of commercial sex acts in the past week				
<6	20.1	14.4-26.2	13.8	9.5-18.6
6-10	41.4	33.2-49.9	22.3	15.4-29.4
11-15	11.4	7.6-15.6	14.9	9.7-21.1
>=16	27.1	19.8-34.6	49.1	42.0-56.9
No of commercial sex acts in the past month				
<16	14.6	10.0-19.6	15.5	9.0-22.9
16-25	27.5	19.5-35.7	9.1	5.6-13.1
26-40	28.7	21.9-36.3	16.9	11.9-22.6
>=41	29.2	22.1-36.5	58.5	51.0-65.8
Has other source of income				
Yes	21.9	15.3-29.1	22.2	15.5-30.0
No	78.1	70.9-84.7	77.8	70.0-84.5

2.1.1.7. Number of sexual partners

Table 42: Number of sex partners

Characteristic	1st CSS (N=311)		2nd CSS (N=404)	
	n	%	n	%
Total No of sex partners in the past week				
Median	10		20	
Q1 – Q3	6-17		8-35	
Range	1-500			
1-7	93	29.9	25	23.5
8-14	90	28.9	79	19.6
15-19	55	17.7	25	6.2
>=20	73	23.5	205	50.7
Total No of sex partners in the past month				
Median	30		50	
Q1 – Q3	20-50		25-120	
Range	2-700			
0-19	72	23.2	61	15.1
20-29	72	23.2	50	12.4
30-49	75	24.1	63	15.6
>=50	92	29.6	230	56.9
No of clients in the past month				
Median	20		30	

Characteristic	1st CSS (N=311)		2nd CSS (N=404)	
	n	%	n	%
Q1 – Q3	10-35		10-95.8	
Range	0.7-700		1-790	
<=9	66	21.2	88	21.8
10-19	83	26.7	53	13.1
20-39	88	28.3	70	17.3
>=40	74	23.8	193	47.8
No of first-time clients in the past month				
Median	6		14	
Q1 – Q3	2-28		3-63	
Range	0-689		1-390	
<2	76	24.4	46	11.4
2-5	77	24.8	97	24.0
6-29	86	27.7	110	27.2
>=30	72	23.2	149	36.9
No information	0	0.0	2	0.5
No of regular clients in the past month				
Median	5		5	
Q1 – Q3	2-10		2-12	
Range	0-100		0-400	
<3	82	26.4	132	32.7
3-4	61	19.6	54	13.4
5-9	80	25.7	78	19.3
>=10	88	28.3	140	34.7
No of non-paying partners in the past month				
0	110	35.4	209	51.7
1	49	15.8	31	7.7
2-5	80	25.7	101	25.0
>=6	72	23.2	63	15.6
Had a regular/steady non-paying partner in the past month				
Yes	110	35.4	81	20.1
No	201	64.6	323	80.0
Had an occasional non-paying partner in the past month				
Yes	150	48.2	146	36.1
No	160	51.5	258	63.9
No information	1	0.3	0	0.0

Table 43: Number of sex partners - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
Total No of sex partners in the past week				
1-7	33.2	25.8-41.0	29.7	22.9-36.9
8-14	32.7	25.1-40.3	18.8	14.1-23.9
15-19	14.5	10.1-19.2	8.4	3.8-14.1
>=20	19.6	14.1-25.1	43.0	36.1-50.3
Total No of sex partners in the past month				
0-19	22.0	16.3-27.6	18.7	12.2-25.3
20-29	28.9	21.4-36.9	14.5	9.5-20.5
30-49	26.1	19.0-33.4	16.7	11.7-21.8
>=50	22.9	17.3-28.9	50.1	43.2-57.5
No of clients in the past month				
<=9	21.1	15.1-26.9	32.5	24.8-39.8

10-19	27.5	20.8-35.3	10.9	7.7-14.7
20-39	32.1	24.9-39.7	17.3	12.2-23.4
>=40	19.3	14.2-24.7	39.3	32.8-46.7
No of first-time clients in the past month				
<2	24.9	18.1-31.9	17.1	10.1-24.2
2-5	24.3	17.8-32.3	29.9	22.8-37.6
6-29	32.5	25.1-39.3	21.4	16.4-26.9
>=30	18.3	13.4-23.7	31.5	25.7-38.1
No of regular clients in the past month				
<3	24.7	18.8-31.1	39.3	31.7-46.5
3-4	19.0	13.6-25.2	17.7	12.1-24.2
5-9	28.7	22.0-36.3	17.4	12.2-23.3
>=10	27.6	20.5-35.6	25.6	20.3-31.4
No of non-paying partners in the past month				
0	36.6	29.5-44.0	56.4	49.7-63.3
1	15.8	10.5-21.3	6.6	3.7-10.0
2-5	29.4	21.2	25.3	19.2-31.3
>=6	18.2	13.4	11.7	7.8-16.1
Had a regular/steady non-paying partner in the past month				
Yes	33.3	26.1-41.4	17.1	12.3-21.9
No	66.6	58.6-73.9	82.9	78.1-87.7
Had an occasional non-paying partner in the past month				
Yes	49.2	41.7-56.3	31.8	25.5-38.7
No	50.8	43.7-58.3	68.2	61.3-74.5

Similarly to the reported number of contacts with clients, the reported number of different clients was higher in the second CSS, although that the difference was less noteworthy. The difference in the reported number of clients is almost entirely due to a higher reported number of first-time clients (median number of 14 first-time clients in the past month vs. 6 in the baseline CSS), while the reported number of regular clients remained similar (median number of 5). The possible explanations for this difference are the same as for the number of contacts, as described above.

Much fewer FSW reported non-paying partners in the second CSS, and this applies both to regular/steady partners and occasional partners. The questions were however not asked in exactly the same way as in the first CSS[2] and there is also a high risk of reporting bias in this type of question. We can therefore not with certainty conclude that this reflects a real difference.

2.1.1.8. Use of HIV/SRH commodities and services

Table 34 presents the comparison of the extent of use of different HIV and SRH commodities and services between the baseline and the end-line survey.

Table 44: Use of HIV/SRH commodities and services by FSW – Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%*	N	%			
Condom use at last sex with: (N=Had this type of partner in the past month)							

[2] In the first CSS, FSW were asked how many different sexual partners they had in the past month, and then how many of these were non-paying partners, and then how many of these were regular non-paying and occasional non-paying partners. Fourteen participants who had less than 10 partners in the past month, were asked the number of different partners in the past 3 months, which was then divided by three, and four participants who had less than 10 partners in the past 3 months were asked the number of different partners in the past 6 months, which was then divided by six. In the second CSS, FSW were first asked how many different sexual partners they had in the past month, and then how many of these were regular non-paying and occasional non-paying partners.

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%*	N	%			
Any client	309	96.8	403	92.1	0.48	0.20-1.12	0.073
New client	308	97.3	401	93.1	0.62	0.24-1.64	0.305
Regular client	288	98.3	375	86.7	0.16	0.07-0.41	<0.001
Occasional partner	86	(96.8)**	165	92.1	0.39	0.01-11.9	0.586
Regular partner	142	43.3	121	49.8	1.28	0.66-2.48	0.472
Always used condoms in past month with last: (N=Had this type of partner in the past month)							
Regular client	242	87.3	371	79.2	0.57	0.26-1.25	0.159
Occasional partner	68	79.5	161	90.4	2.17	0.24-19.3	0.485
Regular partner	124	58.2	111	50.2	0.88	0.43-1.82	0.738
Knows HIV status of: (N=Had this type of partner in the past month)							
Last non-paying partner	191	23.4	212	16.6	0.63	0.32-1.25	0.186
Last regular partner	147	28.7	121	27.4	0.90	0.44-1.84	0.777
Always uses condoms with all partners							
Yes	311	51.3	404	67.7	2.00	1.28-3.15	0.003
Ever used female condom							
Yes	311	37.9	402	54.5	1.90	1.24-2.92	0.003
Abnormal discharge or genital ulcer in past 12 months							
Yes	307	49.5	403	48.4	0.87	0.57-1.32	0.505
Care sought for last STI/RTI syndrome (N= Had STI in the past 12 months)							
Yes	172	80.0	208	87.8	1.80	0.81-4.00	0.147
Ever tested for HIV							
Yes	311	92.3	403	93.9	1.50	0.49-4.58	0.474
When last tested for HIV							
Less than 3 months	-	-	403	60.5	-	-	-
Less than 6 months	311	56.9	403	76.6	2.71	1.49-4.94	0.001
Less than 12 months	311	84.5	403	83.0	1.05	0.54-2.05	0.890
Result of last test (N=Ever tested for HIV)							
Positive	278	38.6	390	34.0	0.60	0.39-0.94	0.025
Currently using HIV care services (N=Tested positive for HIV)							
Yes	128	84.0	155	88.9	1.29	0.43-3.81	0.649
On ART	128	69.0	156	62.2	0.70	0.33-1.48	0.355
Used all HIV services she needed							
Yes	311	29.8	404	42.4	1.75	1.14-2.69	0.011
Currently using contraception (N=Does not want to get pregnant, is not pregnant and is able to conceive)							
Yes	253	86.0	376	97.4	6.66	2.65-16.7	<0.001
Main contraception method used (N=Uses modern contraception method)							
Injectable contraceptives	218	42.4	361	42.1	0.89	0.55-1.44	0.640
Oral contraceptives	218	32.8	361	18.7	0.54	0.30-0.99	0.045
IUD	218	2.4	361	0.5	0.21	0.02-1.96	0.170
Implant	218	3.5	361	14.8	5.17	1.60-16.8	0.006
Condom	218	16.7	361	22.6	1.37	0.74-2.56	0.318
Female sterilization	218	0.9	361	0.3	0.34	0.03-3.73	0.378
Currently using a non-barrier modern contraceptive method (N=Does not want to get pregnant, is not pregnant and is able to conceive)							
Yes	311	70.4	402	74.5	1.29	0.77-2.17	0.326
Uses dual method (N=using non-barrier method)							
Yes	179	62.0	280	44.8	0.50	0.29-0.84	0.010
Uses dual method[1]							
Yes	253	45.4	376	33.2	0.66	0.42-1.04	0.075
Ever used emergency contraception							
Yes	307	13.1	387	7.8	0.46	0.24-0.89	0.021

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%*	N	%			
Action taken for unwanted pregnancy (N=Had an unwanted pregnancy in the past 5 years)							
Went to a health facility	20	(23.6)**	32	30.6	-	-	-
Kept the pregnancy	20	(76.4)**	4	7.0	-	-	-
Found other solution	20	0.0	17	62.5	-	-	-
Ever tested for cervical cancer							
Yes	311	0.0	380	16.9	1.00	-	-
Ever tested for cervical cancer (N=30 years or older)							
Yes	147	0.0	177	25.5	1.00	-	-
Forced to have sex in the past 12 months							
Yes	268	13.5	403	29.6	2.65	1.52-4.60	0.001
Condom use at last forced sex incident (N=Was victim of forced sex in past 12 months)							
Yes	41	(22.5)**	109	61.5	6.20	1.94-19.8	0.002
Sought medical care for last forced sex incident (N=Was victim of forced sex in past 12 months)							
Yes	42	(41.4)**	109	37.3	0.95	0.34-2.71	0.927
Used all SRH services she needed							
Yes	281	33.1	395	40.5	1.42	0.87-2.28	0.157
Used all HIVSRH services she needed							
Yes	311	10.1	404	18.4	2.21	1.25-3.91	0.006

*RDS-adjusted percentage

** RDS adjusted proportion could not be calculated and the weighed proportion is shown instead.

Condom use

Self-reported condom use with clients was already very high at baseline, and no further improvements were observed. There was even a significant *decrease* measured in condom use at last sex with a regular client (from 97% to 92%). This decrease persisted after adjusting for a possible confounding by other factors and can therefore not be attributed to the differences in socio-demographic and sex work characteristics between the two surveys. Nevertheless, we cannot conclude with certainty that this reflects a real decrease or a differential reporting bias between the first and second survey. In the first survey reported condom use at last sex with a regular client was very high and higher than with a non-regular client. This was surprising because condom use with regular clients is usually lower than with one-time clients. In the second survey condom use with regular clients is substantially lower than with non-regular clients, and we therefor suspect that there might have been reporting bias in the first survey. Also the fact that in the first survey a larger proportion of clients had been classified as regular clients might indicate that in that survey some of the non-regular clients were misclassified.

No significant changes were observed in condom use with occasional and regular/steady non-paying partners. Condom use with occasional non-paying partners is relatively high, but condom use with regular partners continues to be low. Neither did we observe a significant change in the knowledge of these partners' HIV status, which persists to be very low.

When calculating the proportion of FSW who reported a consistent condom use with all partners, we observed a substantial and statistically significant increase. This is probably a consequence of the fact that in the second survey less FSW reported to have had a regular non-paying partner. Because condom use with this type of partner is much lower, having less of this type of partners results in a higher condom use.

Significantly more FSW reported to have ever used a female condom. The increase is so large that it is unlikely to be caused by reporting or selection bias, and that it indicates a higher use of this commodity in comparison to baseline.

STI care

No substantial change was observed in reported genital symptoms. Care seeking for those symptoms increased from 80% to 88%, but this was not statistically significant (p=0.147), and we cannot exclude that it is merely due to chance.

HIV testing

At baseline, the questionnaire did not differentiate between having been tested less than 6 and less than 3 months. We can therefore not compare findings for testing within the past 3 months, and can only conclude that a relatively high proportion (almost two thirds) was tested less than 3 months ago in the current survey.

The proportion tested in the past 6 months increased substantially and statistically significantly from 57% to 77%. This indicates that many of the sex workers now appear to be more regularly tested than at baseline.

Having been tested for HIV in the past 12 months was already relatively high at baseline, and no further improvements were observed. This might indicate that the group of approximately 15-20% of FSW who are rarely tested was not reached by the intervention, and that it are those who already were tested at least once a year who are now been tested more regularly.

The self-reported prevalence of HIV was similar between both surveys (38% and 34%, respectively).

HIV care

No substantial or relevant changes were observed in reported enrolment in HIV care and ART. Being enrolled in HIV care increased slightly (rom 84% to 89%), but being on ART decreased slightly from 69% to 62%.

All HIV/STI services combined

When calculating a composite index, including consistent use of condoms with all partners, care sought for the last STI episode, HIV testing within the last 6 months and use of HIV treatment and care services, we observe a substantial and statistically significant increase, most probably because of the increase in HIV testing and consistent condom use.

Contraception

Reported contraception use, by those who needed it, increased to almost 100%, a substantial and statistically significant increase compared to baseline. The denominator are those FSW who are in need of contraception, meaning they are able to conceive, currently not pregnant and do not want to become pregnant. There is a risk of reporting bias in these questions, but even considering all FSW in the denominator, there was still a substantial increase (from 70% to 90%), and we therefore believe that the difference was not caused by this type of reporting bias.

However, when we look at the methods used for contraception, we observe that the increase was greatly due to a larger proportion of FSWs reporting condoms as sole contraception method. Considering only non-barrier methods, the increase was modest (from 70% to 75%) and no longer statistically significant (p=0.326).

Another shift in method use that was observed is from oral contraceptives towards implants. Oral contraception was significantly less used compared to the baseline, and implants significantly more. This is a positive shift, because oral contraceptives are known to be often inconsistently taken by FSW, and implants are a more reliable long-acting contraceptive method.

The FSW who reported to use a non-barrier method, reported less frequently to also use condoms for contraception, resulting in a lower proportion of FSW who use ‘dual method’ for contraception. This

indicator is however highly susceptible to reporting bias because many FSW who consistently use condoms for HIV prevention might not consider this as an additional contraception method.

Significantly less FSW reported in the second survey to have ever used emergency contraception (8% vs. 13% at baseline), but this question is highly susceptible to being misunderstood. Many FSW may not understand what is meant by emergency contraception. We can only conclude that both at baseline and end-line the proportion reporting ever having used emergency contraception is very low, and that the practice of consistently using condoms for contraception and resorting to emergency contraception in case of a condom accident (unprotected sex or condom breakage/slippage) is not common in Tete.

Unwanted pregnancies

A comparison of the proportion of FSW who reported an unwanted pregnancy in the past 5 years was not possible, because this question was in the second survey (by mistake) only asked to FSW who had reported to have had an abortion or miscarriage in the past 5 years. However, the number of FSW who were asked and who reported an unwanted pregnancy was still higher than in the first survey, indicating that its occurrence has probably not diminished.

Comparison of what type of care is sought for an unwanted pregnancy is not possible because of the very low numbers. Reporting bias is also highly likely because abortion was still illegal at the time of the survey. It might explain why in the first survey most FSW said they kept the pregnancy and in the second that they found another solution.

Cervical cancer screening

At baseline, none of the FSW reported to have ever been screened for cervical cancer, and in the second survey the proportion was 17% (26% among those 30 years or older). Although that also this question has a high risk of being misunderstood (FSW not understanding what is meant by cervical cancer screening), it is clear that cervical cancer screening is now more often done among FSW.

Sexual and gender-based violence

The proportion of FSW who reported to have been forced to have sex in the past 12 months, increased substantially and significantly between the two surveys. However, also this question also has a high risk of reporting bias and we cannot exclude that this is the cause of the a difference. The fact that in the second survey a much larger proportion reported that a condom was used during this incident might indicate that in the second survey the notion of 'forced sex' was more broadly interpreted.

Seeking medical care for the incident was not substantially different between the two surveys. Less than half of the victims sought medical care in both surveys.

All SRH services, other than HIV/STI, combined

The composite index, including the use of a non-barrier contraceptive method, ever screened for cervical cancer and medical care sought for last forced sex incident, increased slightly, because of the higher proportion screened for cervical cancer, but not enough to be statistically significant.

All SRH/HIV services combined

The overall composite index, including both the HIV/STI and the other SRH services, increased substantially and statistically significantly. Nevertheless, still only 18% of FSWs correctly used all services they needed in the past 12 months.

2.1.1.9. Stigma and discrimination

Table 45: Stigma and discrimination – Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%*	N	%*			
Discloses as being a FSW when visiting public health services							
Yes	311	46.0	402	28.9	0.51	0.33-0.79	0.002
Feels treated like everyone else, when visiting public health services							
Yes	309	94.8	402	86.9	0.33	0.13-0.85	0.022

*RDS-adjusted percentage

The proportion of FSW who reported that they disclose to be a FSW when visiting a public health facility did not increase, and even substantially and significantly decreased. It is possible that this decrease is a result of reporting bias and/or selection bias (for example, because of having more FSW from Tete in the second CSS), but it is clear that fear for stigmatisation when disclosing to be a FSW did not decrease since the baseline.

The proportion who reported to feel to be treated like any other user of the public health services was very high at baseline, and in the second survey significantly lower. This question is however also highly susceptible to reporting bias.

2.1.1.10. Exposure to peer outreach

The proportion reporting to have had a contact with a 'peer educator' in the past 12 months decreased slightly, although not statistically significantly, from 49% to 42%. However, when asked if this 'peer educator' was a fellow FSW, more FSW (71%) reported she was than at baseline (52%). Therefore, a larger proportion had had a contact with a FSW peer educator than at baseline (29% vs. 25%), although that this difference was not statistically significant. There was, however, a significant increase in the number of FSW who reported to have had multiple contacts. The proportion that reported to have had at least 10 contacts with a FSW peer educator increased from 0.6% to 4.7% (p=0.034). Nevertheless, the coverage continues to be low.

When asked what type of services they had received from the peer educators, we observed a significant increase in condoms, referral for STI treatment and referral for HIV care. On the other hand, general information on HIV/STI was said to have been significantly less provided.

Table 46: Exposure to peer education – Comparison between first and second CSS

	1st CSS		2nd CSS		AOR**	95% CI	p-value
	N	%*	N	%*			
Had contact with a peer educator in the last 12 months							
Yes	266	48.8	403	42.2	0.83	0.54-1.27	0.398
Had at least 4 contacts with a peer educator in the last 12 months (all FSW)							
Yes	266	11.9	402	38.1	4.51	2.11-9.65	<0.001
Had at least 10 contacts with a peer educator in the last 12 months (all FSW)							
Yes	266	0.8	402	7.4	7.45	2.12-26.2	0.002
Peer educator was a FSW (N=had contact with a peer educator)							
Yes	131	52.1	227	71.1	2.25	1.21-4.19	0.008
Had contact with a FSW peer educator in the last 12 months							
Yes	266	25.4	396	29.2	1.28	0.77-2.13	0.340
Had at least 10 contacts with a FSW peer educator in the last 12 months							
Yes	266	0.6	402	4.7	5.47	1.14-26.2	0.034
Services or information received from peer educators (N=had contact with a peer educator)							
General HIV/STI prevention	131	94.6	233	74.8	0.17	0.06-0.51	0.001
Condoms	131	56.7	233	94.9	14.4	3.89-53.1	<0.001
Referral for STI treatment	131	22.5	233	45.1	3.04	1.62-5.70	0.001
Referral for HIV testing	131	27.1	233	33.9	1.44	0.78-2.65	0.241
Referral for HIV care	131	11.5	233	24.4	2.63	1.25-5.56	0.011

	1st CSS		2nd CSS		AOR**	95% CI	p-value
	N	%*	N	%*			
Referral for any service	131	30.4	233	52.7	2.76	1.52-4.99	0.001

*RDS-adjusted percentage

2.1.1.11. Place where HIV/SRH services sought

Table 37 presents the comparison of where FSW sought HIV/SRH commodities or care the last time they needed them. Because care seeking differed sometimes substantially by place of residence (Tete vs. Moatize) and nationality (Mozambican vs. foreign), their possible confounding effect was controlled for by including them in the logistic regression model.

Table 47: Where HIV/SRH commodities and services were sought

	RDS adjusted %		Adjusted OR***	
	1st CSS*	2nd CSS*	AOR	p-value
Condoms (N=all)	N=310	N=403		
Night Clinic	36.0	18.0	0.48	0.011
Market/ stalls	30.8	24.1	0.45	0.002
Hospital/health centre	22.8	11.8	0.39	0.001
Organisations	13.9	42.4	6.0	<0.001
Peer educators	11.3	56.2	12.1	<0.001
Pharmacies	5.8	(1.8)**	0.14	0.015
Shops/ supermarkets	5.5	1.1	0.19	0.021
Friends	2.6	8.8	2.80	0.181
Bars/ nightclubs	1.9	1.3	0.52	0.549
General health care (N=all)	N=277	N=403		
Public health facility	78.3	80.6	1.18	0.572
Private health facility	1.8	1.1	0.37	0.324
Night clinic	15.8	16.5	1.93	0.115
Pharmacy/ Chemist	6.1	11.0	1.76	0.041
Traditional healer	0	2.6	-	-
Outside the area	1.9	5.7	3.94	0.078
Other	0	4.4	-	-
Contraception (N=uses non barrier contraceptive method)	N=178	N=278		
Hospital/health centre	36.9	34.7	0.50	0.058
Outside the Tete-Moatize area	13.7	25.9	2.13	0.049
Night Clinic	31.3	20.7	1.04	0.914
Pharmacies	10.7	6.0	0.46	0.074
Community outreach	3.2	8.3	2.72	0.109
Other	4.2	4.4		
STI care (N=sought care for last STI episode)	N=134	N=189		
Hospital/health centre	61.0	44.4	0.34	0.002
Night Clinic	23.4	13.8	0.67	0.283
Outside the Tete-Moatize area	8.0	10.3	1.15	0.815
Pharmacy	4.4	15.2	2.13	0.231
Community outreach	0.0	12.9	-	-
Other	3.2	3.4	2.38	0.370
HIV testing (N=was tested in the past 2 years)	N=241	N=293		
Hospital/health centre	43.6	30.3	0.45	0.008
Community outreach	21.5	34.4	1.86	0.028
Outside the Tete-Moatize area	18.0	17.3	0.91	0.784
Night Clinic	16.1	14.6	1.37	0.426

	RDS adjusted %		Adjusted OR***	
	1st CSS*	2nd CSS*	AOR	p-value
HIV care (N=is currently in HIV care)	N=105	N=141		
Hospital/health centre	60.5	48.3	0.69	0.378
Outside the Tete-Moatize area	39.4	52.3	1.59	0.229
Other	0.1	0.2		
SGBV care (sought care for last forced sex)	N=42	N=53		
Hospital/health centre	(55.0)**	34.9	0.39	0.321
Night Clinic	(25.0)**	(7.0)**	-	-
Outside the Tete-Moatize area	(10.0)**	(5.5)	-	-
SGBV cabinet	-	9.8	-	-
Non-governmental organisation	-	13.4	-	-
Other	(10.0)**	39.4	-	-

*RDS-adjusted percentage

**RDS adjusted proportion and weighed proportion could not be calculated and the non-adjusted/non-weighed proportion is shown instead.

***Logistic regression model adjusting for place of residence and nationality

When asked where they usually obtain condoms, the responses where quite different between the two surveys. Many more FSW reported that they get them from organisations (42%, three times more than at baseline) and from peer educators (56%, five times more). These large differences were statistically highly significant (p<0.001). On the other hand, less FSW reported to get them from the Night Clinic (18%), health facilities (12%), the market/stalls (24%), pharmacies (2%) or shops/supermarkets (1%). These differences were also statistically significant. This indicates that the outreach by ICRH-Mozambique and others have largely become the main source of condoms, replacing other sources.

The place where FSW go for general health care has not substantially changed. Public health facilities remained by far the main source (81%). There were significantly more FSWs who reported pharmacies as place where they usually go (11% vs. 6%, p=0.041), but we cannot exclude that this is not because of a differential reporting/ measurement bias between the two surveys.

FSW who were using a non-barrier contraception method were asked where they last got this method. Outside the Tete-Moatize area (26%) and community outreach (8%) were relatively more mentioned than at baseline (14% and 3%, respectively). The difference was statistically significant at the 5% level for outside the Tete-Moatize area (p=0.049), but not for community outreach (p=0.078). The comparison is complicated by the fact that the response option 'outside the area' was not listed in the first survey questionnaire and it was reported under 'Others', which could explain why it was less commonly reported at baseline. Relatively less FSW mentioned the Night Clinic (21% vs. 31% at baseline) and pharmacies (6% vs. 11% at baseline). The Night Clinic difference disappeared after adjusting for residence and nationality, indicating that the difference was likely due to the different distribution of these characteristics between the two surveys. Slightly less (35% vs. 37%) said they got their contraception method from public health facilities, but when adjusting for nationality and city where residing, the difference became bigger and almost statistically significant (p=0.058). This was because procuring contraception at public facilities was highly correlated with these two variables.

The place where care was sought for the last STI also substantially changed. Significantly less FSW reported to have gone to a public health facility (44% vs. 61%, p=0.002). Also less FSWs reported to have gone to the Night Clinic, but this difference was not statistically significant (14% vs. 23%, p=0.283).

Community outreach, that was not available at baseline, was for 13% of FSW the place of care and is probably the reason why care seeking at the health facilities diminished. We observed that a significant proportion still reported to have sought care at pharmacies (15%) or other (informal) care providers, such as a nurse coming to their home (3%). This sub-group has apparently not been reached by the outreach or by the activities to promote care seeking at health facilities.

A similar picture was seen for HIV testing: significantly more FSW were tested through outreach (34% vs. 22%, p=0.028)) and significantly less went to a public health facility (30% vs. 44%, p=0.008)). The proportion going to the Night Clinic slightly decreased, but this was no longer the case after adjusting for residence and nationality.

Relatively more FSW reported to be in HIV care outside the Tete-Moatize area (mainly Zimbabwean and Malawian FSW in care in their country), but this difference was not statistically significant and could be due to measurement bias, because this option was not among the response options in the baseline survey. The fact remains that about half of the HIV positive FSW are not in care in Tete-Moatize, which has important implications for how to ensure retention in and adherence to care.

The number of FSW reporting to be victim of forced sex was too small to make any valid comparisons of care seeking. In the second survey, both the SGBV office and NGOs were mentioned as places where care was sought, while they were not at baseline. Another place that FSW frequently mentioned, under 'Others', was seeking support with friends or neighbours.

2.1.1.12. Reason for choice of place of care

Table 48: Reason for choice of place of care

Reason	1st CSS		2nd CSS	
	RDS %	95% CI	RDS %	95% CI
Contraception (N=Currently using contraception)	N=213		N=359	
Cost is low or free	3.7	1.2-7.0	22.6	16.9-29.2
Shorter waiting times	5.4	2.4-9.2	22.6	16.9-29.2
Nearby	41.8	33.0-51.0	13.3	9.1-17.7
Where I always go	64.7	55.4-73.8	32.3	25.8-39.2
Good quality services	0.7	0.2-2.1	42.1	34.1-49.8
Privacy	3.7	1.0-7.2	24.8	18.4-31.5
Friendly personnel	3.4	1.0-6.3	7.3	4.3-10.6
It was indicated/referred	17.1	11.5-23.5	13.4	8.1-19.2
STI care (N=Sought care for STI in the last 12 months)	N=134		N=189	
Cost is low or free	(4.5)*	-	21.7	14.2-30.2
Shorter waiting times	2.8	1.6-6.7	12.7	7.7-18.1
Nearby	43.8	32.4-54.4	37.0	27.0-47.4
Where I always go	65.8	55.0-74.7	36.3	27.1-45.5
Good quality services	0.0	-	27.7	20.1-36.7
Privacy	4.2	1.3-9.1	5.7	2.5-9.5
Friendly personnel	0.0	-	14.8	8.5-22.4
It was indicated/referred	39.8	30.4-50.6	4.2	1.9-6.9
HIV testing (N=Was ever tested for HIV)	N=279		N=391	
Cost is low or free	4.5	1.8-7.7	17.8	13.2-22.6
Shorter waiting times	9.2	4.8-13.7	14.7	10.5-19.2
Nearby	43.1	34.3-51.4	27.2	21.1-33.8
Where I always go	47.7	40.0-55.5	33.8	27.2-41.0
Good quality services	2.5	0.6-4.8	24.1	17.9-31.5
Privacy	6.3	3.1-10.3	10.8	7.2-15.1

Friendly personnel	10.1	5.6-15.4	21.2	14.6-28.5
It was indicated/referred	15.9	10.1-23.1	6.9	3.9-10.1
HIV care (N=Is currently in HIV care)	N=105		N=141	
Cost is low or free	(6.7)*	-	16.2	8.7-24.4
Shorter waiting times	(2.9)*	-	11.0	5.8-17.4
Nearby	32.9	21.0-45.2	19.3	11.9-28.6
Where I always go	69.6	58.2-79.8	56.9	44.6-68.0
Good quality services	(2.9)*	-	23.9	14.6-33.9
Privacy	10.7	4.5-18.7	9.3	4.2-15.8
Friendly personnel	0.0	-	17.2	8.6-27.9
It was indicated/referred	18.6	10.8-26.8	25.6	16.9-36.3
SGBV (N=Sought care for forced sex in the past year)	N=20		N=53	
Cost is low or free	0.0	-	(13.2)*	-
Shorter waiting times	0.0	-	(7.6)*	-
Nearby	(50.0)*	-	(49.7)*	-
Where I always go	(35.0)*	-	27.7	12.0-53.8
Good quality services	0.0	-	18.5	7.0-37.5
Privacy	(5.0)*	-	(1.9)*	-
Friendly personnel	0.0	-	15.2	5.8-34.9
It was indicated/referred	(45.0)*	-	7.7	3.7-21.4

*RDS adjusted proportion and weighed proportion could not be calculated and the non-adjusted/non-weighed proportion is shown instead.

Table 38 presents the results of the responses given when FSW were asked why they sought care at the place they last went. In the second survey FSW give relatively more reasons than in the first, possibly because the interviewers may have probed more. We observe a shift in the reasons mentioned between both surveys. While 'Where I always go' and being nearby continue to be frequently mentioned reasons (ranging from 32% to 57%, and from 13% to 37%, respectively), reasons related to the quality of care, such as good quality services (24% to 42%) or friendly personnel (7% to 21%), were much more commonly mentioned in the second survey. Also cost (18% to 23%), shorter waiting times (11% to 23%) and privacy (6% to 25%) were relatively more often reported. Having been referred there was less often reported, except for HIV care.

The reasons for this shift are unknown and we can only hypothesise. It could indicate that FSW are now more aware of the importance of quality of care, and therefore either make their choice now also based on that criteria, or mention it more often than before.

2.1.1.13. Satisfaction with the availability of HIV/SRH services

Table 49: Satisfaction with the availability of HIV/SRH services

Service	n	Crude %	RDS Adjusted %	95% CI
Condom affordability (N=404)				
For free	251	62.3	56.1	49.1-63.7
Very affordable	85	21.1	25.2	18.0-32.1
Somewhat affordable	36	8.9	11.1	6.2-16.4
Not affordable	31	7.7	7.6	4.5-11.2
No information	1	0.3		
Male Condom availability (N=404)				
Sufficiently	381	94.3	95.9	93.2-98.0
No opinion	3	0.7	0.4	0.2-1.1
Not sufficiently	19	4.7	3.7	1.6-6.2

Service	n	Crude %	RDS Adjusted %	95% CI
No information	1	0.3		
Female Condom availability (N= knows what a female condom is: 384)				
Sufficiently	283	73.7	73.5	67.0-80.0
No opinion	32	8.3	9.5	5.8-13.4
Not sufficiently	61	15.9	17.0	11.2-23.7
No information	8	2.1		
Lubricant availability (N= knows what a lubricant is: 352)				
Sufficiently	220	62.5	64.5	56.8-71.7
No opinion	23	6.5	8.3	4.5-12.8
Not sufficiently	105	29.8	27.2	20.9-34.0
No information	4	1.1		
Unwanted Pregnancy Services Availability (N= 404)				
Very satisfied	380	94.1	92.3	86.6-96.9
Satisfied	20	5.0	7.3	2.7-12.9
A little satisfied	2	0.5	0.3	0.0-1.2
Not satisfied	1	0.3	0.1	0.0-0.3
No information	1	0.3		
Very satisfied/Satisfied	400	99.0	99.6	98.8-100.0
A little satisfied/Not satisfied	3	0.7	0.4	0.0-1.2
No information	1	0.3		
Unwanted Pregnancy Services Availability (N= had an unwanted pregnancy in the past 5 years: 32)				
Very satisfied	9	28.1	-	-
Satisfied	20	62.5	-	-
A little satisfied	2	6.3	-	-
Not satisfied	1	3.1	-	-
Very satisfied/Satisfied	29	90.6	-	-
A little satisfied/Not satisfied	3	9.4	-	-
Contraceptive Services Availability (N=404)				
Very satisfied	159	39.4	41.1	34.1-49.3
Satisfied	216	53.5	53.3	45.8-60.2
A little satisfied	4	1.0	1.2	0.0-2.9
Not satisfied	5	1.2	1.2	0.2-2.6
No opinion	13	3.2	3.1	1.2-5.6
No information	7	1.7		
Very satisfied/Satisfied	375	92.8	97.6	95.3-99.3
A little satisfied/Not satisfied	9	2.2	2.4	0.7-4.7
No opinion/ No information	20	5.0		
STI care services Availability (N=404)				
Very satisfied	130	32.2	34.7	28.2-41.3
Satisfied	218	54.0	55.3	47.6-62.6
A little satisfied	4	1.0	0.5	0.1-1.2
Not satisfied	3	0.7	0.5	0.1-1.1
No opinion	30	4.4	9.1	5.1-14.1
No information	19	4.7		
Very satisfied/Satisfied	348	86.1	99.0	97.9-99.7

Service	n	Crude %	RDS Adjusted %	95% CI
A little satisfied/Not satisfied	7	1.7	1.0	0.3-2.1
No opinion/ No information	49	12.1		
STI care services Availability (N= had an STI in the past 12 months: 208)				
Very satisfied	78	37.5	38.4	29.5-46.7
Satisfied	121	58.2	59.3	49.3-67.3
A little satisfied	2	1.0	0.2	0.2-0.8
Not satisfied	2	1.0	0.6	0.1-1.8
No opinion	2	1.0	1.5	1.0-4.2
No information	3	1.4		
Very satisfied/Satisfied	199	95.7	99.1	97.8-99.8
A little satisfied/Not satisfied	4	1.9	0.9	0.2-2.2
No opinion/ No information	5	2.4		
HIV testing services availability (N=404)				
Very satisfied	159	39.4	-	-
Satisfied	237	58.7	-	-
A little satisfied	3	0.7	-	-
Not satisfied	2	0.5	-	-
No opinion	2	0.5	-	-
No information	1	0.3	-	-
Very satisfied/Satisfied	396	98.0	99.2	98.1-100.0
A little satisfied/Not satisfied	5	1.2	0.8	0.0-1.9
No opinion/ No information	3	0.7		
HIV care services availability (N= is currently in HIV care: 141)				
Very satisfied	47	33.3	-	-
Satisfied	89	63.1	-	-
A little satisfied	2	1.4	-	-
Not satisfied	3	2.1	-	-
Very satisfied/Satisfied	136	96.5	97.3	93.5-99.0
A little satisfied/Not satisfied	5	3.6	2.7	1.0-6.5
SGBV care services availability (N= 404)				
Very satisfied	86	21.3	32.1	24.8-40.3
Satisfied	154	38.1	47.4	39.8-55.5
A little satisfied	13	3.2	2.7	0.9-4.7
Not satisfied	10	2.5	1.6	0.3-3.1
No opinion	56	13.9	16.2	11.1-21.9
No information	85	21.0		
Very satisfied/Satisfied	240	59.4	95.0	91.8-97.6
A little satisfied/Not satisfied	23	5.7	5.0	2.4-8.2
No opinion/ No information	141	34.9		
SGBV care services availability (N= was victim of forced sex in the past year and sought care: 53)				
Very satisfied	19	35.9	-	-
Satisfied	25	47.2	-	-
A little satisfied	3	5.7	-	-
Not satisfied	6	11.3	-	-
Very satisfied/Satisfied	44	83.0	95.0	86.8-98.9

Service	n	Crude %	RDS Adjusted %	95% CI
A little satisfied/Not satisfied	9	17.0	5.0	1.1-13.2

FSW were asked for each HIV/SRH commodity or service if they were satisfied with the access to that commodity/service (Table 39). These questions had not been asked in the first survey, except for condoms, and a comparison is therefore not possible. They were also asked if they found the price of male condoms to be affordable. Slightly more than half of the FSW responded that they get condoms for free, and about half of the remaining FSWs found them very affordable. About 8% of FSW found them not affordable, a proportion similar to what was found at baseline (7%).

Almost all FSW found that the male condom is sufficiently available, but for the female condom this was only about three quarters. Seventeen percent found these not sufficiently available. This is even more than at baseline, when 9% was not or little satisfied with the availability of the female condom. Taking into account the significant increase in female condom use, this may reflect an increased awareness of and demand for female condoms, and not lower availability. Satisfaction with the availability of lubricants was still lower, with more than a quarter of the FSW reporting that they found it insufficiently available.

Satisfaction with the availability of services for unwanted pregnancies was very high when asked to all FSWs, and still high when asked to only those who had an unwanted pregnancy. This is surprising because termination of pregnancy is still not officially available and is not free of charge.

FSW also expressed high satisfaction with the availability of contraceptive services, STI care, HIV testing services and HIV care. It has to be noted though that the question of the availability of HIV care was only asked to those who were in care.

Also satisfaction with the availability of SGBV services was high, despite these services still not being widely available.

It has to be noted though that in general in surveys in Mozambique, and elsewhere in sub-Saharan Africa, self-reported satisfaction with health services tend to be high. These results must therefore be triangulated with the results of the focus group discussions before coming to any conclusions.

2.3.2 Focus group discussions

A first round of three FGDs was held in January-February 2016 with 7 full-time Mozambican, 9 occasional Mozambican and 9 (full-time) Zimbabwean FSW. After a first analysis, it was concluded that the responses to certain questions had not yet reached saturation, and it was decided to hold an additional round of FGD. The second round was held in June 2016 with 9 full-time Mozambican, 7 occasional Mozambican and 5 Zimbabwean FSW.

Participant characteristics

In the second round of FGD, the median age of Zimbabwean FSW was 34 years, of Mozambican full-time FSW 24 years, and of Mozambican occasional FSW 30 years. Most participants were residing in Moatize (20/23) and only 3 were residing in the city of Tete (2 Zimbabwean and one occasional Mozambican FSW). The median number of years doing sex work in the Tete-Moatize area was 6, 3 and 3, respectively for Zimbabwean, full-time Mozambican and occasional Mozambican FSW. The median number of clients in the past week was respectively 7, 5 and 4. No socio-demographic characteristics were available of the participants of the first round.

Where FSW seek SRH care

FGD participants mentioned a variety of sources for SRH care. Condoms were obtained from the Night Clinic, the peer educators and public health facilities, but also at pharmacies, the market, rooms, and from other FSW. Lubricants are mostly obtained from the peer educators and at the Night Clinic, but also at some of the public health facilities. Contraception and STI care is sought at the Night Clinic and public health facilities, but also at pharmacies and the market, in the event of a stock out. Community outreach was mentioned as a source of care for HIV testing, besides the Night Clinic and public health facilities. Some Zimbabwean FSW also get tested by private doctors. The public sector was the sole provider of HIV care and cervical cancer screening. Zimbabwean FSW obtain these services also in Zimbabwe, and several Zimbabwean FSW were not aware that cervical cancer screening is available in Mozambique. Termination of pregnancy was mostly sought from traditional healers or other informal providers, although it is also sometimes obtained at the larger public health facilities. A common practice appears to be to first seek medicines from traditional healers or at the market, and then go to a health facility for post-abortion care (vacuum aspiration or curettage).

> *There are other places, such as in the market where it is for sale, we go to those places because it is a fast and nearby alternative, they have pills for abortion, but after that you need another medicine for post-abortion care, and in the market they don't have it (Mozambican full-time FSW)*

SGBV services are sought from community workers and at specific SGBV departments attached to policy stations.

Why FSW seek care at a specific place

The Mozambican FGD participants mentioned cost as the most important reason for choosing the Night Clinic or public health facilities, because the services are free, while at pharmacies, the market or traditional healers they need to pay. The second most important reason was proximity. Cost and proximity were also mentioned by Zimbabwean FSW, but a good reception and feeling secure were more important reasons. These were given as a reason for procuring services in Zimbabwe, where they are less stigmatised.

> *Yes, she said "Ah, it's better you get that in Zimbabwe". I don't want to say that in Zimbabwe we are not insulted, we are insulted as well, but it is better. (Zimbabwean FSW)*

Good attendance was also mentioned by Mozambican FSW as a reason for choosing the Night Clinic and some specific public health facilities. Some services, such as TOP, cervical cancer screening or HIV care, were not procured at the Night Clinic because they were not available there. One Zimbabwean FSW said a reason for not procuring TOP at a public health facility is fear of being arrested. Community-based condom and lubricant distribution and outreach services were said to greatly enhance accessibility.

Availability and quality of the services

All FGD participants were overall satisfied with the availability and quality of the HIV/SRH services, even after probing. In particular the availability of condoms was said to be very good. The most common barrier mentioned were the stock outs of certain family planning methods (in particular injectable contraceptives) and STI drugs at both the Night Clinic and the public health facilities.

> *I came here (at the Night Clinic), but I couldn't have DEPO and had to go to a pharmacy (Zimbabwean FSW)*

> *For example, some days ago I was bad with discharge. I went to the hospital, made an appointment, they said I needed Kanamycin and pills, those that you insert (in the vagina).*

I spoke to the doctor and he said "Here we do not have injections, but I have a friend who has, will you buy it?" (Mozambican occasional FSW)

The habit of public health providers to ask for bribes persists, in particular for obtaining TOP or post-abortion care, for which sometimes high prices are asked, both at public health facilities and by informal providers.

It is available, yes. But when you go there after an abortion, to have a washing, you have to give money, at least a little bit, to be attended. They do not accept to do a curettage for free. (Mozambican occasional FSW)

Here we see that they like money. Have an abortion here in Mozambique is difficult. To say, to have an abortion you need to have money. You can't have one without paying. Without money they will not abort you here. (Zimbabwean FSW)

Participants agreed that bad reception by public health providers had diminished, but still exists, at least by some providers.

Because, years ago, it was enough to see that you are Zimbabwean, they wouldn't attend you. It was only insults, contempt and they only insulted you, insulted you. But now, it is better. They can insult you, just to insult you, but they don't exaggerate as before. They do with more fear. (Zimbabwean FSW)

Occasional Mozambican FSW said that this was particularly the case when seeking care for STI or SGBV, and they considered this as unavoidable.

I was sick, uh, instead of giving me advice, she only made it worse with insults. I didn't want to have that disease. (Mozambican occasional FSW)

Once, my friends, they were two, they were raped by a boy at his home, here behind the Moatize hotel. The next day they went to the police, but were unfortunately not well attended. They went to the hospital and only received pills to take and that was it. That's how this problem ended. (Mozambican occasional FSW)

Zimbabwean FSW complained more strongly about persisting bad reception and said that often Mozambicans do receive treatment, but they don't. Bad reception was mentioned in particular for ART, SGBV and by one particular provider. They urged to offer these services at the Night Clinic.

And then they said, tell her to come, and then I heard like this: "Come here you Zimbabwean, what did you come to do here? You came to destroy our country, didn't you?" And you feel sick as patient, but what can you do! Then you think: I can only wait until they receive me, you want help. I would be better it they would help us. (Zimbabwean FSW)

Currently they exaggerate with insults. When you go they say: "Ha, you are Zimbabwean". Those who are in front of you get their pills or even a DEPO injection. When it is your turn, they don't give you an injection. They give you a prescription "Go and get it at the pharmacy". They don't give you, they say it is finished. (Zimbabwean FSW)

And ART pills, we want to receive them here (at the Night Clinic) as well, please. There (at the health facility), there is far. … Yes, they use to talk a lot and get angry, and therefore we want to get the pills also here, because if you make them available here, he, then we are sure. (Zimbabwean FSW)

Lack of privacy when collecting medicines in public health facilities, lack of information on when they should go for cervical cancer screening, the long waiting lines at public facilities, and delays in initiating ART were also mentioned as barriers by some participants.

Satisfaction with peer outreach

The FSW did not comment extensively on the peer outreach. Satisfaction was overall good, and FGD participants had no specific comments.

Changes over the past 2 years

All full-time Mozambican FSW agreed that the availability of HIV/SRH services had improved over the past years in general, and for male condoms and peer outreach in particular.

> *It is better because before, it was difficult to get access. Now it isn't. Now when you go to the hospital they have most services, such as for family planning, condoms, we find it all at the hospital. (Full-time Mozambican FSW)*

Occasional Mozambican FSW also found that the availability of services had improved, in particular HTS because of the outreach, and cervical cancer screening. Access to condoms and lubricants improved because of the home distribution.

> *In relation to the past. It isn't the same because before these, these… we didn't see them circulate. Only these days we always see them and they come with all you need and they give it to you. Before they didn't come, they didn't come, and you had to go to the hospital, explain everything, how you feel. You had to explain, while now you wait and any moment they can come. They will find me, they make it easy for you by coming to your home instead of you having to go to the hospital. (Occasional Mozambican FSW)*

Some of the Zimbabwean FSW found that access to services had improved, in particular because of being less insulted, although that there was disagreement on this. Some Zimbabwean FSW mentioned improvement because of the focal points at public health facilities. No change was seen in the availability of TOP.

> *It depends where you go. When you go where there is someone who represents the sex workers, they receive you well and you even do not have to stand in line. You arrive and they help you. (Zimbabwean FSW)*

> *In Matundo (a public health facility) there is someone, as you arrive you go and see him, and he will personally take care of you. When you enter in his consultation room, he can prescribe you pills, he can give you a card and his pills, if you need an injection, he gives it here, you finish and go. (Zimbabwean FSW)*

Suggestions

When the FSW were asked what could be done to improve access to services, suggestions included assist FSW finding other work; improve access to ART by providing longer working ARVs, providing ART at the Night Clinic, and, for Zimbabwean FSW, having the possibility to collect ARVs in Mozambique; opening the Night Clinic also during day-time; offer also cervical cancer screening and TOP at the Night Clinic.

2.3.3 Service statistics

Night Clinic

Table 40 presents the comparison of the average number of monthly visits to the Night Clinic for different HIV/SRH services, between the pre-intervention period (October 2011-December 2012), the

mid-project period during which the intervention was developed (2013-2014), and the end-of-project period after the intervention had been initiated (January 2015-March 2016). Figure 1 shows the number of quarterly visits during the total project period (October 2011-March 2016).

Table 50: Number of monthly SRH services offered to FSW at the Night Clinic

	Baseline	Mid-project		End of project (2015-2016)
		2013	2014	
Number of months evaluated	*15*	*12*	*12*	*15*
Period	Oct 2011-Dec 2012	2013	2014	Jan 2015-Mar 2016
Total number of visits by FSW	**165**	**112**	**142**	**222**
Total FP visits	116	66	83	107
No of visits for emergency contraception	0	1	2	1
No of STI care visits	20	17	16	28
No of STI care visits by partners	-*	-*	16	35
No tested for HIV	29	27	36	84
No screened for cervical cancer	0	1	2	1
No attended for SGBV	0	0	3	1
No of male condoms distributed	15702	13042	12905	15021
No of female condoms distributed	0	208	120	13
No of lubricants distributed	0	0	0	7

*No data available

Comparison between the pre-intervention period and the intervention period is complicated by some changes in the recording and reporting systems at the clinic, and complete comparable data were available only for the period October 2013 – March 2016. In the period October 2011-March 2013, the quarterly number of FSW visits oscillated between 400 and 600. During the period Apr 2013-Jun 2014 there was a clear dip with a quarterly number of 300 or less, and an all-time low in the first quarter of 2014 with only 134 visits. This dip was due to serious stock-outs of various medicines and other products during this period. From the second quarter of 2014 onwards, the number of quarterly visits rose steeply above 600 and then stabilised around 600-700 in the period April 2015-Mar 2016.

In the pre-intervention period, family planning services were the service by far most commonly sought by FSW at the Night Clinic (70% of all visits). By the end of the project, HIV testing services had become equally important (48% for FP vs 38% for HTS). STI care was the third most common service sought (12% and 13% at baseline and end-line respectively). For both HTS and STI care there was a clear increase, but this was less the case for FP. The other SRH services represent only a very small proportion (1.4%) of the total.

Figure 1: No of quarterly visits by FSW at the Night Clinic

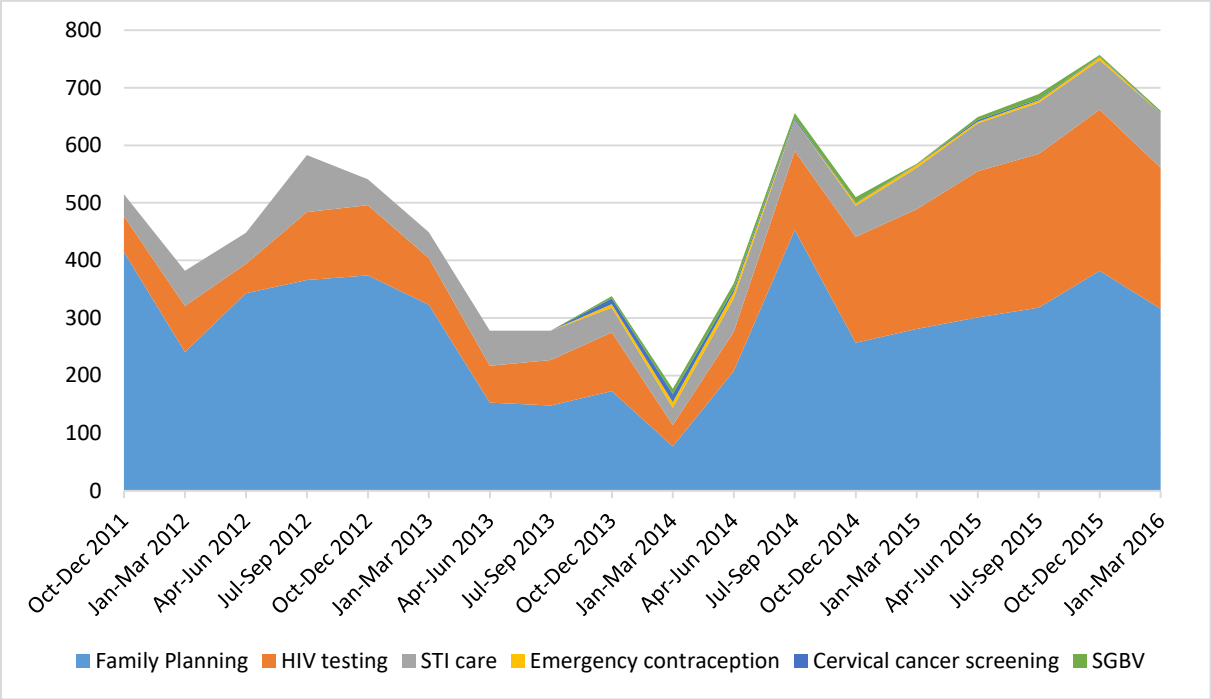


Table 51: Number of monthly visits by FSW at public health facilities

	Mid-project	End of project
Number of months evaluated	*3*	*12*
Period	*Jan/14-Mar/15*	*Apr/15-Mar/16*
Total No of FSWs attended	14	17

The recording of the number of FSW visiting public health facilities started late in the project. The four public health centres that were part of the intervention started recording the number of FSW at their facility from January 2015 onwards. The average number of FSW recorded each month in the respective centres in the period Jan 2015-Mar 2016 was 10.1, 5.4, 0.9 and 1.4, or a total of 17.9 per month in all centres combined. There was no detectable trend during the 15 months period. During the same period, the average monthly number of visits by FSWs recorded at the Night Clinic was 222, more than 10 times the number recorded at the public health facilities. We can however not conclude that this indicates that many more FSW use the Night Clinic, because not all providers systematically recorded FSW and most FSW appear not to disclose that they are FSW in public health facilities (see focal point interviews).

Table 52: Number of monthly activities by the peer educators

	Mid-project		End of project
Number of months evaluated	*6*	*12*	*12*
Period	Oct/13-Mar/14	Apr/14-Mar/15	Apr/15-Mar/16
No of contacts made with FSWs	492	596	402
No of condoms distributed to FSWs	7,650	8,580	11,680
No referred for clinic visits	41	40	67
STI care	9	9	12
HTC	12	11	15

Contraception	20	20	40
No referred and confirmed to have received care	26	18	29

A correct interpretation of the peer outreach statistics is complicated because the monitoring system changed as part of the intervention. The number of activities with FSWs reported by the PE appears to peak in the period April 2014-March 2015, but has since then diminished. There is no clear reason for this decrease, possibly it is because no additional FSW are being reached. However, although reported contacts decreased, referrals increased.

2.3.4 Key informant interviews

During January- March 2016, we interviewed a total of 16 people in 14 different interviews (two interviews had two participants). Six were policy makers or decision takers at national level, 2 from the government and 4 from international development agencies or NGO. At local level, 10 people were interviewed: two provincial-level government officials, two district-level government officials, two community representatives, and two representatives of a non-governmental agency.

Feasibility of the intervention

When asked how they judged the feasibility and practicability of the intervention package that had been implemented in the context of the DIFFER project, all respondents considered the activities as feasible, under the condition that the necessary resources are available. None of the respondents identified obstacles why it would not be possible to implement the intervention as a whole.

The only challenges in the implementation of this type of activities that were mentioned by some were the fact that lubricants were still not integrated in the Ministry of Health's (MoH) supply systems; reluctance by policy makers to authorise the establishment of sex worker associations; and the persisting reluctance/resistance among certain individual policy makers to develop guidelines specifically for services for key populations, and in particular for MSM. Since these guidelines are for all key populations combined this impacts also on FSWs.

From a legal perspective, there were no laws that prohibit any of the activities. Sex work as such is not considered illegal in the Mozambican legislation and therefore also implementing projects with sex workers is not illegal. The legislation even supports this type of intervention, because the constitution states that all have a right to health. Also TOP had recently been legalised and it should therefore become possible to offer this services, although that some of the respondents expressed a clear disapproval of the fact that it had become legal.

Adequacy of the intervention

All respondents agreed that this type of intervention is adequate, responding to a real need, and worth implementing. The national policies endorse interventions with key populations, such as sex workers, and the project as a whole was thus in line with the national policies.

The MoH was finalising the guidelines on HIV services for key populations, and many of the intervention components were in line with these guidelines. Peer education and community mobilisation were recognised as essential components of interventions with key populations by all respondents. The government had no specific guidelines on what and how community-level activities should be implemented with key populations, although that it was reported that the National AIDS Council was working on this. Another gap in the current guidelines, mentioned by respondents, was the omission of mobile clinical outreach services, such as for HIV testing.

However, the MoH guidelines clearly prioritised FSW-friendly services at the public health facilities, and did not recommend the establishment of parallel clinics, such as the Night Clinic that was an important component of the DIFFER intervention. The guidelines were considered to be not always

clear and to not explicitly prohibit the establishment of parallel clinics, allowing alternative solutions such as having separate opening times for key populations.

Endorsement of the concept of the Night Clinic differed by respondent. Endorsement was weakest by national-level government policy makers, because of the lack of alignment with what the national guidelines recommend. Endorsement became greater among local government health managers and community representatives. Both at provincial and district level the current Night Clinic was fully endorsed, and at district level considered as sufficiently in agreement with the new guidelines. Community representatives endorsed the clinic, but more from the perspective that it also enhanced access for people from the general population.

Arguments raised against the concept of parallel clinics included:

- low sustainability
- risk of stigmatisation
- marking services to FSW as something not part of the normal duties of health care providers and for which thus extra remuneration is required
- not being possible to provide all services at such clinics
- there are many key populations and it is not possible to have separate clinics for each of them.

Representatives of non-governmental agencies, both donor agencies and implementing agencies, were more open to the concept of parallel clinics, although also among them opinions differed greatly, ranging from being fully in favour of parallel clinics to being against.

Arguments raised in favour of parallel clinics included:

- the time needed before public health facilities effectively become FSW-friendly and the uptake by FSW increases; parallel clinics should be maintained until it has shown that public services are effectively FSW-friendly
- the high workload at public health facilities that prohibits providers spending sufficient time with a FSW
- the opening hours and location of public health facilities are not always suitable for FSWs
- FSWs do not want to disclose as such when visiting public health facilities

The concept of having FSW focal points at public health facilities was endorsed by all respondents.

Only two of the respondents mentioned that the decision on what model the country should adopt should be based on evidence provided by thorough assessments and studies, as was done for the concept of ART support groups[3]. This indicated that the decision making process was mostly political/ ideological and not so much evidence-based.

According to the respondents, gaps that could be strengthened in the current intervention included:

- The follow-up of HIV positive FSW, ensuring adherence and retention in care, in particular for foreign FSWs
- Having a broader scope of services at parallel clinics
- Involving the local health committees
- Reduction of stigmatisation of FSWs in the population at large
- Sexual and gender-based violence services

[3] The Ministry of Health adopted the establishment of groups of people who are on ART, live in the same neighborhood and support each other to collect ARVs and adhere to treatment, as part of the national strategy to enhance adherence to HIV care, based on a successful pilot tested by MSF.

Sustainability and replicability of the intervention

All respondents agreed that the intervention package, in the form that it was implemented, was not sustainable without continued funding from external donors. At best, the government could, in time, absorb certain expenses, such as medical supplies and the payment of the staff providing the clinical services, or (according to local health managers) eventually the operational cost of a parallel clinic, but they can definitely not absorb the cost of the community-level activities such as the incentives paid to peer educators or the cost of clinical mobile outreach.

Some respondents thought that financial sustainability could be achieved because of the growing interest of the international community in funding this type of interventions. Alternative funding sources such as public-private partnerships or user fees were considered not realistic by most respondents.

Many respondents, mostly from the government, found that the clinical services component of the intervention was *institutionally* sustainable because the MoH is equipped to provide that type of services, but other mentioned that it would be challenged by the high staff turn-over at public health facilities and the high dependence on external technical assistance. The lack of capacity at community-based organisations was mentioned as a challenge to the institutional sustainability of the community-level activities.

All respondents agreed that some components of the intervention should and could be replicated elsewhere. Components that were mentioned included the concept of FSW focal points and the linkage between these focal points and the FSWs, peer education and having peer educators of different nationalities, and making the public health facilities more FSW-friendly. The concept of the Night Clinic is generally considered as not replicable in the current context.

2.3.5 Analysis of the process monitoring

The table below summarises the progress that was made in the implementation of the designed intervention during the course of the project.

Planned activities	**Progress by the end of the project**
1. Targeted interventions	
1.1. Mapping and enumeration	
Participatory mapping of sex work networks and enumeration using a capture-recapture methodology	Partially done. There was a mapping of sex work networks done with assistance of Ashodaya, but it did not result in a report clearly describing the networks and an enumeration was never done
1.2. Peer outreach and community mobilisation	
Expand the cadre of FSW peer educators from 15 to 30	Partially done. The PE cadre was expanded to 20, of which 2 were male, thus the target of 30 FSW PE was not reached
Orient the PE through a comprehensive training program that comprises the essential information on all SRH components addressed by the DIFFER project, learned techniques on how to provide the peer education services, and how to use the monitoring tools	Mostly done. Two trainings were conducted, one on human rights and empowerment, and one on refreshment of peer education and mobilisation strategies. In addition, the 10 new peer educators were trained.
PE will be paid a stipend of 1,500 MZN per month working 4 hours per day from 4pm to 10pm operating from the Night Clinic as the home base	Done
PE will: • provide essential IEC on all key SRH aspects • distribute free male and female condoms and lubricants	Mostly done. Tracking of HIV care defaulters was not done.

Planned activities	Progress by the end of the project
• provide information and sensitisation on a correct use of SRH services • implement a system of referral slips • track FSW who dropped out of certain services, such as HIV care • provide IEC on substance/alcohol abuse and mental health services	
PE will mobilize the community at large to sensitise them about the needs of sex workers to reduce stigma and discrimination	Mostly Done. ICRH-Mozambique conducted sensitisation activities, with involvement of the peer educators.
ICRH-Mozambique will facilitate the creation of a local sex worker association and build capacity among FSW through workshops and other means	Mostly done. An association was created. Capacity was built through the exchange visits with Ashodaya and others.
Support groups and safe spaces will be encouraged by the project to provide an opportunity and platform for sex workers to discuss and share experiences	Mostly done. The Night Clinic functions as a sort of safe place, a Vulnerable Women's Support Group was created
1.3. Targeted clinical services	
The package of services at the Night Clinic will be expanded to include: • IEC on all sexual and reproductive health topics • Provision of male and female condoms and lubricants • Syphilis screening • HIV T&C • Free contraception, including long-lasting methods, such as implants, and emergency contraception. • Care for incomplete abortions, and support to women with unwanted pregnancies. • SGBV counselling. • initiate HIV care, including antiretroviral therapy (ART).	Partially done. Female condoms and lubricants were added to the package, emergency contraception is offered, implants were offered but with frequent stock-outs, care for incomplete abortions and the initiation of HIV care were not done, and the SGBV services were stopped.
MOUs will be developed with the district health departments that will describe the responsibilities of each	Done
In addition to the current Night Clinic in Moatize, a second Night Clinic will be constructed within the City of Tete, offering the same services	Not done
A plan will be developed for marketing the clinic(s)	Not done. Some activities were undertaken to make the clinic known, but a marketing plan as such was not developed.
The aim is that the Night Clinic becomes a Centre of Excellence to serve as a training and mentoring site for health care workers working at health centres to provide sex worker friendly services	Not achieved (Although staff from the night clinic were involved in training staff from public health facilities in FSW-friendly services)
FSW will be invited for routine clinic visits for regular HIV and syphilis testing, genital exams and counselling around e condom use and risk reduction	Not achieved. The system was initiated, but stopped because very few FSW returned for their follow-up visits.
FSW who have a steady partner will be invited to come to the clinic with their partner for couples counselling	Not done
HIV+ FSW will be linked to ART adherence support groups	Not done

Planned activities	Progress by the end of the project
Training of the clinic(s) health staff will be conducted to update them on the above described changes	
The clinic will be regularly visited by both the ICRH-Mozambique staff and the district health department staff to supervise its functioning. A supervision guide will be developed for this purpose	Partially done. The clinic is supervised by ICRH staff, but not systematically by the SDSMAS, and there is no supervision guide
During at least one of these visits, a quality audit will be performed	Not done
2. Improve access to the general health services	
Workshops with health facility managers and key SRH providers of 4 selected public health facilities	Done. But late in the project.
Appointment of FSW focal points at 4 selected public health facilities	Done. But late in the project.
Support will be given to further roll-out newly introduced SRH interventions at public health facilities	Not done
The project will evaluate how access to certain services, such as CD4 cell count monitoring and care for incomplete abortions, can be improved	Not done
The project will conduct joint supervision visits with the district and provincial health departments	Not done
Assess whether data on the number of FSW attending the services can be collected in a confidential manner	Done. But late in the project.
A system of backstopping of certain essential commodities will be developed, but without taking on a substitution role	Not done
The project will evaluate with the provincial and district health departments if FSW can be targeted through existing organised outreach activities, such as HTC	Partially done. No FSW-targeted outreach was done by the government, but outreach was done by NGO instead.
The project will coordinate with the provincial and district health departments and MSF how ART adherence support groups can be further expanded. The support groups will be linked to the Night Clinic and the community mobilisation activities	Not done
3. Linkages and referral systems	
Identifying 2 focal persons at each of the 4 health facilities who will be the point of contact	Done. But late in the project.
Regular meetings between members of the FSW community, the focal persons and health managers of the 4 selected public health facilities, the Night Clinic staff and ICRH-Mozambique	Partially done. There were 7 meetings between all focal points and the ICRH-Mozambique staff, but no health facility specific meetings between the focal point(s) and FSW representatives
Referral and counter-referral systems between the Night Clinics, the 4 health centres and the provincial hospital	Done
Referral and counter-referral systems between the PE and the health services	Done
Tracking of defaulters by PE	Not done
4. Monitoring systems	
The monitoring tools for peer outreach will be adapted and expanded	Done. But late in the project.
The daily registers will be replaced by an electronic FSW individual monitoring system	Done. But late in the project.

Planned activities	Progress by the end of the project
A system will be developed to monitor attendance by FSW at the 4 public health facilities	Done. But late in the project.

Many of the planned intervention components could not be implemented. The most important components that could not be realised were:

- The mapping and enumeration was not fully done
- The peer outreach could not be expanded to an extent that it reaches most FSWs
- The establishment of a second targeted clinic in Tete City could not be done. It was replaced by clinical outreach from Moatize, but also this could only be done during a limited period of time.
- Not all services planned to be provided at the Night Clinic could be provided
- The concept of having FSWs regularly come for a check-up visit was not successful
- The involvement of the FSWs' steady partners was not successful
- The monitoring, supervision and quality control of the Night Clinic's activities was not improved to the desired level
- The activities to make the regular health services more FSW-friendly and link them with the FSW community were done, but too late in the project to be able to evaluate their effect
- No activities could be done to strengthen the public SRH services in general

The reasons for this partial success are multiple and complex. The intervention package was too ambitious in relation to the available capacity. It started from what needed to be done, based on the baseline situational analysis, to enhance access to services and ensure a minimum standard of quality, but underestimated the resources needed to effectively achieve this. The list of activities to be implemented exceeded what could be realistically done with the available funds and the existing institutional capacity of the non-governmental and governmental actors.

In addition, some assumptions were not fulfilled. The construction of the second clinic was based on a commitment by a private partner, in the context of a public-private partnership, and commitments by the government, that were not completely fulfilled.

2.3.6 Health facility assessments/ Focal point interviews

In March-April 2016, we assessed what HIV/SRH services were offered by the Night Clinic and the four public health centres that the project partnered with, and in what conditions these services were offered. The FSW focal points of the four public health centres were interviewed to evaluate the effect of the activities that had been done to make the services more FSW-friendly, and their appreciation of their feasibility, adequacy and sustainability.

Health facility audits

Table 43 presents the results of the general conditions to provide health care at the five audited facilities, Table 44 the results of the availability of key HIV/SRH drugs and medical supplies, and Table 45 what equipment and supplies were available at the consultation rooms were HIV/SRH services were provided.

Table 53: General conditions at the audited health facilities

Facility	**Carbo-moc**	**CS N°2**	**CS N°3**	**CS N°4**	**Night clinic**
Sufficient chairs in the waiting area	-	+	-	-	+
Sufficient space in the waiting area	-	-	-	+	+
Sufficient No of consultation rooms	-	+	-	-	+
Electricity 24h/24h, without interruption in the past month	-	-	-	+	+

Facility	Carbo-moc	CS N°2	CS N°3	CS N°4	Night clinic
Generator	+	-	-	-	-
Photocopier	+	-	-	-	-
Fax	-	-	-	-	-
Telephone	+	+	+	+	-
Computers	+	+	+	+	-
E-mail	+	-	-	-	-
Air conditioning	+	-	+	-	+
Refrigerator	-	-	-	-	+
Clean and adequate toilet facilities for patients	-	-	+	+	+
Clean and adequate toilet facilities for providers	+	+	+	+	+
Drinking water for patients	-	-	+	+	+
Adequate water supply	-	-	-	+	+
No water cut off in last 3 months	+	+	-	+	+
Well illuminated consultation rooms	-	+	+	+	-
Well ventilated	+	-	+	-	+

Table 54: Availability of drugs and medical supplies at the audited health facilities

Facility	Carbo-moc	CS N°2	CS N°3	CS N°4	Night clinic
No stock out of basic STI drugs (first line in non-pregnant women) in past year	-	-	+	+	-
No stock out of all STI drugs of national guidelines in past year	-	-	+	+	-
No male condom stock out (past 3 months)	+	+	+	+	+
No female condom stock out (past 3 months)	+	+	+	+	+
No lubricant stock out (past 3 months)	N/A	N/A	N/A	N/A	+
No stock out of FP methods in past year	+	+	+	-	-
No stock out of first line ART regimens in past year	+	+	+	+	N/A
No stock out of HIV rapid tests in past year	+	+	+	+	
No stock out of syphilis rapid tests in past year	+	+	+	+	
No stock out of CD4 reagents in past year	+	N/A	N/A	N/A	N/A
No stock out of VIA reagents in past year	+	+	+	+	

Table 55: Equipment and supplies at consultation rooms

Facility	Carbo-moc	CS N°2	CS N°3	CS N°4	Night clinic
Number of rooms assessed	3	3	3	3	1
Room 1*	MCH	MCH	MCH	MCH	
Room 2	OPD	MCH	MCH	OPD	
Room 3	MCH	OPD	HIV care	MCH	
Examination table (general)	3	3	3	3	+
Examination table (gynaecological)	2	2	2	0	+
Leg supports/stirrups	2	2	2	0	+
Gloves for genital and vaginal/pelvic examinations	2	3	2	3	+
If yes, sterile	2	3	2	3	+
If yes, sufficient quantity	1	3	1	1	-

Facility	Carbo-moc	CS N°2	CS N°3	CS N°4	Night clinic
If yes, all sizes	1	3	0	1	-
Paper covering (or laundered covering) for each patient for gynaecological examination table	1	3	2	1	+
Vaginal specula	1	2	2	2	-
If yes, disposable	1	0	1	1	-
If yes, sufficient quantity	1	3	0	0	-
If yes, all sizes	1	3	0	0	-
Appropriate light for speculum exam (standing lamp, headlamp or torch)	0	2	2	0	+
Buckets with chlorine for collecting used specula in exam rooms	3	3	3	3	-
Glass slides	2	1	3	3	-
Cotton-tipped swabs	2	3	3	2	-
Ring forceps	2	3	2	2	-
4x4 gauze squares (to wipe cervix)	3	3	2	3	+
Slides for pap smears	2	1	1	2	-
Equipment for VIA	2	3	2	2	-
Adequate washing/disinfection/sterilisation facilities	0	3	3	3	+
Containers for safe needle disposal	3	3	3	3	+
IEC materials placed in locations that are visible and accessible to patients	3	3	3	3	+
Protocols/ guidelines in the consultation room	3	3	3	3	
Permits a private conversation (without being overheard)	3	3	3	3	+
More than one provider seeing patients	0	1	1	0	-
Adequate lighting	0	3	3	3	-
Temperature control/air conditioning	1	0	0	0	+
Adequate ventilation (fresh air, no smoking or bad odours)	3	0	3	2	+

*MCH=Maternal and Child Health; OPD= Out-patient Department

The general conditions in term of available space and equipment continue to be very basic in the Mozambican public health sector, and they were similar to those found at baseline[4]. Space was often very limited, forcing some health centres to offer services by more than one provider in the same room. The consultation rooms were often badly ventilated and illuminated, electricity and running water sometimes unavailable, and toilet facilities in bad conditions. Health centres did not have access to computers or email, with the exception to the Carbomoc health centre, that also houses the district health department.

On the other hand, stock outs of essential HIV/SRH commodities were much less reported than at baseline. Assuming that the information was correctly reported by the interviewed health manager, this could indicate that the national supply systems function better than at baseline. Similar to baseline, the Night Clinic reported more stock outs than the public health facilities.

The availability of medical equipment and supplies in the consultation rooms was also overall much better than at baseline. Nevertheless, there are still important shortages, such as no proper conditions

[4] The DIFFER Project. Report of situational analysis of reproductive health services for general population women and female sex workers in India, Kenya, Mozambique and South Africa. September 2013.

to perform a speculum exam in many consultation rooms, and insufficient quantities of gloves and specula.

Focal Point interviews

Table 46 presents the results of the assessment of the FSW-friendly activities conducted at the four public health facilities.

Table 56: FSW-friendly services

Facility	**Carbomoc**	**CS N°2**	**CS N°3**	**CS N°4**
Is there a person appointed as FSW focal point?	Yes	Yes	Yes	Yes
Function of focal point	Enf SMI[5]	Enf SMI	Enf SMI	Tecn SMI
Has there been staff trained in FSW-friendly services?	Yes	Yes	Yes	Yes
What training did they attend?	Second	Second	Second	Second First
How many were trained?	5	4	5	5
What professional category did they have?	Enf básico Tecn med Enf SMI Ag Med Conselheiro	Tecn SMI Tecn Med Tecn SMI Tecn SMI	Enf SMI Tecn Med Medica Ag Serv Conselheiro	Tecn SMI Nurse Tecn Med Ag Serv Conselheiro
What services do they provide?	Nursing OPD MCH HIV care HTS	MCH HIV care MCH MCH	MCH OPD OPD not clinical HTS	MCH OPD OPD not clinical HTS
Did you have any meeting with FSW representatives?	Yes	No	No	No
How many meetings did you have?	3			
Who participated from the facility?	Focal point 2 MCH nurses			
Who participated from the FSW?	14 FSW of the Violence support group			
What was discussed?	Patient flow Linkage HF-FSW Providers' duties when receiving FSW			
Was a FSW monitoring system introduced?	No	No	No	No
Did you receive any FSW during the last year who disclosed as FSW?	Yes	Yes	No	Yes
How many FSW do you think visit the facility per month?	26	8	10	17

[5] 'Enf SMI' (enfermeira SMI) = Maternal and Child Health (MCH) nurse, 'Enf básico' (enfermeiro básico) = general nurse, and 'Ag Med' (agente de medicina) = medical agent. All of these followed a 3-years training with a degree equivalent to 12th grade. 'Tecn SMI' (técnico de SMI) = MCH medical assistant and 'Tecn med' (técnico de medicina) = general medical assistant. They followed a 3-years training with a degree equivalent to higher education. 'Conselheiro' = lay counsellor. 'Ag Serv' = servant and has no specific training.

What nationality do they have?	90% foreign	75% foreign	90% foreign	80% foreign
What services do they procure?	HTS, FP, HIV care, SGBV, PEP	HTS, FP, HIV care, cervical cancer screening, STI care	HTS, FP, HIV care, ANC , condoms	HTS, FP, HIV care, condoms, SGBV
Do you think if FSWs usually disclose?	No	Yes	No	No
Why not?	Fear for bad reception Shame		Fear for bad reception Shame	Fear for bad reception Fear for being insulted Shame

*MCH=Maternal and Child Health; OPD= Out-patient Department

All four assessed public health facilities had a FSW focal point appointed, which was always someone of the maternal and child health department (MCH). Four to five providers of each facility had participated in training in FSW-friendly services. That was mostly the second training organised by ICRH-Mozambique, that focused on a rights-based FSW-friendly approach and the provision of HIV/SRH services adapted to the needs of FSW. It was mostly providers from the MCH department and the OPD who had been trained. Also HIV counsellors and non-medical staff participated.

Only one focal point reported to have held a meeting with FSW and none reported to have initiated the recording of the number of FSW visiting their consultations.

Three of the focal points were aware that FSW visit their facility, but one said there are no FSW, who disclose as such, visiting their facility. Nevertheless, all do think that FSW visit the facility. The perception by all focal points was that the FSW are mostly foreigners. Only at one facility the focal point thought that FSW usually disclose. The focal points thought that the most common reasons for not disclosing were fear for bad reception and shame.

When asked if it had been feasible to implement the FSW-friendly services as had been taught during the training, three focal points said it had been feasible, although with initially some difficulties. The fourth focal point said it was not feasible because the FSW still do not want to disclose their activity when visiting the facility.

None of the focal points reported resistance from the providers in providing FSW-friendly services.

Three focal points stated that the services can be continued even without further support from the project, because it is now part of the national guidelines and they already have been trained. One thought however that further external financial assistance might be needed, and one stated that it was not sustainable because of the extra work loads it created.

When asked what challenges they encountered, the answers varied. Two mentioned the non-disclosure by FSW as a continuing challenge. The most commonly reported solutions to this were to have more health talks in the community and to involve community leaders.

2.3.7 Peer educator discussions

Participant characteristics

Two discussions were held in group with 9 Mozambican and 7 Zimbabwean peer educators (PE), respectively. The median age of the Mozambican PE was 30 years and of the Zimbabwean 37. All Zimbabwean PE were still working as sex workers, but 4 of the Mozambican PE had stopped. Six of the Mozambican and five of the Zimbabwean PE were operating in the city of Tete, and the remaining in the city of Moatize. All had attended at least one of the organised training sessions.

Feasibility

All peer educators agreed that the peer outreach activities were feasible.

> *Yes, our work is going well. When we arrive, we talk to them, we talk about the benefits, and we also talk about the difficulties, we talk to them, and then we distribute condoms.*

However, some challenges were mentioned. Some nationalities were said to be harder to reach than others. More precisely, the local Mozambican FSW and Malawian FSW were more difficult to approach than Zimbabwean FSW.

> *Here, the only difficulties we have, a lot is with Mozambicans. Mozambicans do not want to be open with us. We try to meet with them, but no.*
>
> *In the same manner, the Malawians. The Malawians, to sit well with them on the ground and succeed in talking to them, well it is difficult.*

Not all planned activities were done. Free distribution of lubricants, which initially was foreseen, was not done, the mobile clinical outreach that had been initiated was stopped, and theatre performances had been planned but were never realised.

> *We have problems because they ask for lubricants, what ICRH still doesn't have*
>
> *Yes, to say, he, last year, he, we went to work in Steia, he, where we had a mobile clinic. We arrived there, mounted a tent, looked for those our target population, brought them to the tent where they were attended to. So, those services, this year, stopped.*

Also the distribution of ID cards to all FSW, as part of the new peer outreach monitoring system, was said to have only been partially successful.

> *They are given cards, but not all have these cards*

The peer educators also mentioned some difficulties they faced when conducting peer outreach, such as the high mobility of the FSW, FSW who are not available when visiting them, and stigmatisation by the general community.

An obstacle that was stressed, in particular by Zimbabwean peer educators, was the perceived low remuneration for the work they did.

> *We do not have a salary. What we have is a small compensation only to thank us for what we do, it is an incentive, not a salary*
>
> *We like the work we do, we want to work, we only ask to increase the amount of money*

In particular, the lack of reimbursement of travel expenses was criticized, and mentioned as a reason why some FSW refuse to come for meetings. It also made it difficult to accompany FSW when they have to go to a health facility.

> *We walk on foot. But this problem, to say that we are given money for the minibus, we are not! We walk and use our own money for the minibus.*

Adequacy

The peer educators considered the adequacy of the peer outreach generally good. It responded to an existing need and was highly appreciated by the FSW.

Yes, only to add I want to say that the work we take to the sex workers, the information that we bring, they are well-liked

The commodity/service that was said to be most lacking and for which there was a high demand by the FSW were lubricants and mobile clinical services.

They don't manage to get lubricants, because those are rare. We only give condoms. We don't give lubricants, but the people need them.

Yes, when we go to the field, they depend on us to do the test (the HIV test). The test, and others ask if we don't have family planning, style DEPO injection. Now we don't use to have DEPO, only condoms.

Also the newly introduced FSW tracking and monitoring system was considered adequate, although the lack of ID cards hampered the good functioning of the system.

When the technique of each of us having our list (of sex workers) appeared, it was a technique that favoured the coverage of all sex workers

Sometimes we do the same registration twice our trice. "Hey, but you already took our names, and the cards never come". Sometimes they give false names and they do it on purpose. Sometimes they do wrong things just because they want to, and ICRH has to look into this right now.

The received training was highly appreciated and considered very adequate.

Yes, yes, the training was good, because they taught us, they taught us, he, they taught us to communicate well with the public. Yes. And also the mutual respect, the respect to have with the population overall.

Also the appointment of focal points at selected health facilities was considered a very useful approach.

We have focal points to ensure that the sex workers are received in a secure manner, in a secure manner, that doesn't mean that without these focal points they cannot be received well, but it is a way to have a 'godfather' or 'godmother'

When asked how they appreciated the capacity strengthening visits by the Ashodaya team (WP5) the peer educators said they had been helpful, and especially the learned mapping techniques and the empowerment was highly appreciated. Also the exchange visits with other FSW associations were considered very useful.

The visits were good, we learned a lot with them

Their visit was good, it helped us quite a bit. It motivated us to present ourselves as FSW, and to succeed emancipating us as FSW.

Efficacy

The peer educators believed that their activities had a positive effect on the FSW's behaviour, that almost all are now consistently using condoms with clients, and that even women of the general population start using condoms more often.

What they used to say, they do not say anymore, and they don't do anymore. Drinking as they used to do, and saying "I don't need because I am already HIV positive". That really

changed, and we are seeing that it changed, and therefore we are sure that what we bring to them, it is being done.

They use condoms, they even say themselves that in the community, the women from the community whose husbands don't know how to use a condoms, those women manage to help their husbands using condoms.

Also the use of contraception is believed to have increased.

They use, they use because I tell you, if I am not mistaken, I am not a technician, but I know that no case of abortion was registered here.

However, they recognised that unprotected sex with sexual partners who are not clients was still common and that because of that FSW still get STI, and that there are subgroups of FSW who still agreed to have unprotected sex with a client if he paid more. They also confirmed that the female condom was not liked by the FSW.

Often, when the sex workers see that it is a friend who visits them, a friend such as a steady partner, often, they will have sex without a condom, and in those cases it is easy to get an STI, it is easy to get infected with an STI

We have problems with the Malawians. We all know that it is hard to get money. So, they use to say "You, condoms, when I see someone and he pays 300 meticais with, but 500 meticais without, than I do it without". We all know that there are FSW who at the end of the month are still poor.

Another factor that limited the effect of their work was the lack of lubricants and mobile clinical outreach.

We should have an ambulance, we should have equipment to do testing in the field, that work that we did with the mobile clinic, we should have done it in more areas, in more areas.

The appointment and training of focal points at the public health facilities was said to have had a positive effect on accessing the services.,

There where there are focal points, where ICRH left instructions that when FSW arrive, they will be attended to immediately.

Nevertheless, the fact that not all providers had been trained in FSW-friendly services still hampered access, in the event that the focal point was not present. This appeared to be facility-specific, with some facilities not having this problem, and non-Mozambican FSW still appeared to suffer more from discrimination by some providers than Mozambicans.

When we meet with the nurse, with whom we had the meeting, she takes care of it. And also when we visit the nurses, maybe two to five of them, who participated in the training. But when we visit those who did not participate, it is difficult, they still don't understand.

She was received by a nurse who doesn't know who we are. She hadn't been trained by ICRH, and started to laugh. She took the register and started to laugh. She (the FSW) became demoralized and didn't even go, didn't go for a consultation.

When they hear you speak Shona, when they discover.. Like us, the FSW, when we go to consult for an STI, we do not have a husband to accompany us. Knowing that, it is difficult. It is still not finished.

Other relevant points raised by the peer educators

Zimbabwean peer educators expressed some dissatisfaction with the manner the Night Clinic operated. They said that also at this clinic FSW were sometimes badly attended, that often there was a great delay in starting the services (at 5:30 instead of 4:00 pm) and that the shortage of drugs and contraceptives was a problem that needed to be addressed.

They confirmed that many foreign FSW were in HIV care in their country of origin and that problems arise when they run out of ARVs, because at the Mozambican health facilities they do not know what regimen they are following.

2.3.8 Responses to the evaluation questions

A mixed-methods analysis was done of all, of the above research components to come to integrated conclusions regarding the evaluation questions.

2.3.8.1 Mixed analysis 1

To answer the questions regarding feasibility, adequacy form the policy makers and providers perspective, and sustainability, we did a side-by-side comparison by topic of the results of the process monitoring, the peer educator discussions, focal point interviews, and key informant interviews.

Feasibility (Was the intervention feasible/ practicable to implement?)

The process monitoring clearly showed that overall it had not been feasible to implement the intervention package as it had been designed. In particular the planned expansion of the scope and range of the targeted services was not fully achieved. This was mostly because the available resources were by far insufficient to implement such a comprehensive and extensive package of interventions. Nevertheless, several of the planned intervention components were judged to be feasible by the consulted policy makers, health managers, and providers, if the necessary resources were made available.

The strengthening of the peer outreach was mostly achieved and a further expansion is in principle perfectly practicable with extra resources to recruit, train and remunerate more peer educators, and to strengthen the capacity of non-governmental partners in managing a peer outreach programme. The same applies to periodic mapping and enumeration exercises. Great progress was made in community mobilisation, and also this component could in principle be further developed, with the needed resources. A challenge here, mentioned by some of the key informants, is the perceived resistance by some policy makers to authorise the establishment of sex worker associations and support self-organisation.

More challenging was the expansion and strengthening of the targeted *clinical* services. Although this component is in principle also perfectly possible to implement if the necessary resources are made available, these resources are greater than for community-level activities and full commitment is needed from various stakeholders. This was clearly not the case in the current project and most of the planned expansion could not be done.

The activities to improve access to the general health services and to strengthen linkages and referral systems were mostly successfully implemented and appear to be perfectly feasible. The focal points at the selected public health facilities had not encountered major problems in implementing the FSW-friendly approach, and health care providers were said not to have shown any resistance. The only challenges mentioned were that some of the commodities that FSW need, such as lubricants, are not yet distributed by the MoH, the reluctance by some policy makers to endorse key-population specific guidelines, and the persisting fear of FSW to disclose their profession to health care providers.

From a legal perspective, there are no barriers to implement interventions with FSW, but one of the services identified as lacking in the baseline analysis, termination of pregnancy, could not be included in the package of services because of being illegal. Meanwhile, Mozambique has legalised termination of pregnancy and it should be feasible to offer this service to FSW. However, it will take some time before guidelines are developed and the service can effectively be offered. There also appears to be resistance by some policy makers, health managers and community members in endorsing the implementation of this service.

Adequacy, from the perspective of policy makers, health managers and service providers (Was the intervention adequately responding to the needs, in accordance with national policies and guidelines, and acceptable to providers, health managers and policy makers?)

All consulted informants found it very adequate to have FSW-targeted interventions. It was said to respond to a real need and be in line with both the country's constitution and national health policies, that state that all should have access to health care. However, not all intervention components were judged appropriate by all informants.

The concept of peer outreach and community mobilization was endorsed and considered aligned with the national health policies, by all informants. The government has however not yet developed guidelines and there is no national strategy on how it should be provided. The MoH does not see it as one of its responsibilities to implement or coordinate this type of activities. The National AIUDS council has the responsibility to coordinate community-level HIV interventions, but does not implement or provide funding. It is expected that NGO will conduct them with funding other than from the Mozambican government.

The peer outreach providers judged all the peer outreach and community mobilization activities conducted by the project to be adequate and relevant, but pointed out that some components are still not functioning optimally, such as the distribution of lubricants. Their major concern is the low remuneration they receive for their work.

There was more disagreement on the adequacy of the model applied by the project to provide targeted clinical services to FSW. Based on the outcome of the situational analysis, the DIFFER project had opted to combine the strengthening and expansion of the existing clinic targeting FSW and some other key populations (the Night Clinic), with enhancing access to the public health system by making them more FSW-friendly.

At the time of the baseline, the MoH had initiated the development of guidelines for HIV prevention and care services for key populations at their health facilities, but had not yet taken a stand towards parallel clinics for key populations operated by non-governmental actors. Since then, the MoH made a clear choice towards making their health services more friendly for key populations, including FSW, and is not supportive of having external, parallel health services, be it through mobile outreach or stand-alone clinics. There is no prohibition to operate this type of services, but the existing ones are expected to be temporary until full expansion of FSW-friendly services is achieved. This was one of the reasons why the expansion of the targeted clinical services component of the intervention could not be fully achieved. On the other hand, the concept of having focal points at selected health facilities to facilitate access for key populations was fully endorsed by all.

The objection against parallel clinical services for key populations is not shared by all stakeholders. Some non-governmental agencies, both donor agencies and implementing agencies, are more open to the concept and willing to provide further funding. The omission of outreach services in the MoH guidelines was identified as a weakness. Also at the more local level, there is less resistance by district-level and provincial health managers. The choice to opt for services integrated in the general health services was clearly a political/ideological one and does not appear to be based on evidence from

research or evaluations. The arguments are mostly the perceived low sustainability and cost-effectiveness of this type of clinics, and the principle that the public health system should provide services to all. There is no evidence so far that the strategy chosen by the MoH is effective in sufficiently ensuring access to care for key populations, and many respondents doubted it will.

Sustainability and replicability (Is the intervention financially and institutionally sustainable on a long-term, and can it be rolled out on a larger scale?)

It is clear that the intervention package, in its current design, is currently financially not sustainable. It depends on short-term project funding by international donor agencies without any perspective on long-term funding. The government will at best continue to provide medical supplies and medical staff (against extra payment), but has no intention to finance activities such as the peer outreach, community mobilisation, or the full operational cost of parallel clinics. There is currently also no donor agency or other financing mechanism that can provide long-term funding. Although there is a growing interest by the international community in supporting activities with key populations, none has already shown interest in providing long-term financial support for interventions such as the one in Tete. Public-private partnerships have proven to be not a valid alternative, and financing through user fees is very unlikely to be viable.

The activities with FSWs in Tete are also highly dependent on the institutional and technical support of ICRH-Mozambique and other non-governmental partners. At best, some of the activities, such as the focal points and the provision of FSW-friendlier services can be maintained for some time, but others, such as the Night Clinic, the peer outreach and the community empowerment will stop as soon as these partners withdraw.

Some components of the intervention were judged by the consulted stakeholders to be replicable at a larger scale. These included the concept of FSW focal points and the linkage systems developed between the public health facilities and the peer outreach, as the peer outreach model, and the other activities to make the public health facilities more FSW-friendly.

2.3.8.2 Mixed analysis 2

To formulate integrated conclusions of the questions regarding the effectiveness of the intervention, we conducted a mixed analysis of the cross-sectional surveys, FSW focus group discussions, peer educator discussions, service statistics, and focal point interviews. We applied the method of a joint display of data in a matrix, by topic.

Effectiveness (What was the main effect of the intervention on the use of HIV/SRH services and commodities by FSWs?)

The first question we asked was if the uptake of HIV/SRH services and commodities by FSWs, and the coverage of the peer outreach, effectively increased between baseline and end-line. For this particular question we used the results of the cross-sectional services, and compared them to the available service statistics. Unfortunately, few valid service statistics were available. The recording of FSW attendance at the public health facilities only started late in the project, and was hampered by the high level of non-disclosure. A pre-post comparison of targeted services statistics was hampered by differences in the recording and reporting tools and methods used. We therefore mainly based our conclusions on the pre-post comparison of the cross-sectional surveys.

This comparison showed that significant improvements were achieved in the use of some HIV/SRH services, in particular HIV testing, and also cervical cancer screening and female condoms, but that the overall effect was only moderate. The uptake of some HIV and SRH commodities and services was still low at end-line, and needs to be further improved where possible. In particular screening for cervical

cancer and services for SGBV need further strengthening. Peer outreach is still very limited in its coverage and needs to be expanded.

We can only hypothesise what the reasons are for this moderate effect. The low implementation rate of the planned activities, with many activities that could not be implemented or were only initiated late in the project, is without doubt a major factor. For example, the cancellation of establishing a second targeted clinic in Tete City has certainly limited the effect, as well as the late initiation of the activities to make the general health facilities more FSW-friendly. Another contributing factor might be the high mobility of the FSW and the distrust by some FSW (mostly Mozambican and Malawian) towards the providers, that were mentioned by the peer educators in limiting the effect of their work.

A second question addressed, was if the place where FSW seek care, or get care from, changed in comparison to the baseline.

From the results of both CSS, the Night Clinic statistics and the FGD combined, we cannot concisely conclude if more FSW are now using the Night Clinic for contraception, STI care and HIV testing, as compared to the pre-intervention period. The Night clinic statistics appear to indicate that, despite a dip in between, there are now more visits by FSW than before, but the CSS results indicate that proportionally less FSW seek care at the clinic. The most important limitations of the Night Clinic statistics is that they assume a correct recording and classification, which might not always be the case, and that it counts the number of visits, not the number of FSW. The limitations of the CSS are the high risk of reporting bias and also a possible selection bias. The only conclusion that we can make is that from the service statistics it appears that the clinic receives (slightly) more visits by FSW than before, but that it has not become a more important source of services for the entire FSW population.

The clearest change between baseline and end-line is that community outreach became a relatively important source of commodities and care, while before it was negligible, and that it mostly replaced care seeking at public health facilities. Nevertheless, for most services public health facilities continue to be the most important place of care, while the Night Clinic is usually also a more frequent source. The exceptions are condoms, that now clearly are obtained much more from community outreach, and also HIV testing, with about one third of the FSW reporting it as place where they were last tested.

A finding at baseline and that persists in the end-line, and that was confirmed in the FGD, is that a large proportion of the FSW are enrolled in HIV care elsewhere. Also contraception is often procured outside the Tete-Moatize area.

The third question addressed was if the availability of different HIV/SRH commodities and services is sufficient, with particular attention to those services that were at baseline identified as insufficiently available.

FSW were overall very satisfied with the availability of contraceptive services, STI care, HIV testing services and HIV care. Almost all CSS participants reported to be either satisfied or very satisfied, and also the FGD participants and peer educators said these were sufficiently available. Services that were said to be now better available than before included HIV testing, mainly because of the mobile outreach, cervical cancer screening and peer outreach. Some FGD participants mentioned the focal points as one of the reasons the availability had improved. Also the availability of condoms was said to have increased, although that there were still FSW who reported in the CSS that they are not sufficiently available or affordable.

Commodities or services for which there is evidence that the availability is still not ideal include the female condom, lubricants, services for victims of violence and termination of pregnancy. Although that most FSW said in the CSS that the availability of these services is satisfactory, the proportion of dissatisfied FSW was substantially higher than for the other services. SGBV and in particular TOP

services were said during the FGD to be still lacking. The peer educators expressed a need to improve the availability of lubricants.

Persisting barriers to care at public health facilities mentioned during the FGD and peer educator discussions, include the habit of asking bribes and the long waiting lines. New barriers mentioned were the price asked for (informal) TOP, and also the cost of some contraceptives and STI drugs when there is a stock-out at the public health facilities and/or the Night Clinic. A particular challenge for HIV-positive foreign FSW is getting ARVs. They usually initiated their ART outside Mozambique and face difficulties in getting their drugs replenished. The reasons vary by source of information, providers say it is often not possible to know what regimen they are on, while FSW state that they are often refused treatment because of being FSW and/or foreigner. FGD participants expressed a desire to expand the opening hours and the scope of services at the Night Clinic, to include ART, cervical cancer screening and TOP, stating that this would greatly improve access.

A final question we assessed was if the intervention had had an effect on reducing stigma and discrimination of FSW.

Similar to at baseline, most FSW said in the CSS that they do not feel treated differently than other users at public health facilities. However, more than 70% also said that they do not disclose to the provider to be a FSW. This was confirmed by the focal points who mentioned the non-disclosure as a main challenge in providing services adapted to the needs of FSW. This indicates that FSW still fear to be treated differently if the provider discovers that they are a FSW.

Similar to at baseline, the responses given during the FGD, in regards to the reception at public health services, were quite different from the ones in the CSS. Again, similar as at baseline, the occasional FSW reported less problems of bad reception and discrimination probably because they are less easily identifiable as FSW. Full time Mozambican FSW reported that insults by public health care providers diminished, but still persisted, and perceived this as unavoidable. The ones most suffering from discrimination were the Zimbabwean FSW. They said they are still often badly received and sometimes refused a service, because of being Zimbabwean. However, the insults were said to have diminished in the past years and the presence of the focal points has helped. FSW pointed out that it is only some specific providers who have this attitude and certainly not all.

The peer educators also thought that the presence of the focal points had helped to reduce stigmatisation. However, they pointed out that not all providers participated in the FSW-friendly trainings and that when the focal point is not present, discrimination by some providers might still happen. They also confirmed that Zimbabwean FSW still suffer more from stigma and discrimination than Mozambicans.

2.3.9 Conclusions

- A diagonal intervention to improve access to HIV and SRH commodities and services for FSW, combining targeted community and clinical services with improving access to general health services is feasible in Mozambique, if the necessary resources are made available.
- Interventions to improve access to HIV and SRH commodities and services for FSW are in line with the country's policies and legislations, and fully endorsed by policy makers and health managers.
- Targeted FSW peer outreach and community mobilisation is considered as critical by all stakeholders, but the government has no strategy or guidelines on it, and expects it to be organised by external partners.

- Targeted clinical services, through mobile outreach or separate stand-alone clinics, are not considered to be an appropriate approach by the government, that has adopted a strategy to enhance access by making the public health services more friendly to key populations.
- There is uncertainty about the future of targeted clinics, such as the Moatize Night Clinic, that are still tolerated, but not encouraged.
- The targeted interventions, both community-based and clinic-based, are currently financially not sustainable because they are dependent on short-term project funding, and without perspectives of long-term funding by the government, the international community or from other sources.
- Institutional sustainability of interventions to improve access to HIV and SRH commodities and services for FSW is challenged by the high dependency on the technical and managerial support of external partners.
- The intervention as such cannot be replicated at national scale, but some components, such as the focal points, the linkage systems and the peer outreach model, could.
- The designed intervention package could only partially be implemented, mainly because of a lack of sufficient resources.
- The overall effect of the piloted intervention on the uptake of HIV/SRH services by FSW was therefore moderate, although that substantial and significant progress was achieved in regular HIV testing and cervical cancer screening.
- SRH care seeking at public health facilities and the Night Clinic did not substantially increase as a result of the intervention. The biggest change was the relatively higher proportion of FSW receiving care from outreach services.
- A large proportion of FSW, mostly foreign, seek HIV care outside the Tete-Moatize area, mostly in their area of origin, and many face problems getting their ARVs replenished.
- FSW were at end-line overall very satisfied with the availability of contraceptive services, STI care, HIV testing services, HIV care and, to a lesser extent, male condoms. Services whose availability were said to have improved since baseline included HIV testing (mainly because of the mobile outreach), cervical cancer screening and peer outreach.
- Commodities or services for which availability is still not ideal include the female condom, lubricants, services for victims of violence and, particularly, termination of pregnancy.
- Persisting barriers at the public health facilities are the habit of asking bribes and the long waiting lines. Cost is a barrier for (informal) TOP and for some contraceptives and STI drugs when there is a stock-out at the public health facilities or the Night Clinic.
- Despite the presence of the focal points being said to have diminished poor reception at public health facilities, FSW, and in particular Zimbabwean FSW, declare that they are still often badly received and sometimes refused a service, by certain providers.
- FSW therefor suggest to expand the opening hours and scope of services at the Night Clinic, to include ART, cervical cancer screening and TOP.

2.4 Durban, South Africa

2.4.1 Cross-sectional surveys

The baseline survey was completed in Durban between October and December 2012, and the second CSS was completed between February and April 2016. Four hundred FSW were recruited and interviewed for each survey. The findings from the second CSS are presented together with the baseline in order to illustrate differences which occurred between the two time points.

Socio-demographic characteristics

The crude results and the results adjusted for the responded-driven sampling bias are presented in Table 47 and Table 48 respectively. Overall, the socio-demographic characteristics of the participants of the first and second CSS were quite similar, with some notable exceptions:

- The number of years that FSW reported to be residing in their current place of residence was substantially higher in the second CSS
- Many more FSWs in the second CSS reported to have been previously married and be currently single, and fewer to be currently married/cohabiting or always been single

The difference in marital status has a high probability of being a result of measurement bias, because of the way the marital status questions were framed in the first CSS. One of the response options in that survey was 'Several partners at present', which was chosen by a high proportion (110/400) of participants. These respondents were arbitrarily classified as single, but could have included many FSW who had been previously married. The difference in time of stay at current residence is less likely to be caused by measurement bias, because the question was asked in the same way in the two surveys, but it cannot be excluded (for example by a different definition of 'primary residence' in the two surveys). The proportion of foreign FSWs is also slightly higher in the second CSS.

Table 57: Socio-demographic characteristics of FSW - Unadjusted data

Characteristic	1st CSS (N=400)		2nd CSS (N=400)	
	n	%	n	%
Age (years)				
Median	27		29	
Q1 – Q3	23-31		25-34	
Range	18-49		19-49	
<=20	28	7.0	10	2.5
21-25	142	35.5	102	25.5
26-30	123	30.8	124	31.0
31-35	67	16.8	79	19.8
>=36	40	10.0	85	21.2
Place of origin				
National, KwaZulu Natal	345	86.3	323	80.8
National, other province	49	12.3	55	13.8
Foreign	5	1.3	16	4.0
Unknown	1	0.3	6	1.5
Education				
None	3	0.8	2	0.5
Primary started	33	8.3	37	9.3
Primary completed	275	68.8	278	70.0
Secondary completed	75	18.8	61	15.4
Technical completed	2	0.5	7	1.8
Higher completed	12	3.0	10	2.5
Other/ unknown	0	0.0	2	0.5
Years living in current residence				

Characteristic	1st CSS (N=400)		2nd CSS (N=400)	
	n	%	n	%
Median	5		8	
Q1 – Q3	1.1-20		4-21	
Range	0-42		1-45	
<3years	142	35.5	51	12.8
>=3 years	258	64.5	349	87.3
Was away from residence				
In the past year	213	53.3	209	52.3
Present relationship				
Single. never married/ cohabiting	267	66.8	171	42.8
Married/cohabiting and living with partner	22	5.6	39	9.8
Married/cohabiting, but living apart	105	26.3	26	6.5
Single. previously married	5	1.3	164	41.0
Unknown	1	0.3	0	0.0
Present relationship				
Single, never married/cohabiting	267	66.8	171	42.8
Married or cohabiting	132	31.7	65	16.3
Single. previously married	5	1.3	164	41.0
Unknown	1	0.3	0	0.0

Table 58: Socio-demographic characteristics of FSW - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
Age (years)				
<=20	6.4	3.6 – 9.7	4.0	0.7-10.7
21-25	37.3	30.1 – 44.4	24.4	19.1-31.3
26-30	31.3	24.9 – 38.1	28.2	22.7-34.9
31-35	12.8	8.7 – 17.3	22.0	15.0-28.8
>=36	12.2	6.7 – 18.4	21.4	16.0-27.1
Place of origin				
National, KwaZulu Natal	86.2	79.5-91.6	80.9	74.6-86.4
National, other province	12.8	7.5-19.8	14.4	9.7-19.5
Foreign	1.0	0.1 – 2.2	4.7	1.7-8.7
Education				
Less than primary	10.5	6.3 – 15.0	9.8	6.4-13.8
Primary completed	68.7	61.4 – 75.7	68.6	61.5-75.0
Secondary completed	20.8	14.9 – 26.8	21.6	15.4-28.2
Years living in current residence				
<3 years	39.8	32.4 – 47.4	15.9	10.1-22.3
>= 3 years	60.2	52.6 – 67.6	84.1	77.7-89.9
Present relationship				
Single, never married/cohabiting	70.5	63.6 – 77.1	44.4	36.8-52.1
Married or cohabiting	28.7	22.2 – 35.4	15.8	10.4-23.1
Single, previously married/cohabiting	0.8	0.2 – 1.6	39.8	32.6-47.6

Sex work characteristics

In the second CSS, there were relatively more FSW who reported a high number of sex acts (35.6% reported more than 16 sex acts per week versus 26% at baseline) and more FSW who reported another source of income. The average amount, in South African Rand, received in exchange for having sex in the past month is slightly higher, but when exchanging to Euro the amount is lower than at baseline.

All of these questions are susceptible to reporting bias and care has therefore to be taken in making conclusions.

Table 59: Sex work characteristics of FSW - Unadjusted data

Characteristic	1st CSS (N=400)		2nd CSS (N=400)	
	n	%	n	%
No of commercial sex acts in the past week				
Median	10		11	
Q1 – Q3	5.3-16		7-20	
Range	0-65		0-300	
<6	100	25.0	68	17.0
6-10	118	29.5	130	32.5
11-15	78	19.5	57	14.3
>=16	104	26.0	142	35.6
No information	0	0.0	3	0.8
No of commercial sex acts in the past month				
Median	29		40	
Q1 – Q3	15-48		21-80	
Range	2-280		0-1150	
<16	102	25.5	58	14.5
16-25	87	21.8	73	18.3
26-40	88	22.0	72	18.0
>=41	123	30.8	193	48.3
No information	0	0.0	4	1.0
Average amount received for commercial sex (ZAR)				
Median	2000		2500	
Q1 – Q3	1000-3000		1200-4500	
Range	10-18000		0-29000	
Average amount received for commercial sex (EUR)				
Median	250		156	
Q1 – Q3	125-375		75-281	
Range	1.3-2250		0-1812	
Has other source of income				
Yes	36	9.0	73	18.3
No	364	91.0	323	80.8
No information	0	0.0	4	1.0

Table 60: Sex worker characteristics of FSW - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
No of commercial sex acts in the past week				
<6	31.0	23.6-37.9	24.1	17.4-31.1
6-10	30.7	24.6-37.9	29.6	23.2-35.8
11-15	14.6	10.7-18.8	10.3	6.9-14.1
>=16	23.7	18.0-30.0	36.0	28.7-44.7
No of commercial sex acts in the past month				
<16	30.6	23.3 – 37.9	21.1	14.9-27.0
16-25	25.0	18.8 – 31.4	19.9	14.0-25.9
26-40	20.9	15.2 – 27.1	20.0	13.4-27.0
>=41	23.5	18.0 – 29.2	39.0	31.9-46.8
Has other source of income				
Yes	10.5	6.5 – 15.0	17.4	12.2-23.2

Number of sexual partners

The total number of different sex partners in the past week was similar between the first and second CSS. A comparison of the number of partners in the past month is difficult because FSW in the first CSS were asked about the number of sex partners in the past 3 months and not in the past month. The number in the past month was estimated by dividing this number by three, but this most probably resulted in an underestimation, and might explain why the numbers are much higher in the second CSS. In both the first and second CSS, FSW reported a higher number of regular clients than of first-time clients. The different recall periods between the first and second CSS have a lesser effect on the number of non-paying partners, because FSWs have rarely many of this type of partners, and the proportions of FSW who had this type of partner is similar between the two surveys. About half of FSW reported to have a non-paying regular/steady partner and about one fifth to have had at least one occasional/one-time non-paying partner.

Table 61: Number of sex partners

Characteristic	1st CSS (N=400)		2nd CSS (N=400)	
	n	%	n	%
Total No of sex partners in the past week				
Median	10		10	
Q1 – Q3	5.5-17		6-20	
Range	1-201		0-134	
1-7	141	35.3	126	31.5
8-14	115	28.8	109	27.3
>=15	144	36.1	158	39.5
No information	0	0.0	7	1.8
Total No of sex partners in the past month				
Median	20		32	
Q1 – Q3	12-47		18-60	
Range	1-700		0-600	
0-19	169	42.3	105	26.3
20-29	62	15.5	66	16.5
30-49	76	19.0	83	20.8
>=50	92	23.0	145	36.3
No information	1	0.3	1	0.3
No of clients in the past month				
Median	20		30.5	
Q1 – Q3	10-42		16-60	
Range	0-700		0-615	
<=9	79	19.8	42	10.5
10-19	103	25.8	75	18.8
20-39	104	26.0	115	28.8
>=40	113	28.3	166	41.5
No information	1	0.3	2	0.5
No of first-time clients in the past month				
Median	8		13.5	
Q1 – Q3	3-17		5-29	
Range	0-500		0-300	
0-4	126	31.5	79	19.8
5-14	150	37.5	125	31.3
>=15	123	30.8	194	48.5
No information	1	0.3	2	0.5
No of regular clients in the past month				
Median	10		15	

Characteristic	1st CSS (N=400)		2nd CSS (N=400)	
	n	%	n	%
Q1 – Q3	3.3 – 25.3		7-32	
Range	0-400		0-595	
0-4	118	29.5	65	16.3
5-14	114	28.5	120	30.0
15-24	63	15.8	84	21.0
>=25	105	26.3	131	32.8
Had a non-paying partner in the past month				
Yes	238	59.5	228	57.0
No	162	40.5	165	41.3
No information	0	0.0	7	1.8
Had a regular/steady non-paying partner in the past month				
Yes	228	57.0	188	47.0
No	170	42.5	207	51.8
No information	2	0.5	5	1.3
Had an occasional non-paying partner in the past month				
Yes	90	22.5	80	20.0
No	308	77.0	310	77.5
No information	2	0.5	10	2.5

Table 62: Number of sex partners - Adjusted for RDS effect

Characteristic	1st CSS		2nd CSS	
	%	95% CI	%	95% CI
Total No of sex partners in the past week				
1-7	43.8	36.0-51.3	39.5	32.4-46.9
8-14	26.8	20.5-33.8	22.7	16.8-29.3
>=15	29.4	23.2-36.7	37.8	30.8-45.4
Total No of sex partners in the past month				
0-19	45.5	38.2-53.7	34.4	26.9-41.4
20-29	18.5	13.0-24.3	19.5	13.5-25.8
30-49	17.4	11.5-23.5	17.0	13.0-21.9
>=50	18.5	13.9-23.8	29.1	22.5-36.1
No of clients in the past month				
<=9	22.1	15.7-28.7	14.7	9.6-20.2
10-19	27.1	20.9-33.5	22.0	15.7-29.1
20-39	29.3	22.8-36.1	30.1	23.7-36.6
>=40	21.6	16.3-27.1	33.1	26.8-40.2
No of first-time clients in the past month				
0-4	36.2	29.0-43.8	25.5	18.6-32.8
5-14	42.5	35.3-50.3	36.0	29.1-42.6
>=15	21.3	16.3-26.5	38.5	31.3-46.3
No of regular clients in the past month				
0-4	32.0	24.2-39.2	17.2	12.3-22.8
5-14	30.0	23.3-37.1	31.6	24.7-38.9
15-24	14.2	9.8-19.3	20.5	14.9-26.6
>=25	23.7	17.6-30.3	30.6	23.8-37.7
Had a non-paying partner in the past month				
Yes	49.4	41.8-56.6	58.0	50.1-65.2
Had a regular/steady non-paying partner in the past month				
Yes	46.8	39.6 – 54.2	47.8	40.1-55.9
Had an occasional non-paying partner in the past month				

Yes	20.2	14.7 – 25.9	21.1	15.9-27.0

Uptake of HIV prevention and care services

The findings on the use of different HIV prevention and care commodities and services are presented in Table 53 and Table 54, and discussed below per service.

Condom use

The intervention appeared to have had little effect on condom use. Self-reported condom use with clients did not substantially change. Self-reported condom use with non-paying partners even significantly reduced, in particular with a regular/steady non-paying partner (from 61.5% who used a condom at last sex at baseline to 44.7% at end-line). This could possibly be a consequence of differences in reporting and measurement bias between the two surveys, but it is apparent that little progress was made in this domain. There was also no substantial change in self-reported condom breakage.

Substantial and significant progress was achieved in the number of FSW who knew their (non-paying) partners' HIV status. While only 10.8% reported to know the HIV status of their regular, non-paying partner at baseline, 42.5% reported such at end-line.

The use of the female condom did substantially and statistically significantly increase, with about one quarter of FSW reporting to have ever used it in the second CSS.

STI care

The prevalence of self-reported symptoms of STI was similar across the two surveys, but care seeking for these symptoms increased substantially and significantly to more than 90%.

HIV testing

Great changes were observed in the area of HIV testing. All indicators increased very substantially and with a very high statistical significance. Almost all participating FSW reported to ever have been tested and a large proportion did so in the last 3 months. Because the questions were identical in both surveys and quite straightforward, it is very unlikely that this can be explained by measurement, reporting or selection bias and it is very probable that FSW are now getting tested more often.

HIV care

Self-reported positive HIV status was much higher in the second survey than in the first. One explanation could be that because FSW got more frequently tested, more positive FSW are now aware of their status. In the first survey there was a large proportion who had not been tested for a long time, who reported to be HIV negative and who tested HIV positive. It could be that this group of FSW now mostly knows their status. Another possible contributing factor could be that FSW are now less resistant to disclosing their positive status than in the first survey. It is of course also possible that the actual HIV prevalence has increased, but it is very unlikely that it increased this much in such a short time. The proportion of positive FSW who reported to be in care and/or in ART is enormously higher than at baseline. This probably reflects a real increase, but care has to be taken because of the confusing way this question was asked at baseline. It is possible that there was some misclassification at baseline and that the actual number of FSW in care was higher.

All HIV/STI services combined

Calculating the same index as at baseline (combining consistent condom use with all partners, care seeking for last STI episode, HIV testing in the last 6 months and being in HIV care), we note a substantial and significant increase. This is logical taken into account the high increases in HIV testing and HIV care. The percentage of FSW using all commodities and services she needs continues however low (21%), mostly because the proportion of FSW that consistently uses condoms with all partners is still low.

Table 63: Use of HIV prevention and care commodities and services by FSW – Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%*	N	%*			
Condom use at last sex with: (N=had this type of partner in the past month)							
Any client	374	88.3	379	88.0	0.99	0.44-2.25	0.988
New client	127	94.8	388	94.3	0.90	0.04-20.0	0.945
Regular client	357	86.6	363	83.1	0.77	0.38-1.55	0.463
Occasional partner	112	82.6	87	71.9	0.54	0.19-1.59	0.266
Regular partner	200	61.5	205	44.7	0.48	0.26-0.90	0.022
Always used condoms in past month with last: (N=had this type of partner in the past month)							
Regular client	124	79.3	385	76.8	1.04	0.59-1.83	0.885
Occasional partner	50	99.0	85	68.0	0.29	0.10-0.87	0.027
Regular partner	54	61.8	196	37.6	0.44	0.23-0.82	0.010
Knows HIV status of : (N=had this type of partner in the past month)							
Last non-paying partner	296	10.8	268	42.5	6.10	3.19-11.7	<0.001
Last regular partner	214	16.3	214	61.6	8.32	4.05-17.1	<0.001
Always uses condoms with all partners[1]							
Yes	390	51.9	399	49.9	1.00	0.66-1.54	0.984
Had condom break in the past year							
Yes	399	71.1	392	69.2	0.87	0.53-1.45	0.600
Ever used female condom							
Yes	400	15.4	395	25.1	1.88	1.15-3.07	0.012
Abnormal discharge or genital ulcer in past 12 months							
Yes	400	68.8	398	67.1	0.88	0.55-1.41	0.601
Care sought for last STI/RTI syndrome (N=had discharge or ulcer in past year)							
Yes	205	84.7	261	95.4	3.65	1.50-8.86	0.004
Ever tested for HIV							
Yes	398	73.8	399	98.9	31.8	8.9-113	<0.001
When last tested for HIV (N=did not test positive for HIV before that period)							
Less than 3 months	325	30.0	174	60.5	3.65	2.03-6.55	<0.001
Less than 6 months	340	40.9	210	83.2	7.26	4.02-13.1	<0.001
Less than 12 months	362	47.0	255	89.3	9.53	4.99-18.2	<0.001
Result of last test (N=ever tested for HIV)							
Positive	266	42.6	391	67.3	2.55	1.57-4.15	<0.001
Currently using HIV care services (N= HIV positive)							
Yes	117	35.5	268	91.8	19.4	9.16-41.2	<0.001
On ART	117	12.9	268	61.2	10.9	4.78-24.7	<0.001
Used all HIV services she needed							
Yes	400	13.3	399	21.0	1.72	0.95-3.09	0.071

*RDS-adjusted percentage

Contraception

Contraception use increased since the baseline. Almost all FSW reported in the second CSS to use contraception, which is a significant increase compared to baseline, and the proportion that used condoms alone significantly decreased. Nevertheless, relying solely on condoms to prevent pregnancy remains common and only half of FSW used a non-barrier contraceptive method. Because more FSW were using a non-barrier method, compared to the baseline, the proportion of FSWs who used a dual method (non-barrier method and condoms combined) also significantly increased. The non-barrier contraceptive method mix remains largely the same as at baseline, with the exception of sub-dermal hormonal implants that now appear to be used as well. No substantial changes were seen in the use of emergency contraception.

Unwanted pregnancies

The proportion that reported to have been pregnant while they didn't plan to in the past 5 years was substantially and very significantly lower than at baseline. This could reflect a real decrease, as a result of the higher contraception use, but again this question is susceptible to reporting bias. The proportion who said that they sought a termination of pregnancy was low, and lower than at baseline (although that this decrease was not statistically significant). The proportion who found another solution was bigger than the proportion that went to a facility.

Cervical cancer screening

Another indicator that increased dramatically was ever having been screened for cervical cancer. This could possibly be linked to the fact that more HIV positive FSW go for care and are then tested as part of the HIV care package. This is supported by the fact that the increase was mostly in the younger FSW.

Sexual and gender-based violence

The proportion of FSW who reported to have been forced to have sex is substantially and significantly lower in the second CSS. Again, this could reflect a real decrease, but is susceptible to reporting/ measurement bias. However, many more FSW now reported to have sought care for the last forced sex incidence at a health facility. The increase was statistically significant and so large that we can rule out reporting bias as the cause of the increase.

All SRH services, other than HIV/STI, combined

The increase in the use of SRH services/commodities, other than HIV/STI, was even greater than the increase of HIV/STI services/commodities. The index includes the use of a non-barrier contraception method, ever have been screened for cervical cancer if older than 30 years, and having sought medical care for last forced sex. All of these three indicators increased substantially and it is therefore not surprising that the index also increased substantially and significantly.

All SRH/HIV services combined

When considering the number of FSW who used all commodities and services they needed, both for HIV prevention and care and other SRH topics, we observe that the number has increased, but to a lesser extent than the separate indexes and not enough to be statistically significant. The large majority of FSW is still not using at least one service they should.

Table 64: Use of SRH commodities and services, other than HIV prevention and care, by FSW – Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%*	N	%*			
Currently using contraception (N= not wanting to get pregnant, not pregnant, and able to conceive)							
Yes	381	91.3	368	97.7	4.25	1.27-14.2	0.019
Main contraception method used (N=currently using contraception)							
Injectable contraceptives	346	29.7	358	37.7	1.42	0.88-2.30	0.153
Oral contraceptives	346	3.2	358	1.8	0.54	0.10-2.93	0.474
IUD	346	0.1	358	3.3	25.7	0.27-2412	0.161
Implant	346	0.0	358	5.9	1	-	-
Condom	346	63.7	358	45.9	0.49	0.31-0.78	0.002
Female sterilization	346	3.2	358	5.4	1.45	0.51-4.11	0.487
Currently using a non-barrier modern contraceptive method (N= not wanting to get pregnant, not pregnant, and able to conceive)							
Yes	378	33.4	368	52.0	2.20	1.41-3.44	0.001
Uses dual method (N=using non-barrier method)							
Yes	117	19.3	163	45.0	3.42	1.46-8.00	0.005
Uses dual method (N= not wanting to get pregnant, not pregnant, able to conceive and not sterilised)							
Yes	364	6.0	349	22.6	4.54	2.12-9.71	<0.001
Ever used emergency contraception							

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%*	N	%*			
Yes	389	27.9	385	25.0	0.83	0.52-1.32	0.428
Ever got pregnant while didn't want to get pregnant in the last five years							
Yes	394	37.6	388	23.4	0.49	0.32-0.76	0.002
Action taken for unwanted pregnancy (N=had unwanted pregnancy in the past 5 years)							
Went to a health facility	142	15.3	99	8.6	0.53	0.18-1.56	0.247
Kept the pregnancy	142	80.6	99	77.1	-	-	-
Found other solution	142	4.1	99	14.4	-	-	-
Ever tested for cervical cancer							
Yes	400	29.0	398	51.2	2.47	1.56-3.91	<0.001
Ever tested for cervical cancer (N= older than 30 years)							
Yes	107	44.8	163	68.5	2.52	1.05-6.07	0.039
Forced to have sex in the past 12 months							
Yes	397	36.3	396	18.1	0.37	0.22-0.63	<0.001
Condom use at last forced sex incident (N=Was forced to have sex in the past 12 months)							
Yes	131	47.5	72	37.7	0.70	0.22-2.81	0.557
Sought medical care for last forced sex incident (N=Was forced to have sex in the past 12 months)							
Yes	121	38.8	72	67.6	3.05	1.23-7.57	0.017
Used all SRH services she needed							
Yes	393	19.4	388	37.9	2.56	1.57-4.17	<0.001
Used all HIVSRH services she needed							
Yes	398	5.3	397	7.2	1.93	0.73-5.11	0.183

*RDS-adjusted percentage

Stigma and discrimination

No substantial change was seen in the proportion of FSW disclosing that they are a FSW when visiting a public health facility. This could indicate that the fear of being stigmatised or badly received remains. Most FSW found that they were not treated differently from other users at public health facilities however, and this proportion was higher in the second survey. The increase was however not statistically significant.

Table 65: Stigma and discrimination – Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%*	N	%*			
Discloses as being a FSW when visiting public health services							
Yes	391	15.8	382	13.3	0.77	0.43-1.39	0.389
Feels treated like everyone else, when visiting public health services							
Yes	366	84.3	366	93.6	2.76	0.80-9.57	0.109

*RDS-adjusted percentage

Peer outreach

The proportion of FSW who had a contact with a peer/ community educator did not change between the two surveys, nor did the proportion who had at least 10 contacts change. However many more FSW reported that the peer they did interact with was a fellow FSW. Therefore the proportion of participants that had a contact with a FSW peer educator did substantially and significantly increase. Nevertheless, more than half of the FSW still appears not to be reached by peer outreach and those who are reached have few contacts. No substantial changes were observed in the type of services provided by the peer educators.

Table 66: Exposure to peer education – Comparison between first and second CSS

	1st CSS		2nd CSS		OR	95% CI	p-value
	N	%*	N	%*			
Had contact with a peer educator in the last 12 months							
Yes	400	46.2	398	47.3	1.00	0.66-1.53	0.998
Had at least 10 contacts with a peer educator in the last 12 months (all FSW)							
Yes	325	14.8	395	18.8	1.29	0.72-2.33	0.390
Peer educator was a FSW (N=had contact with a peer educator)							
Yes	189	49.5	183	90.1	8.09	3.69-17.8	<0.001
Had contact with a FSW peer educator in the last 12 months							
Yes	400	22.8	359	37.2	1.84	1.17-2.90	0.009
*							
*	182	86.1	196	84.2	0.90	0.34-2.40	0.831
*	182	92.4	209	96.9	2.10	0.38-11.7	0.395
*	182	31.8	139	36.8	1.30	0.66-2.56	0.438
*	182	17.9	119	18.3	0.97	0.47-2.03	0.941

*RDS-adjusted percentage

Place where care sought

A comparison of where FSW usually obtain condoms was complicated because apparently there was less probing in the second survey, and all places were less commonly reported. The only relevant comparison that therefore can be made is of the order of what places were most commonly reported in each survey. In the first survey this was 1. (by far) public health facilities, followed by 2. peer educators/community workers and entertainment venues, and 3. Non-governmental organisations. This order remains approximately the same in the second survey. Public health facilities continue to be by far the main source of condoms, and is again followed by peer educators and entertainment venues, and then non-governmental organisations. Peer educators/community healthcare workers were relatively more reported than entertainment venues, which could indicate that they have become a more important source, but because of the reporting bias we cannot make any definite conclusion.

There appears to be no substantial differences in regards to where FSW usually go for general medical care. The place where FSW reported to have obtained their current non-barrier family planning method is also greatly similar to baseline. Mobile outreach, such as by lifeline or HIV/TB care, was slightly more reported (although not statistically significant), but it has to be noted that this question has a high risk of measurement bias. In particular because more than one place was mentioned (while because of the nature of the question, only one place was expected) and the name of the place did often not correspond with the classification (for example, the option 'targeted services' was chosen, and then the name of a clinic was recorded).

When asked where they went for their last STI episode, outreach services were substantially more mentioned than at baseline, and this was almost statistically significant at the 5% level (p=0.069). But again this question suffers from potential differential measurement bias and care has to be taken in making conclusions.

A similar picture for where FSW were last tested for HIV. Public health facilities remain the most important place, followed by mobile outreach that slightly, but not significantly, increased. HTC centres at public health facilities were considered as public health facilities in this analysis. When asked where they go for their ARVs or where they are being monitored for their HIV, contrary to the baseline, a substantial proportion responded outreach services such as Lifeline and TB/HIV care. There are probably still some remaining misclassifications and the actual proportion might be less.

For cervical cancer screening mobile outreach is now reported by a substantial proportion, while it wasn't at baseline.

The number of FSWs who sought care for a forced sex event was small and detecting significant differences is therefore difficult. Nevertheless, public health facilities remain the main place where care is sought.

Table 67: Where HIV/SRH commodities and services were sought

	RDS adjusted %		Logistic regression model		
	1st CSS	2nd CSS	OR	95% CI	p-value
Condoms (N=all)	N=399	N=399			
Public health facilities	64.7	47.3	0.48	0.31-0.73	0.001
Private clinics	1.2	0.1	0.05	0.00-1.04	0.053
Targeted clinics/ services	-	(0.5)**	-	-	-
Pharmacy/ Chemist	8.9	2.7	0.28	0.11-0.70	0.006
Shop/Supermarket/Petrol station	29.1	9.7	0.26	0.14-0.46	<0.001
Café/Bar/Night club/Hotel	24.9	13.3	0.49	0.28-0.87	0.014
Market/Stand/Street vendor	1.2	0.4	0.34	0.00-114	0.718
Peer Educators/ CHW	25.7	19.8	0.70	0.43-1.15	0.161
Organisations	13.8	6.9	0.43	0.23-0.79	0.007
At work	0.6	0.0	-	-	-
Friends	6.9	5.0	0.70	0.19-2.58	0.596
General health care (N=all)	N=400	N=397			
Public health facility	89.1	85.0	0.65	0.33-1.25	0.196
Private health facility	2.1	4.8	1.90	0.52-6.95	0.334
Pharmacy/ Chemist	3.5	0.5	0.14	0.00-58.2	0.525
Mobile outreach	9.0	9.5	1.10	0.53-2.31	0.791
Traditional healer	0.1	0.2	10.4	0.25-4343	0.445
Contraception (N=uses non barrier contraceptive method)	N=131	N=181			
Public health facility	88.3	83.8	0.68	0.26-1.76	0.427
Private health facility	2.0	3.6	1.89	0.08-43.8	0.690
Targeted services	8.3	12.3	1.56	0.48-5.11	0.463
Pharmacy/ Chemist	0.0	(0.2)*	-	-	-
Other	1.4	0.0	-	-	-
STI care (N=sought care for last STI episode)	N=174	N=252			
Public health facility	84.2	79.8	0.74	0.33-1.65	0.461
Private health facility	1.7	1.7	1.02	0.07-14.7	0.989
Mobile outreach	3.9	16.4	3.53	0.91-13.8	0.069
Pharmacy/ Chemist	6.3	1.4	0.16	0.02-1.45	0.104
HIV testing (N=was tested in the past 2 years)	N=204	N=492			
Public health facility	57.4	57.8	1.00	0.57-1.76	0.991
Private health facility	2.4	1.1	0.43	0.00-98.9	0.762
Targeted services	29.2	32.7	1.22	0.67-2.22	0.519
Youth-friendly services	10.1	2.7	0.23	0.03-1.94	0.178
Community VCT	0.0	0.4	-	-	-
In country of origin	0.0	1.1	-	-	-
HIV care (N=is currently in HIV care)	N=38	N=216			
Public health facility	96.5	77.9	0.08	0.01-0.78	0.029
Private health facility	0.6	(1.4)**	-	-	-
Mobile outreach	0.0	17.2	14.0	7.03-27.9	<0.001
Cervical cancer screening (N=Was ever tested for cervical cancer)	N=110	N=326			
Public health facility	96.9	83.5	0.22	0.78-0.64	0.005

	RDS adjusted %		Logistic regression model		
	1st CSS	2nd CSS	OR	95% CI	p-value
Private health facility	(0.8)*	1.5	1.61	0.10-25.6	0.734
Mobile outreach	0.0	11.1	-	-	-
SGBV care (N=sought care for last forced sex)	N=60	N=43			
Public health facility	(93.7)**	88.6	1.08	0.24-4.99	0.916
Private health facility	(5.0)**	(0.2)*	-	-	-
Targeted services	(3.3)**	(5.9)*	-	-	-
Pharmacy	(1.7)**	(3.8)*	-	-	-

* RDS adjusted proportion could not be calculated and the weighed proportion is shown instead.
**RDS adjusted proportion and weighed proportion could not be calculated and the non-adjusted/non-weighed proportion is shown instead.

Reason for the choice of place of care

Overall the reasons for choosing a place of care were similar to the ones at baseline. The major reason continues to be proximity. 'Where I always go' was relatively more mentioned than at baseline and was now clearly the second most common reason. Cost was relatively less mentioned, and quality of care much less often mentioned. Friendly personal was more often mentioned.

Satisfaction with the availability of SRH commodities and services

About two thirds of the FSW find male condoms affordable, but a substantial proportion (17%) did not. Availability of condoms doesn't appear to be a problem as almost all FSW find them sufficiently available and are satisfied with its availability. Satisfaction with the availability of the female condom did not improve in comparison to baseline, with almost one quarter of the FSW who ever used a female condom reporting that they find them insufficiently available and 15% being not satisfied. When adjusting for the RDS sampling design effect, the proportions of FSWs who find them sufficiently available and who are satisfied or very satisfied, become even smaller (61% and 68%, respectively).

Due to a lack of responses it was not possible to assess the FSWs' perception on the availability of termination of pregnancy services. Satisfaction with the availability of contraceptive services, STI care services and HIV testing is very high, with only about 2-3%, about 7% and about 4%, respectively, not being satisfied or very satisfied. Those who responded to the question about availability of HIV care services almost unanimously agreed that the availability was satisfactory, although an important proportion (10%) did not have a response to this question, and this question was only asked to those who were in HIV care and not to those who were HIV positive and not in care (30 FSW who reported to be HIV positive had reported to not be in care). It is possible that some of these FSW are less satisfied, but even so we can conclude that satisfaction is overall very good.

Of those who provided a response to the availability of services for victims of violence, the large majority were satisfied or very satisfied.

Table 68: satisfaction with the availability of services

Service	n	Crude %	RDS Adjusted %	95% CI
1.Condom affordability (N=400)				
Very affordable	252	63.0	62.8	55.5-70.6
Somewhat affordable	69	17.3	19.8	14.2-25.5
Not affordable	67	16.8	17.4	11.5-23.2
No information	12	3.0		
2. Male Condom availability (N=400)				
Do you find male condoms to be sufficiently available?				
Sufficiently	376	94.0	94.6	91.6-97.1
No opinion	3	0.8	1.7	0.3-4.1

Service	n	Crude %	RDS Adjusted %	95% CI
Not sufficiently	18	4.5	3.7	1.7-5.9
No information	3	0.8		
Are you very satisfied, satisfied, a little satisfied, or not satisfied with the current availability of male condoms?				
Very satisfied	254	63.5	61.3	54.2-68.3
Satisfied	120	30.0	32.4	25.3-39.6
A little satisfied	17	4.3	4.7	1.7-8.0
Not satisfied	5	1.3	1.7	0.05-4.5
No information	4	1.0		
Very satisfied/Satisfied	374	93.5	93.7	89.4-97.1
A little satisfied/Not satisfied	22	5.5	6.3	2.9-10.6
3. Female Condom availability (N=ever used a female condom: 105)				
Do you find female condoms to be sufficiently available?				
Sufficiently	67	63.8	-	-
No opinion	4	3.8	-	-
Not sufficiently	24	22.9	-	-
No information	10	9.5	-	-
Sufficiently	67	63.8	61.2	43.6-75.5
No opinion/ Not sufficiently	28	26.7	38.8	24.5-56.4
No information	10	9.5		
Are you very satisfied, satisfied, a little satisfied, or not satisfied with the current availability of female condoms?				
Very satisfied	36	34.3	27.2	16.3-40.2
Satisfied	40	38.1	40.4	26.7-55.7
A little satisfied	10	9.5	14.2	4.4-26.0
Not satisfied	16	15.2	18.3	6.0-32.0
No information	3	2.9		
Very satisfied/Satisfied	76	72.4	67.6	52.9-81.7
A little satisfied/Not satisfied	26	24.8	32.4	18.3-47.1
No information	3	2.9		
4. Unwanted Pregnancy Services Availability (N= had an unwanted pregnancy in the past 5 years: 106)				
Very satisfied	8	7.6	-	-
Satisfied	12	11.3	-	-
A little satisfied	4	3.8	-	-
Not satisfied	3	2.8	-	-
No information	79	74.5		
Very satisfied/Satisfied	20	18.9	-	-
A little satisfied/Not satisfied	7	6.6	-	-
No information	79	74.5		
5. Contraceptive Services Availability (N= is currently using a contraceptive method: 358)				
Very satisfied	226	63.1	-	-
Satisfied	117	32.7	-	-
A little satisfied	9	2.5	-	-
Not satisfied	1	0.3	-	-
No information	5	1.4	-	-
Very satisfied/Satisfied	343	95.8	97.4	95.0-99.2
A little satisfied/Not satisfied	10	2.8	2.6	0.8-5.0
No information	5	1.4		
6. STI care services Availability (N= had an STI in the past 12 months: 261)				
Very satisfied	138	52.9	55.6	45.6-65.9
Satisfied	79	30.3	37.9	27.6-48.0
A little satisfied	6	2.3	4.3	1.1-8.7

Service	n	Crude %	RDS Adjusted %	95% CI
Not satisfied	5	1.9	2.3	0.4-5.3
No information	33	12.6		
Very satisfied/Satisfied	217	83.1	93.5	88.6-97.6
A little satisfied/Not satisfied	11	4.2	6.5	2.4-11.6
No information	33	12.6		
7. HIV testing services availability (N= was ever tested for HIV: 394)				
Very satisfied	207	52.5	-	-
Satisfied	178	45.2	-	-
A little satisfied	7	1.8	-	-
Not satisfied	2	0.5	-	-
No information	0	0.0		
Very satisfied/Satisfied	385	97.7	95.7	90.0-99.5
A little satisfied/Not satisfied	9	2.3	4.3	0.5-10.0
8. HIV care services availability (N= is currently in HIV care: 238)				
Very satisfied	117	49.2	55.0	44.8-64.5
Satisfied	95	39.9	45.5	35.3-54.9
A little satisfied	2	0.8	0.1	0.1-0.4
Not satisfied	0	0.0	0.0	
No information	24	10.1		
Very satisfied/Satisfied	212	89.1	99.9	99.6-99.9
A little satisfied/Not satisfied	2	0.8	0.1	0.1-0.4
No information	24	10.1		
9. SGBV care services availability (N= sought care for last forced sex episode: 44)				
Very satisfied	17	38.6	-	-
Satisfied	14	31.8	-	-
A little satisfied	1	2.3	-	-
Not satisfied	3	6.8	-	-
No information	9	20.5	-	-
Very satisfied/Satisfied	32	70.5	-	-
A little satisfied/Not satisfied	4	9.1	-	-
No information	9	20.5	-	-

Conclusions CSS findings

HIV/SRH services and commodities by FSWs: The cross sectional survey measured largely positive results and sometimes very large increases in service uptake. Condom use remained stable between the baseline and end-line surveys (>90% used a condom with first time clients, >80% with regular clients and >60% with regular non-paying partners). Ever use of the female condom increased over time by 10% (up from 15% at baseline) and overall contraception use increased, with a more diverse method mix and less reliance on condoms as the sole contraceptive method, and more FSW reported dual protection. Ever tested for HIV increased substantially (74% at baseline vs 99% at end-line), and frequency of HIV testing improved (40% at baseline had tested in the last 6 months vs 83% at end-line). Of those who had tested positive, more FSW reported accessing HIV care and antiretroviral treatment. Care seeking for STI symptoms also increased (85% at baseline vs 95% at end-line). Calculating the same index as at baseline (combining consistent condom use with all partners, care seeking for last STI episode, HIV testing in the last 6 months and being in HIV care), we note a substantial and significant increase. The increase in the use of SRH services/commodities, other than HIV/STI, was even greater than the increase of HIV/STI services/commodities. The index includes the use of a non-barrier contraception methods, ever screened for cervical cancer if older than 30 years, and seeking medical care for last forced

sex. All of these three indicators increased substantially and therefore the index increased. Also having had a contact with a FSW peer educator in the last year increased from 23% to 37%.

Place where FSW seek care: No major changes were observed in where FSW obtain their SRH commodities and services. Peer educators/community healthcare workers were relatively more reported as a source for condoms, and mobile outreach as place where STI care, HIV care and cervical cancer screening had been obtained. This could indicate that this type of service provision has become more important as a result of the intervention, although that care has to be taken because of potential reporting or measurement bias.

Effect on reducing stigma and discrimination of FSWs at public health facilities: No substantial change were seen in the proportion of FSW reporting disclosing that they are a FSW when visiting a public health facility, and this could indicate that the fear of being stigmatised or badly received remains.

2.4.2 Focus group discussions

Four focus group discussions (FGD) were held with a total of 33 participants:

FGD 1: South African sex workers working primarily from outdoor sites
FGD 2: South African sex workers working primarily from indoor sites
FGD 3: Immigrant/ Non-South African sex workers
FGD 4: South African sex workers working in both indoor and outdoor sites (mixed group)

Description of sample

Table 59 below summarises key socio-demographic characteristics of FGD participants. Participants were on average 34 years of age. *Most reported having obtained some secondary school (56.3% in total).* Female sex workers described working to support their families and other dependents – more than 4 dependents in some cases, but mostly between three and six. In most cases, these were not only biological children, but also members of their extended families. Most participants described having experienced up to two pregnancies. In terms of substance abuse binge drinking (defined as drinking more than five alcoholic drinks on a single occasion) appeared quite common: 32,3% participants reported doing so two - four or more times a week. Forty percent reported using narcotic substances in the last month. Only 8% of participants reported earning an income outside of sex work. Participants reported working in a variety of SW venues. Most commonly places of work included hotels (36.4%), followed by streets (30.3%) and bars/clubs or shebeens (24.2%). Participants reported securing a median of 64 paying clients in the past month. Participants used male condoms (97%) and female condoms 59.4% but 86,3% experiencing condom breakages. The majority reported having an HIV test (81.8%).

Table 69: Sociodemographic characteristics

Variable	**n (%)** **N=33**
Median age (IQR)	34.0 (32-36)
Age began sex work Median (IQR)	23.0 (21-25)
Education level n (%)	
None	1 (3.1%)
Primary school education	2 (6.3%)
Some secondary school education (no matric)	18 (56.3)
Matric	7 (21.9)
Tertiary education	4 (12.4)
Parity Median (IQR)	1.8 (1-2)
Gravidity Median (IQR)	1.6 (1-2)

Variable	n (%) N=33
Mean number of dependents	4 (3-6)
Workplace n (%)	
Bar or club	4 (12.1%)
Shebeen or informal drinking venue	4 (12.1%)
Brothel	3 (9.1%)
Street	10 (30.3)
Hotel / Motel	12 (36.4)
Part-time sex work n (%)	
Yes	8 (24.24%)
Sometimes	2 (6.06%)
No	23 (69.7%)
Median total sex partners in past week (IQR)	34 (20-48)
Median total sex partners in past month (IQR)	64 (26 -103)
Number of husbands or boyfriends in past week (IQR)	1 (1-2)
Number casual non-paying partners in past week (IQR)	1 (1-3)
Number paying clients in past week(IQR)	20 (6-33)
Do you use male condoms	32 (97%)
Where do you get male condoms from n (%)	
Peer educators	16 (50%)
Public health facilities	13 (40.6%)
Bars	3 (9.4%)
Ever experienced condom breakage	26 (86.3%)
Ever used female condom	19 (59.4%)
Use lubricants	26 (81%)
Where do you get lubricants from n (%)	
Peer educators	64.3% (18/28)
Public health facilities	25% (7/28)
Bars	2 (7.1%)
Refused	1 (3.6%)
Currently using family planning	21 (63.6%)
Have you had an HIV test	27 (81.8%)
How often have you had 5 or more alcoholic drinks in one sitting in the last six months n (%)	
Not more than 5 drinks	6 (19.4%)
Once a month or less	5 (16.1%)
2 to 4 times a month	10 (32.3%)
2 to 3 times a week	4 (12.9%)
4 or more times a week	5 (16.1%)
Did not answer	1 (3.2%)
How often have you used drugs in the last 30 days n (%)	
Everyday	3 (30%)
2-6 times a week	2 (20%)
Once a week or less	4 (40%)
Did not answer	1 (10%)

In contrast to the baseline FSW themselves understood the concept of 'sexual and reproductive health' quite well and were knowledgeable of the services these terms encompassed. During the preference/ needs-ranking exercise in the FGD FSW discussed services they are able to access and their experiences accessing these services as well as services they are unable to access and their experiences related to the difficulty accessing services.

Access to and availability of HIV/SRH services and commodities

The pie chart below graphically depicts the ranking of services accessed (ranked based on frequency of access). Male condoms, HIV testing and TB tests were ranked among the most frequently accessed service; among SRH services: family planning, pap smears and pregnancy tests were highly ranked /accessed services.

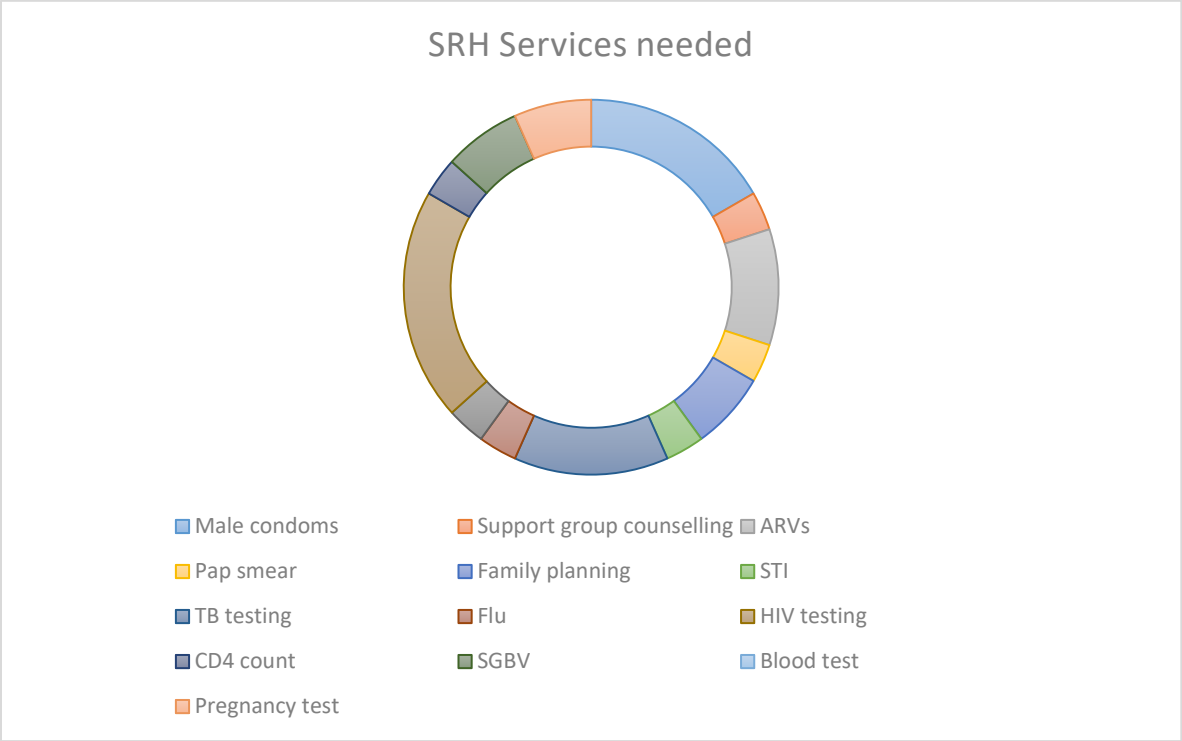


Figure 2: Ranking of services accessed the most by FSWs (across all four focus groups)

HIV and SRH services were accessed from public healthcare facilities and NGOs (targeted interventions). There was a preference for NGO run services as these were often provided near or at their places of work. Condoms (access and provision) remained an essential service that FSW felt had repercussions for STI and HIV acquisition (many stated this at the baseline as well).

Male condoms, accessed from both public health facilities as well as non-government organisations (targeted interventions) were reportedly always used by participants and were also the key method for preventing STIs and HIV. Male condoms were rated as extremely important and easy to access. However, condom negotiation was reportedly difficult with some reporting partner violence as a major barrier to condom use. Another barrier was not consistently carrying condoms or having to go to another venue with a client rather than one's room. Often clients were the ones to put on condoms but they had limited knowledge of correct use. It is interesting to note that services such as emergency contraception and termination of pregnancy were hardly mentioned. Abuse and rape were also mentioned and services, such as, SGBV or group counselling were reportedly accessed.

Family planning services were used more than at baseline as many baseline participants reported primarily relying on male condoms for family planning. Among this sample 63.6% of participants reported using family planning.

STI and TB treatment. FSW in these FGDs were more likely than at the baseline to seek treatment for STIs however for repeat STIs they were more likely to seek over-the-counter medication from pharmacies before seeking care for STIs.

Gynaecological services such as cervical cancer screening and 'checking their cervix' were still used quite frequently and still popular among FSW participants.

Access to CD4 count testing and ART initiation was low but described as available. Participants were knowledgeable about the service but not when to access them.

Post-exposure prophylaxis (PEP) following sexual assault was mentioned as a service that was very difficult for FSW to access and those who had heard about Pre-exposure prophylaxis (PrEP) were hopeful that it would be easier to attain although very little was known about PrEP.

Perhaps unsurprisingly, male condoms, HIV testing services (HTS) and TB testing were the most frequently accessed services, suggesting that among these FSW, at least, awareness of HIV risk is high, as is a willingness to take active steps at prevention of HIV and other STIs. FGD participants explained why repeat HIV testing was seen as necessary, particularly when engaging in sex work and demonstrated lower levels of 'fear of a positive result':

> *"P5: And it's important to always know that HIV is not a monster, we must test even the one who has not must go and test to know her status." [FGD2]*
>
> *"P3: One is to know your status two is to know the condition you are three is to know does…I have been doing sex all the time and the condom can get broken you don't know who is sick and who is fine so to know what is wrong with you so you must go for it." [FGD3]*
>
> *"P5: Another thing though not related to this, it concerns infections. It is important to know your infections. Another thing, don't say now that I have HIV, HIV must rule you, you must respect it because it's in your blood only, it cannot rule you." [FGD1]*

Male condoms were used for dual protection – i.e. both for disease prevention and for contraceptive purposes:

> *"P3: As I said before, I said STI because when you are doing sex without eh protection, maybe your partner can infect you with an STI ah if you don't know his status maybe he is infected you." [FGD4]*
>
> *"P7: I will agree with 04 most of the time we use condoms and we are working so I cannot just sleep with someone without a condom because I am at work. Most of us don't have boyfriends." [FGD1]*
>
> "*P5: And that other people believe that condom must be carried by the male only, there are still females who feel shy to carry condoms in their bags, like us as sex workers. It is important for us to carry condoms, the moment he says he doesn't have a condom you pull your bag and take out your condoms." [FGD2]*

Female condoms (FCs) were mentioned in all four FGDs, however, some reported limited access and wanted to access more FCs.

> *"P6: And it is very important because other people, males they tell you I don't need a condom and there is that female condom which we must use very much, it protects the women when the man says he doesn't want his condom, he says it causes me rash, can I not use it." [FGD2]*
>
> *"P7:I take risk, I put sponge underneath because I am telling myself that if I put sponge I am safe whereas it is where I am killing myself because he has promised me this money, I want it, forgetting that there are female condoms if a person says he don't want a condom, you can agree and at the end put a female condom." [FGD1]*

When FSW participants listed their unmet needs, among the most desired were: social work, child support, good service (from healthcare providers), condoms, TB, referrals/follow-ups and ARVs. The pie chart below (figure 3) depicts the services ranked by FSW as most desired or needed.

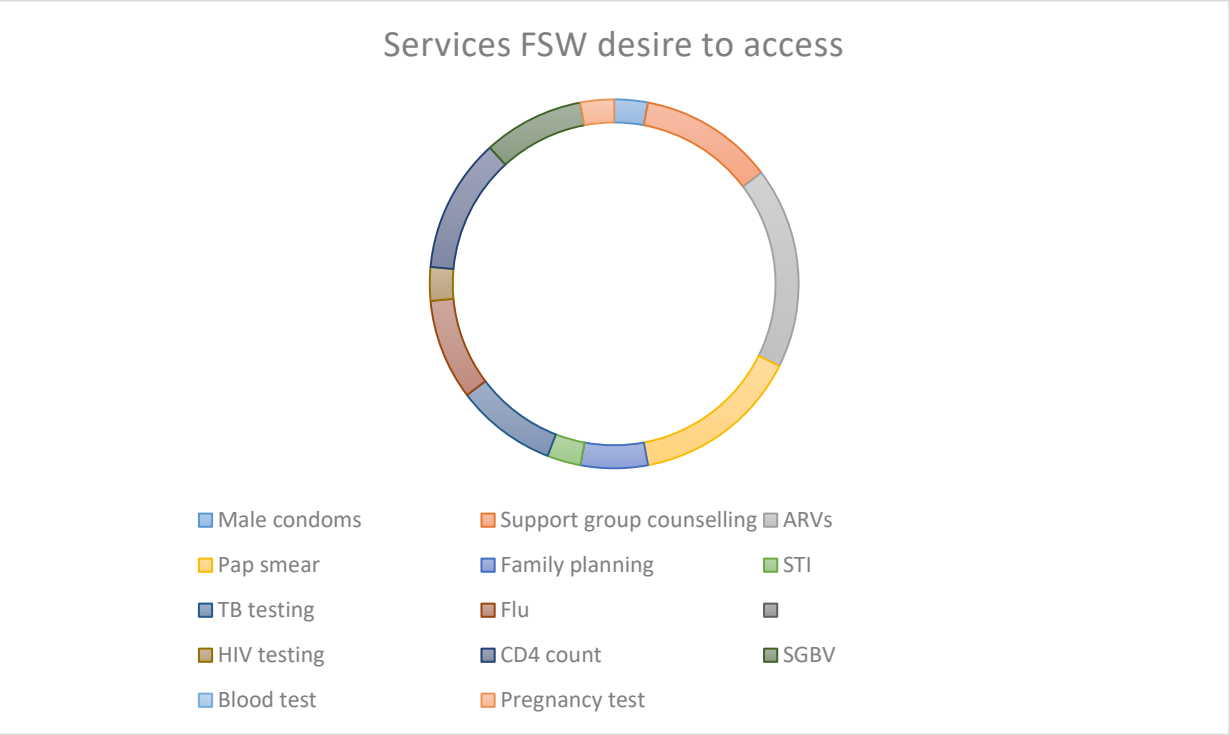


Figure 3: FSWs' ranking of services they most desire/need to access

The unmet needs (or services they would like to access) as identified by participants were: gynaecological services (including cervical cancer screening), ARV services, CD4 tests and trauma counselling.

Even for those who *had* been able to access cervical cancer screening, many wanted to test more frequently primarily due to misunderstandings about the purpose of cervical cancer screening. *"P8: Pap smear is important because we engage in sex. Condoms, condoms oils harm the cervix, you must always go check if it is painful." [FGD1]*

Finally, alcohol and drug rehabilitation services were discussed but not listed as needed by some participants but none indicated that they had actually accessed this service.

Another interesting finding is that many of the services listed as desired or needed were also mentioned as most frequently accessed, such as condoms, HIV and CD4 testing. FSW in the focus groups explained that while they *could* access these services, they did not sufficiently address their needs or access itself was at times erratic. The discussion around condoms shed light on some of the gaps within provision and access. FSW expressed a desire for female condoms and condoms that would not tear, many knew of or had heard of female condoms, compared to the baseline where few had accessed female condoms or used them..

Although many FSW reported accessing HIV testing and counselling, they expressed confusion around the issue of sero-discordant couples and HIV acquisition, and the timing or commencement of treatment. Migrant FSW reported the greatest difficulty accessing ARVs.

> *"P?: Just to know your status, not that most people don't go for ARV to the clinics you will remember all of us are foreigners here some get tablets from home it's not that people are not*

getting tablets. Plus we said that others don't wanna disclose how they are you see, some they get tables from different places not here in Durban only you understand so that's why there is only on person who …I don't know whoever is this." [FGD3]

"P4: Yah I last received help in November, but where I last received help was here in this home because I was sick, having a problem of my body getting tired I think it was because of CD4 they gave me pills, they [the Peers] came to me at (name of site), I was very satisfied I saw that they have love." [FDG1]

Additionally, they reported difficulties adhering to treatment if they are able to access services subsequent to HTC, for example ARV treatment and longer-term care.

"P5: May I add where she says most of us use ARVs, the time you go to take them, you attend a class where they tell you that this pills are life so that is why it's like there is more treatment because we were taught that its important and defaulting let's not default guys." [FGD1]

Barriers to accessing SRH services for FSW at public healthcare facilities

Barriers within the health system

FSW participants experience barriers to access such as demands for identity documentation that often could not be produced. Many FSW who are foreign migrants apparently avoid public sector services altogether as they lack South African Identity documents and fear being turned away on account of their nationality. The need for patients to provide 'proof of residence' was also deemed problematic for FSW who rent rooms but do not have proof of their address from Brothel owners.

Almost all FSW participating in the FGDs had had at least one negative experience when accessing services and most had been discriminated against and reported feeling stigmatised by public healthcare facility staff. Some had experienced health workers breaking confidentiality in public hospitals and disclosing their HIV status, illness or identity as sex workers to others.

"P8: Yes, when I went to and I am a Zimbabwean I have eh I was pregnant and eh when the baby was due I went to (name of hospital). What I used, the address I used there is only for my sex work I went there I gave them my address (name of Brothel) then this nurse started saying you guys why are you doing this, discouraging me, I have nothing else to do, only this I am able to survive me and my family. They discouraged me." [FGD3]

FSWs found it difficult to access services in this intimidating environment.

Barriers external to the health system

FSW participants often reported barriers to service access due to police harassing and arresting FSW if they are found to be carrying condoms with them, they treated this as "proof" that they are sex workers. Many FSW also reported abuse and rape at the hands of police officers the consequences of these experiences led FSW to believe that they had limited (or no) avenues to confront their attackers or to discuss their fears and traumatic experiences and often felt isolated. Some discussed the use of drugs and alcohol either at the request of clients or due to a reliance on these substances. Many experienced SGBV whilst under the influence of drugs and/ or alcohol and were turned away by police officers when reporting incidents of violence.

"P4: No that is not fair, its drugs that do that, it's not a person that you pay, there is no person that you pay. It's you who like smoking yes, as we do sex work, we don't just go there on the road, that is why you will always find me drunk because I cannot do sex work when I am sober. You see, I don't have time for a man when I am sober, there must be something that drugs my body so that I can go straight to the man and say "brother let us go have sex", because I cannot go sober like this no, I can't." [FGD1]

Many participants reported difficulty using condoms with their regular partners (boyfriends) many reported that their boyfriends did not enjoy using condoms. In some cases their boyfriends did not know that they were sex workers and would question the condoms and in other cases the boyfriends would find the condoms and become angry or sad at the thought of numerous clients using the condoms. The disagreements were often resolved by throwing away the condoms but this meant they had to engage in unprotected sex with paying clients as well.

> *"P5: Especially boyfriends in me, I will say so, they like to say lot of things if they find condoms in my bag and why you always carrying condoms, I say instead of asking me, you should be happy because I am able to care for myself, they don't feel good about finding condoms in my bag." [FGD2]*

While not directly linked to the issues of health access, these findings are noted here as they require urgent intervention from organisations in the city working with SWs and negatively impact the health of FSW.

Improving services for FSW

Strategies to improve access and uptake

An essential component of service delivery for FSW participants was the need for peers to play a central role in service delivery for FSWs. The idea of peer-conveyed services was agreed upon by all participants and various suggestions of how this could be operationalized were proposed. The need for peers to assist with the provision of services was desired for the empathy and understanding that peers would have for other FSW.

> *"P3: They teach us about cleanliness and condom use.*
>
> *P4: To bring condoms where ever we go.*
>
> *P2: We get a lot of support from them.*
>
> *P6: They give us their time.*
>
> *P4: They give us a lot of support.*
>
> *P1: Strong –they opened our eyes a lot, they give us skills like beadwork, computer skills and counselling.*
>
> *P3: You can tell them anything." [FGD4]*
>
> *"P?: They bring us condoms, they bring us lubrication they tell us if you are sick or whatever you are having maybe you can't even know what is it… They will test you, they will give you some treatments." [FGD3]*
>
> *"P3: They encourage us to get condoms and to always take care.*
> *P6: They give us support, support they come in our sites they teach us about HIV AIDS and tell us to take care of ourselves and be healthy.*
> *P4: They teach us about inserting condoms, types of condoms, female condoms how to insert them and how to insert condom to avoid breaking and HIV and TB." [FGD2]*

Additionally, peer assistance was valued for providing a career path for FSWs and promised to foster a sense of community, which is currently lacking among sex workers. Participants were virtually unanimous in their support for targeted outreach to be delivered by peers, who were believed to hold a common understanding of the lives of SWs and consequently, implicitly recognize what their health

needs were. Peers encountered during the intervention were described as "very friendly" and offering a service where confidentiality was respected and SW issues were well understood.

Referral and accompanied referral***:*** FSW participants were appreciative and motivated by the accompanied referrals provided by FSW peers. Peers felt able to access services and cared for.

> *"P9: Yes I have, when you have to go for your testing or whatever, so there is one that will take you there from (name of NGO service provider) if you need to go somewhere else she will meet you there too, so she is like your supporter." [FGD2]*

Addressing stigma and discrimination**:** Sensitization about the sex industry for nurses and doctors should begin in their medical training and continue in-service, rather than only beginning once they are qualified and posted to facilities. Furthermore, sensitization training should include SW themselves, speaking openly about their experiences. Outreach services with health providers working alongside SW peer outreach workers, for example.

> *"F: My other question is, based on what I asked you, the attitude of staff, how did the staff treat you, how was their attitude towards you?*
>
> *P6: They have good hearts because they are able to sit down with you and talk to you nicely and when they realise you not in the mood to talk about what she want to talk about she says next time when you are alright you must come back and talk, they take good care of you.*
>
> *P5: I will comment more about the staff in this home, all of them, they take good care of us in terms of services we need, the counsel you well when you need to see the doctor they tell you nicely, they never shout at you, instead you are seated down and they explain what you need to do, so they take good care of us." [FGD2]*
>
> *"P5: Other attitudes of nurses it depends on clinics like (name of peer NGO and public health facility) they …we are able to talk to them as sex workers and they treat us like normal people. In clinic like they say they use this clinic you can't tell them that I have an STI, I had a condom burst because I am a sex worker, she will take you otherwise such that you will be hurt in your heart and end up leaving without getting help." [FGD1]*

In addition, this strategy was believed to lessen prejudice among health workers as they became directly exposed to the living conditions occupied by FSW and challenge their misconceptions.

Participants suggestions and feedback on services received indicated that they preferred services that were holistic, comprehensive care involving more than a focus on illness (also a focus on emotional wellness), non-judgmental health providers and support staff, welcoming attitude: friendly, warm, accepting. Staff specifically trained to serve SWs and meet their needs, outreach programs driven by peers and FSWs, strong emphasis on provision of information to empower SWs.

Participants in the study accessed a wide range of health services from public sector clinics, hospitals and local NGOs, and participants considered their needs to have been largely met. In terms of the quality of HIV services received, most rated the intervention services highly. Examples of encounters with caring health providers were cited, along with instances where the facility atmosphere as a whole was open, non-judgemental and accepting.

Additional gaps and needs that emerged from the study was better access to trauma counselling and support. This was listed by many participants as an unmet need due to the high levels of violence, abuse, harassment they routinely experience. Access to substance abuse treatment and rehabilitation services emerged as another area of need. None of the SWs interviewed for this study reported having accessed these services, but some did list them among the most 'needed'. It is notable that many of the 'services' listed by FSW were social services, for example social workers and child support, or they

related to the quality of services received, such as “good or kind service” and respect, or to linkages between services, such as effective follow-ups to referrals. FSWs wanted services that were delivered in a respectful manner and with thorough explanations and clarifications.

Improving partnerships**:** The successful collaboration between government and the NGOs currently serving the FSW community, routinely engaging with FSW during the course of their work improved FSWs perceptions of public healthcare facilities and provided them a wider range of options to access services.

Pragmatic realities**:** Engagement with brothel managers were successful during the intervention and ensured that the SWs themselves were part of this interaction. Without their involvement, there was a real risk that the project staff would be suspected of spying for the authorities. Brothel managers were important allies in the provision of services to brothel-based SWs, helping to ensure uninterrupted supply of condoms, and immediate link-ups with NGOs.

2.4.3 Service statistics

Intervention service statistics were collected between October 2014 and March 2016. First we present the data collected by the Department of Health facility, second, by the NGO partners, and lastly the Health System Navigator peers.

The intervention in Durban looked to expand services offered by the Department of Health facility to FSWs. As such, facility statistics (collated from the Department of Health Information System – DHIS) collected at baseline are not applicable for the evaluation. However, the services provided by the facility at the outreach for FSWs conducted as part of the DIFFER project were collected (these statistics were also submitted to the DHIS), and are presented in Table 60. Some of the services provided by the health facility included family planning, HIV testing and counselling, STI testing and treatment and cervical cancer screening. In total 1369 clients were assisted by the facility over the intervention, 173 were initiated on family planning, 423 were treated for STIs and 179 HIV testing and counselling events occurred. Due to the logistical demands of conducting clinical outreach, the facility was able to conduct between 1 and 6 outreach events a month, and were not able to conduct activities due to other demands for 4 months of the intervention.

Statistics from the NGO providers are presented in Table 61. A total of 3835 FSWs were reached through peer outreach over the course of the intervention, 73 004 male condoms were distributed and 2098 female condoms. The disparity between male and female condom numbers highlight an ongoing problem in providing female condoms, to FSWs and to women in the general population, as supply does not currently meet demand. This is due to a number of factors, including female condom cost and availability.

Table 70: Outreach services provided by the healthcare facility during the intervention

Variable	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Total
Monthly # of first FP visits, disaggregated by FP method		5	19	1		10	5	12	6		35	45		17	8	10	173
Subdermal Implant		1	5	0		0	2	0			1	0		0	0	5	14
Oral Contraceptive		0	0	1		0	0	0			18	18		0	3	0	40
Hormonal Injectable (Depo)		4	8	0		8	3	5	3		14	21		17	3	3	89
Hormonal Injectable (NET-EN)		0	6	0		2	0	7	3		2	6		0	0	2	28
Monthly # of women who received emergency contraception		0	0	0		1	0	0	0		0	4		2	0		7
Monthly # of STI care first visits by women, disaggregated by STI syndrome	21	69	41	9		10	23	12	39		28	97		45	12	17	423
Monthly # of T&C events in women		10	18	12		8	10	7	8		62	17		5	17	5	179
Monthly # of women with a positive testing, referred for HIV care		2	0	0		0	0	4	1		4	4		0	1	1	17
Monthly # of women attended for SGBV (or # referred for SGBV and # of which confirmation was received that they received the service)		0	0	0		0	0	0	0		0	0		0	0	0	0
Secondary:																	0
Monthly # of women testing positive for HIV		2	8	1		0	15	5	1		4	4		0	1	1	42

Variable	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Total
Monthly # of women screened for cervical cancer	8	29	29	4		8	13	1	21		11	16		2	4	3	149
Monthly # of women with positive cervical cancer screening result who were treated for pre-cancer			0	0		0	0	0	0								0
Monthly # of male condoms distributed		-	-	-		-	-	-	-		7776	5684		2300	1200	1800	18760
Monthly # of female condoms distributed		-	-	-		-	-	-	-		900	1200		400	200	300	3000
Monthly # of lubricants distributed		-	-	-		-	-	-	-		0	0		0	0	0	0
Number of outreach activities conducted	1	3	4	2		3	2	4	6		3	3		2	2	2	37
Number of people reached through outreach activities	23	86	79	77		41	62	98	125		226	283		119	72	78	1369

Table 71: NGO Service Statistics

	October - December 2014	January - March 2015	April - June 2015	July - September 2015	October - December 2015	January - March 2016	**TOTAL**
Number of outreach activities conducted,	-	12	8	16	9	6	51
Number of people reached through outreach activities	378	LL 410 SS 131	LL 578 SS 371	670	721	576	3835
Monthly # of condoms distributed by the PE (disaggregated by male/ female)	MC = 7450 FC = 134	MC = 7750 FC = 120	MC = 14798 FC = 255	MC = 29378 FC = 573	MC = 8438 FC = 573	MC = 5190 FC = 443	MC = 73004 FC = 2098
Monthly # of units of lubricant distributed by PE	560	356	259	0	0	0	1175

Intervention statistics from the Health System Navigator (HSN) peers are presented in table 62. A total of 436 clients were assisted in the health facility by the HSNs, this included providing information, directions scheduling or referrals. In total 562 different outreach activities were conducted by the HSNs over the intervention period, these included talks, condom and other commodity distribution and referral assistance. A total of 97796 male condoms were distributed by the HSNs, and 2266 female condoms, a similar difference in proportion as the NGO condom distribution.

Table 72: Health System Navigator Statistics

Variable	**Outcome**
Number of patients assisted by navigators	436
Number of patients successfully referred and number of FSWs referred by navigators (disaggregated by type of service referred for).	12
Referred for Termination of Pregnancy	12
Number of health talks within facilities done	426
Number of patients attending health talks	8067
Number of community outreach activities (e.g. talks) done	562
Number of community members reached through IEC materials distributed outreach talks	739
Number of IEC materials on MMC and listed SRH topics distributed	4950
Number of health promotion talks provided by HSNs	562
Number of patients reached through health talks	8377
Number of FSWs receiving SRH kits	400
Number of MC & FC distributed	MC: 97796 FC: 2266
Number of community activities where SRH services are promoted	430

2.4.4 Provider interviews

Participants for this component of the end-line evaluation were drawn from the different stakeholders providing healthcare services for the intervention. This included a government primary health care facility, a non-governmental organisation and a female sex worker rights movement. A total of five provider types were selected: 5 registered nurses, 2 enrolled nurses, 1 lay counsellor and 10 other

types of provider (such as outreach peers, facility managers and monitoring officers). All interviews took place in May 2016.

The participants' characteristics are presented in Table 63. Most participants were over 30 years old, with a median of 9.5 years as a healthcare provider (HCP). Providers were largely involved providing family planning (FP) or HIV testing services, 61% and 55.6% accordingly. HCPs had received training on a wide array of areas, and over half our sample had received training for female condom distribution and demonstration, HTC/HIV counselling, HIV management, STI screening and treatment and sexual health services. Most providers rated themselves as able to perform their job well, motivated and felt appreciated by management.

Table 73: Background characteristics and capacity of service providers

Variable	Frequency(n)	% N=18
Percentage respondents female (n) (1.2)	15	88.9
Median age (IQR) (1.1)	Median= 48 years	
Education level n (%)(1.3)		
Degree	1	5.6
Diploma	10	55.7
Certificate	4	22.2
Other Post Graduation	3	16.7
Number of years as health provider	Median= 9.5	
Service provision area		
PHC (non-specific)	4	22.2
CTOP	4	22.2
Cervical cancer screening	7	38.9
Family Planning	11	61.1
STI	8	44.4
ARV	6	33.3
HTC	10	55.6
SGBV	5	27.8
Area received training		
Family Planning (counselling & method)	6	33.3
Emergency contraception (counselling & method)	7	38.9
Female condoms (counselling & demonstration)	12	66.7
HTC/HIV counselling	13	72.2
HIV management (wellness)	13	72.2
ARV services	9	50
SGBV services	8	44.4
STI screening and treatment	10	55.6
Cervical cancer screening	5	27.8
Sexual health	11	61.1
Taking sexual history	8	44.4
CTOP/abortion	5	27.8
Pregnancy counselling	8	44.4
Infertility counselling	6	33.3
Values clarification	4	22.2
Other	17	94.4
Requirements for training or experience		
Family Planning (counselling & method)	6	33.3
Emergency contraception (counselling & method)	2	11.1
Female condoms (counselling & demonstration)	1	5.6
HTC/HIV counselling	3	16.8
HIV management (wellness)	7	38.9

Variable	Frequency(n)	% N=18
ARV services	6	33.3
SGBV services	5	27.8
STI screening and treatment	2	11.1
Cervical cancer screening	4	22.2
Sexual health	1	5.6
Taking sexual history	2	11.1
CTOP/abortion	2	11.1
Pregnancy counselling	2	11.1
Infertility counselling	5	27.8
Other	-	-
Capacity building needs (lower is better)	Mean (sd)	
Have right training to perform my job well	1.33 (0.18)	
Adequate and supportive supervision to help perform job well	1.33 (0.18)	
Job satisfaction and work environment (lower is better)	Mean (sd)	
Facility provides everything needed to perform job well	1.72 (0.19)	
My workload is manageable	2.16 (0.40)	
Motivated to ensure all patients, especially most marginalized, receive good quality services	1.11 (0.07)	
Feel totally drained at the end of every work day	2.83 (0.38)	
Feel work is appreciated by patients serve	1.22 (0.10)	
Work appreciated & rewarded by co-workers & supervisors	1.33 (0.14)	
If honest, only does job so get paid at month end	4.83 (0.16)	
Care about improving lives & health of women attend facility	1 (0)*	
Feels work is worthwhile and gives great satisfaction	1 (0)*	

*All participants recorded "strongly agree", hence the consensus and no standard deviation

Most respondents thought that FSW used the healthcare facilities available, and over half (55%) reported that they thought this occurred at least once a week (Table 64). Services FSW were most commonly thought to have accessed included family planning, condoms (male and female), HTS, STI care and sexual and gender-based violence (SGBV) services. The large majority of HCPs (88%) believed that FSW disclosed their occupation to staff at the facility, and said they would offer additional services to FSW (94%). Services/commodities most commonly mentioned to potentially be provided through outreach were condoms (94%), STI and SGBV care (both 83%), and FP, EC and HTS (all 79%).

Table 74: Access for sex workers to SRH services

Variable	Frequency (n)	% N=18
Sex workers use of clinic		
Use clinic	16	88.9%
Frequency of use		
Daily	5	27.8
At least every week	10	55.6
Less than weekly	1	5.5
Don't know	2	11.1
Services commonly accessed by SWs at facility		
Family Planning	13	72.2
Emergency contraception	6	33.3
Provision of male condoms	12	66.8
Provision of female condoms	11	61.1
HTC/HIV counselling	11	61.1

Variable	Frequency (n)	% N=18
HIV management	8	44.4
ART initiation	5	27.8
STI care	13	72.2
Cervical cancer services	8	44.4
Sexual health	10	55.6
Pregnancy counselling	4	22.2
CTOP referral	8	44.4
Sexual & Gender-based violence services	10	55.6
Believes SWs disclose occupation to staff	15	88.2
SWs disclosing occupation would be offered additional services	16	94.1
Services that could be provided in outreach		
Family Planning	14	77.8
Emergency contraception	14	77.8
Provision of male & female condoms	17	94.4
HTC/HIV counselling	14	77.8
HIV management	9	50
ART initiation	8	44.4
STI	15	83.3
Cervical cancer services	10	55.6
Sexual health	12	66.7
Taking sexual history	11	61.1
CTOP referral	11	61.1
Sexual & Gender-based violence services….	15	83.3
Best agency to lead outreach services		
Department of Heath	13	72.2
NGOs	5	27.8
Private sector	-	-
Believes services could be offered in afternoon if logistical barriers removed	9	50%

Almost all HCPs (94.4%) had shown clients how to use male and female condoms, and 88% had given a client a male condom in the past week (Table 65). A range of FP methods had been discussed by HCPs (>80%) with clients, and included injectable hormonal contraceptives, oral contraceptives, condoms, intrauterine devices and hormonal implants. Sixty-one percent of providers had referred a client for termination of pregnancy in the past 6 months.

Table 75: Work practices in key SRH areas

Variable category	Variable	Frequency (n)	% N=18
Sexual health services	Asks sexual history from clients	13	72.2
	Discusses sexual practices during counselling		
	Oral sex	7	38.9
	Anal sex	6	33.3
	Vaginal practices	7	38.9
	Use of lubricant	6	33.3
	Feels comfortable taking a sexual history	11	61.1
	Clients groups feel uncomfortable taking sexual history from		
	No group	14	77.8
	Married women	-	-

Variable category	Variable	Frequency (n)	% N=18
	Married men	1	5.6
	Adolescent girls	1	5.6
	Adolescent boys	1	5.6
	Commercial sex workers	-	-
	Feels comfortable counselling and examining sex workers	14	77.8
Condom services	Gave client male condom in past week	16	88.9
	Discussed condom use during clients at least half the time	15	83.4
	Shown clients how to use male condoms	17	94.4
	Shown clients how to use female condoms	17	94.4
	Issues discussed with clients about male condoms		
	How to use (shows client)	16	88.9
	Dual protection	16	88.9
	HTC	7	38.9
	STI and HIV risk	15	83.3
	Importance of correct and consistent use	12	66.8
	Negotiation of condom use	11	61.2
	Gender-based violence	7	38.9
	Emergency Contraception	7	38.9
	What to do if it breaks	11	61.2
	Storage	7	38.9
	Expiry date	10	55.6
Family planning services	Has seen women for family planning past year	12	70.6
	Family planning methods discussed (if seen client for FP in past year)		
	Injectable contraceptives	11	91.7
	Combined oral contraceptives (COCs)	10	83.3
	Progestin-only oral contraceptives (POPs)	11	91.7
	Male condoms	12	100
	Female condoms	12	100
	Intrauterine devices (IUDs)	11	91.7
	Emergency contraception	9	75
	Tubal ligation	9	75
	Vasectomy	10	83.3
	Hormonal implant	11	91.7
	Actions taken when women late for contraception refill (if seen client for FP in past year)		
	Check woman not pregnant and give her pills/injection		
	Ask women to return when menstruating and give her condoms	10	83.3
	Prescribe emergency contraception if had sex last 72 hours	2	16.7
		3	25
	Number of IUDs fitted past 6 months median (IQR)	Median= 0 (0,3.5)	
	Has referred a woman for CTOP in past 6 months	11	61.1
	Has given emergency contraception to woman	8	47.1
	Screening methods at facility		
	Pap smear	7	38.9
	Both Pap smear & VIA	3	16.7
	Ever done cervical screening	3	16.7

Variable category	Variable	Frequency (n)	% N=18
Cervical cancer	When would offer cervical cancer screening		
	Woman over 30	7	38.9
	HIV+	5	27.9
	Client with STI	5	27.9
	Patient requests one	4	22.2
	Sexually active	6	33.3
	Family history of cancer	8	44.4
	Commercial sex worker	5	27.9
	Client accessing family planning	2	11.1
	Asks clients if they victims or at risk of SGBV		
	I always ask	10	55.6
	I sometimes ask depending on the client	1	5.6
	I wait for them to disclose	5	27.8
SGBV	Would ask bruised or injured woman if they had SGBV	16	88.9
	Actions would take if women disclosed SGV n(%) Q4.6.3		
	Counsel her about her options	1	5.6
	Ask if she needs any special services e.g. HIV test	8	44.4
	Refer her to a local GBV support group	5	27.9
	PEP (merge refer and give options 4,5)	3	16.8

Table 66 presents the results on the practices by HCP as related to HIV. Over 70% of participants reported that they were comfortable counselling and examining an HIV-positive woman, and 88% believed that HIV positive women could have children if they so wished.

Table 76: Work practices in HIV and STI services

Variable	Frequency (n)	% N=18
Comfortable to counsel and examine HIV-positive women	14	77.8
Believes healthy HIV-positive women should have children	16	88.9
Clients that get offered HIV testing routinely		
ANC clients (incl. PMTCT)	4	22.2
STI clients	10	55.6
FP clients	10	55.6
TB patients	8	44.4
PHC clients	10	55.6
Postnatal clients	6	33.3
CTOP clients	7	38.9
Blood donors	-	-
Clients can decline testing (only respondents who see HTC clients)	10	100
Topics discussed with STI patients n(%) q4.5.2		
HIV	5	27.8
HTC	5	27.8
Risk of having multiple partners and other risky behaviour	9	50
Abstinence during STI treatment	1	5.6
Partner referral for STI treatment	5	27.8
Family planning	3	16.8
Condom use	8	44.4
SGBV	1	5.6

Variable	Frequency (n)	% N=18
Use syndromic approach to STI case management (only respondents who see STI clients)	8	100
Barriers to implementing national STI guidelines (only respondents who see STI clients)		
Medications not routinely available	2	25
Too many medications are required	-	-
Uncertainty about when infection is an STI	-	-
Has system for contact tracing for STIs (only respondents who see STI clients)	7	77.8
Counsels on importance of completing STI treatment course (only respondents who see STI clients)	8	100

HCPs reported a range of services offered by the same HCP on the same day, and included family planning, STI screening and treatment, HTC, post-exposure prophylaxis (PEP), sexual health counselling and condom demonstration (all services reported by >60% of HCPs). Benefits to integrating services included improved quality of care (44.4%) and the fact HIV patients can get all services together (44.4%). Issues discussed with HIV-positive family planning clients included dual contraceptive use (50%) and checking if client is in a wellness or antiretroviral treatment (ART) programme (61.1%). Survey respondents were mostly positive about integrating healthcare services, and believed government facilities should be responsible for conducting outreach activities with FSWs.

Table 77: Integration of SRH and HIV services

Variable category	Variable	Frequency (n)	% N=18
Integrated services	Integrated services provided by nurse on same day		
	FP	11	61.2
	Cervical cancer screening and follow-up for abnormal results	10	55.6
	STI screening and treatment	12	66.7
	HTC	11	61.1
	PEP	2	11.1
	Pregnancy testing	10	55.6
	Pregnancy counselling and referral for CTOP if desired	11	61.1
	Sexual health counselling	12	66.7
	Condom demonstration	11	61.1
	ARV treatment	9	50
	TB testing	10	55.6
	Benefits to integration of services		
	Improve quality of care	8	44.4
	Improve health of HIV patients	5	27.8
	HIV patients can get all services together	8	44.4
	Challenges to service integration n(%) q5.4		
	There is too much work to do for providers	4	22.2
	Staff do not have the training	1	5.6
	Integrating services requires longer consultations with clients	2	11.1
	Clients are in a hurry and don't want longer consultations	4	22.2

Variable category	Variable	Frequency (n)	% N=18
	Ever discussed HIV testing with family planning client	11	61.1
	Routinely offers HIV testing to family planning clients	11	61.1
Family planning and HIV integration	Issues discussed with HIV-positive family planning clients		
	Should be using condoms/dual protection	9	50
	Don't mention HIV status unless client does	1	5.6
	Ask if they are in wellness/ART programme	11	61.1
	Desire for children in the future	4	22.2
	Safer and unsafe sexual practices	10	55.6
	Contraceptives would recommend for HIV-positive women		
	Injectables and condoms	10	55.6
	Thinks there are ARV-contraception drug interactions	9	50
	Able to provide STI treatment and HIV testing for family planning clients	9	50
STI and HIV integration	Routinely offers HIV tests to all STI clients	8	44.4
	Gives male condoms to STI clients	9	50
	Gives female condoms to STI clients	9	50

2.4.5 Client exit interviews

In total, 100 women participated in the DIFFER client exit interview between February and April 2016. Women were recruited at the Commercial City Clinic, a public health facility in the Durban central business district and primary healthcare level clinic. Eligibility criteria were to be female, older than 18 years and completed a visit that involved receiving services for an STI; FP; HIV testing and counselling; HIV care; cervical cancer (screening or care); gender-based violence; or TOP. No participants who were approached by interviewers refused participation.

Characteristics of participants

Less than half of women who participated in the client exit interviews were unemployed (40%) with a little under half (48.5%) having finished secondary school. Cohabitation was low amongst participants (3%) although 76% reported one regular/primary partner. Unintended pregnancy was high, Only 23.3% (20/88) of participants reported that their last pregnancy was planned.

Table 78: Characteristics of women participating in client exit interviews

Var. category	Study variable	Durban, SA
Socio-demographics	Age median years (IQR)	29 (Q1=25; Q3=33)
	Highest education level	
	None	1% (1)
	Primary incomplete	2% (2)
	Secondary incomplete	21.2% (21)
	Secondary complete	48.5% (48)
	Any tertiary level	27.3% (27)
	Currently employed % (n/N)	40% (40/100)
	Relationship status	
	Married – living together	6% (6)
	Married – living apart	4% (4)

	Not married, living with partner Single, no current partner Separated or divorced Regular visiting partner	3% (3) 18% (18) 1% (1) 68% (68)
Sexual and reproductive characteristics	Present number and type of sexual partners One regular or primary partner Casual partners only Regular and casual partners None	 76% (76) 1% (1) 2% (2) 21% (21)
	Transactional sex Ever Past 6 months % (n/N)	 20% (20/100) 35% (7/20)
	Median number of children (IQR)	1 (Q1=1; Q3=2)
	Last pregnancy was planned	23.3% (20)

Experiences of SRH services

Participants made use of a variety of sexual and reproductive health (SRH) services; and 84% of participants reported all services were available all the time on the same day at the clinic.

Participants used a range of family planning methods, hormonal methods were the most favoured with 61% of women reporting using either the 2- or 3-month variants, as well as the hormonal implant which had been introduced in the country since the baseline evaluation.

Just over half (56%) of respondents reported that they would be comfortable to ask a health care provider at the facility about termination of pregnancy services.

The vast majority of participants, 91% had heard of a female condom (FC) before, however, of these only 18.9% (17/90) had ever tried using one. Seventy-one percent of participants reported using a condom to prevent STIs and pregnancy, 73.9% (68/92) reported using a condom during their last sexual intercourse.

HIV testing was prevalent amongst participants, 98% had ever tested for HIV, and over half (68%) of participants reported that their partners had tested for HIV.

Very few participants reported a STI in the last year (n=12). Over half (8/12) of these reported that they attended a health facility. All received medication to treat their STI, and had been counselled on taking the and almost all had received HTC (9/12). Half (6/12) had been offered a pap smear, just under half (5/12) female condoms and a third (4/12) medication to treat their partner, respectively.

Only 2% of the clients reported that the health care provider had asked if they had experienced SGBV.

Table 79: Experiences with use of sexual and reproductive health services

	Indicator	Durban % (n/N)
	Used other SRH services in this clinic in past year	69% (69/100)
Integration of SRH services	All services available all the time at this clinic, all available same day	84% (84/100)
	Referred to another provider or service Yes Yes, in same facility	 10% (10/100) 80% (8/10)
Family planning/ EC	Women sexually active, not wanting to become pregnant, not currently pregnant, who currently use a method to prevent pregnancy herself/with her partner	89.66% (78/87)
	Family planning method mix used 2-month injectable (NET-EN)	 12% (12/100)

	Indicator	Durban % (n/N)
	3-month injectable (Depo)	43% (43 /100)
	Hormonal Implant	6% (6 /100)
	Combined oral contraceptive pills	3% (3 /100)
	Progestin-only contraceptive pills (POPs)	5% (5 /100)
	IUD	7% (7 /100)
	Male condoms	35% (35 /100)
	Female condoms	2% (2 /100)
	Sterilization	2% (2 /100)
	Family planning method mix available at clinic	
	2-month injectable (NET-EN)	83% (83/100)
	3-month injectable (Depo)	83% (83/100)
	Hormonal Implant	72% (72/100)
	Combined oral contraceptive pills	66% (66/100)
	Progestin-only contraceptive pills (POPs)	18% (18/100)
	IUD	52% (52/100)
	Male condoms	73% (73/100)
	Female condoms	5% (5/100)
	Sterilization	9% (9/100)
	Emergency contraception	8% (8/100)
	Provider offered HIV T&C in last year's family planning visits (of those women who were attending an FP visit)	56.9% (37/65)
	Provider offered genital examination in last year's family planning visits	15% (15/100)
	Provider offered speculum examination in last year's family planning visits	21% (21/100)
	Provider offered cervical cancer screening in last year's family planning visits	37% (37/100)
	Provider offered male condoms in last year's family planning visits	53% (53/100)
	Provider demonstrated how to use male condom in last year's family planning visits	47% (47/100)
	Provider offered female condoms in last year's family planning visits	47% (47/100)
	Provider demonstrated how to use female condom in last year's family planning visits	44% (44/100)
	Provider explained about using 2 methods at once for extra protection (condoms plus another) in last year's family planning visits	44% (44/100)
	Ever heard about emergency contraception	71% (71/100)
	Ever used emergency contraception	45.1% (32/71)
Abortion	Women feel they could speak to provider at this clinic to get information/advice on abortion	56% (56/100)
	Heard of medical abortion	63% (63/100)
	Heard of women buying such medicines themselves to cause abortion	68% (68/100)
Condoms	Had discussion about protecting themselves from STI/HIV infection with a provider at this visit (of those women who had attended FP service)	44.6% (29/65)
	Ever heard of female condom	91% (91/100)
	Ever tried using a female condom	18.9% (17/90)
	Would ever use female condom	30% (30/100)
	Never tried using a female condom, but think they would use it	39% (27/69)
	Given female or male condoms during visit	26% (26/100)
	Use condoms for both preventing STIs and pregnancy	71% (71/100)
	Used condom at last sex	73.9% (68/92)
	Use a condom at least half the time	85.8% (79/92)
HIV	Heard that male circumcision prevents HIV	93% (93/100)

	Indicator	Durban % (n/N)
	Partner has been circumcised	62% (62/100)
	Offered HIV test today	34% (34/100)
	Ever had HIV test	98% (98/100)
	Provider asked them to encourage their partner to come for testing	76% (76/100)
	Has partner been tested for HIV	68% (68/100)
	Knows partner's HIV status	86.1% (68/79)
	Where had HIV test This facility Other facility NGO Private	 53.5% (46/86) 32.6% (28/86) 11.6% (10/86) 2.3% (4/86)
HIV care	Of clients receiving HIV care, provider talked to them about condom use	77.3% (17/22)
	Of clients receiving HIV care and received family planning services in facility, family planning provider knows they are HIV positive	40.9% (9/22)
	Of clients receiving HIV care, provider gave them family planning advice when their status was confirmed or when they started ARVs	68.2% (15/22)
STI care	Of clients who had a STI in the last year:	12% (12/100)
	Went for treatment to a health facility	100% (12/12)
	Went FIRST for treatment to a health facility	66.7% (8/12)
	Provider offered a genital examination to women with STI	25% (3/12)
	Provider offered a speculum examination to women with STI	16.7% (2/12)
	Provider offered counselling about your current sexual practices and level of risk to women with STI	75% (9/12)
	Provider offered a pap smear, or test for cervical cancer screening to women with STI	50% (6/12)
	Provider offered male condoms to women with STI	83.3% (10/12)
	Provider offered demonstration on how to use a male condom to women with STI	58.3% (7/12)
	Provider offered female condoms to women with STI	41.7% (5/12)
	Provider offered demonstration on how to use a female condom to women with STI	41.7% (5/12)
	Provider offered HIV counselling and testing to women with STI	75% (9/12)
	Provider offered STI medication for women with STI	100% (12/12)
	Provider counselled women on how to take medication for the STI	100% (12/12)
	Provider offered instructions on how to notify their sexual partner(s) about their need to be assessed for possible STI	100% (12/12)
	Provider gave medication to treat partner of women with an STI	33.3% (4/12)
Cervical cancer screening	Facility where cervical screening test done At this facility At another facility	 56.1% (23/41) 43.9% (18/41)
	Clients ≥30 years who ever had a test for cervical cancer prevention (e.g. Pap smear, VIA, colposcopy)	66.0% (24/40)
	Of clients who ever had a test for cervical cancer prevention, received test results same day	12.9% (4/31)
SGBV	Provider asked if they had experienced physical or sexual violence	2% (2/100)

Client satisfaction with services

Clients were generally satisfied with the treatment they received from providers, 70% reported that they were greeted warmly by staff and 67% (reported that staff were friendly. Among the clients

attending the facility, 82% felt that their visit with the provider was confidential and 77% were assured by staff that the consultation would remain confidential.

Table 80: Satisfaction with services

Var. category	Variable	% strongly agree	Mean score (sd)
Staff reception	I was greeted warmly today'	70% (70/100)	1.66 (1.23)
	'Staff were friendly'	67% (67/100)	1.67 (1.19)
Communication	Nurses/doctors were easy to understand'	70% (70/100)	1.43 (0.83)
	Nurses/doctors listened to me'	74% (74/100)	1.39 (0.85)
Information provision	Staff were helpful in providing information'	70% (70/100)	1.56 (1.08)
	Felt free to ask questions'	69% (69/100)	1.63 (1.17)
	Was provided all the information I wanted during today's consultation'	74% (74/100)	1.40 (0.86)
Privacy and confidentiality	Consultation was private	82% (82/100)	1.33 (0.88)
	Nurses/doctors assured me about confidentiality'	77% (77/100)	1.39 (0.91)
Patient respect	Staff treated me the same as any other patient at the facility (I was not discriminated against)	61% (61/100)	1.58 (0.94)
	Staff treated me with respect'	71% (71/100)	1.55 (1.06)
Overall impression	Would like to come back to this clinic/hospital again'	80% (80/100)	1.38 (0.90)
	Would recommend this clinic/hospital to a friend'	77% (77/100)	1.48 (1.08)
	Agree or strongly agree with all of the above statements	66% (66/100)	-
	% of clients who, when asked how the providers treated them during their visit, respond with an answer that is generally positive (q1.24)	86% (86/100)	-

SD = standard deviation

Health Systems Navigators

The health systems navigators had assisted a third of the general population woman interviewed during an exit interview at the health facility site for the study evaluation. Of these over 80% found the health systems navigators useful.

Table 81: Health Systems Navigators (HSN)

	Indicator	Durban % (n/N)
Interaction with HSNs	Ever heard of HSN	
	Yes, from friend	2% (2/100)
	Yes, from family	1% (1/100)
	Yes, from previous visit	15% (15/100)
	Yes, from visit today	19% (19/100)
	Approached, spoken to HSN	92.3% (36/39)
	During last contact with HSN, was assisted	94.4% (34/36)
	Found HSN assistance very useful	85.3% (29/34)

2.4.6 Key informant feedback

The main objective of the key informant discussion was to receive feedback from key policy makers, health managers and community stakeholders on the feasibility, acceptability and sustainability of the current interventions.

Table 82: Characteristics of Key Informants

Variable	N=11
Job titles	
Programme manager/coordinator	5
Peer educator/outreach worker	3
Professional nurse counsellor	2
Lay counsellor	1
Agency/organisation	
Sex worker-led CBO	3
NGO running outreach programme	2
NGO running mobile clinic service	3
Government program	1
Gender	
Female	10
Male	1
Median age	39
Median number of years in current job	3
Median number of years in FSW service provision	6

Appropriateness and relevance of the intervention: With regard to the key SRH and HIV services, family planning was provided during the clinic outreach and at the public sector to all women and FSW who requested it and uptake has been good with many FSW using methods such as injectables, IUDs and the newly introduced implant. With the implant however a few FSW requested removals soon after insertion citing headaches and nausea. STI screening and treatment syndromic screening was used for the clinical outreach and treatment issued, adherence was successful but rates of reinfection were high. There was a preference for services at site despite public sector clinics and hospitals providing a wider range of services. HIV testing services (HTS) was high and in contrast to the baseline many felt that it was now FSW initiated rather than provider-initiated. This service was offered by several local NGOs (e.g. Lifeline, TB-HIV Care, Caprisa, FHI 360, ANOVA health). ART initiation was piloted during the intervention with great success however although local NGOs provided testing they seldom provide treatment and care and there is a visible divide between those who know their status and those who have been able to access treatment, many corroborated our findings by sharing their experiences engaging with FSW who have tested positive but were not linked to ongoing care. Cervical cancer screening was successfully offered during the clinic outreach and provided at the public sector facility and was taken up with by FSW there seems to be an increasing demand for this service, however healthcare providers who went on the clinic outreach found that many FSW did not come back for their results and this was especially worrying for the abnormal results found. It often took weeks and much effort on the peers' part to find the FSW and link them to care. Adherence to ARVs was noted to be a growing issue as more FSW are now testing more are able to access care and treatment but the adherence to treatment is low. Poor adherence could be related to alcohol and drug use, inability to leave their place of work without their brothel managers permission or fear of being stigmatised by clients or other FWS. As Pre-exposure prophylaxis (PrEP) was approved for use in South Africa there is a growing interest in PrEP and who is eligible for PrEP. Services still needed are drug and alcohol rehabilitation services, child care services, social grants for children are needed but not accessed as social workers are not sensitised and willing to assist.

Limitations noted by the local stakeholders were that although there are currently a few targeted interventions in Durban their services are limited to testing but linkage to services is poor, many felt that the HSN / navigator model successfully tackled the problem of linkages and should be adopted by both targeted interventions as well as the Government / public sector. Another failing of TIs is their low levels of coverage, successful programs such as mobiles and the clinic brothel based outreach should be expanded, by recruiting and training additional outreach workers. There is a growing need for psycho-social services to promote emotional wellness and enhance FSWs' sense of self-efficacy which can be done by training peers as counsellors and making more social workers available (sensitised) to the needs of FSW.

Feasibility of the intervention: The intervention was feasible to implement as planned with few barriers experienced. The intervention was able to adapt to changing circumstances in the public health landscape in South Africa, through regular communication with intervention stakeholders. The intervention harmonised with national policies and strategies, some of which drew on preliminary findings from DIFFER to inform their development. Buy-in by national and local policy makers was achieved with great success and contributed largely to the success of the intervention. Health managers and service providers were constantly engaged for the duration of the study and intervention, and the different components of the intervention were found acceptable by them. Aspects of the intervention have been adopted by study stakeholders following the conclusion of the study. The DIFFER project continues to engage with the Department of Health, as they look to adopt certain aspects of the intervention.

Sustainability and scalability of the intervention: MatCH Research have also contributed to the national strategic guideline documents for working with key populations and the national strategic plan for working with sex workers (2012 -2016 and 2016-2019). The situational analysis findings have been presented at provincial and national fora. Many of the stakeholders that were engaged with are also trusted gatekeepers within the FSW community and work with the FSW community. With the support of these gatekeepers a greater sense of trust within the community has been nurtured and promoted; permitting to assess the feasibility and practicability of participatory processes involving FSW and local partners in both the design of the DIFFER intervention and eventual delivery of improved SRH services for FSW.

After the intervention ended in March 2016 a sex worker committee was formed by FSW, with sex worker ambassadors from each site and monthly creative space meetings have been coordinated by FSW to discuss any issues they experience and share information. The numbers of FSW attending these meetings have increased since the intervention has ended and Sisonke continues catering for these events. Brothel managers and SWs have continued to request services from Commercial City Clinic who continue with their brothel based outreach. However not as consistently as the outreach that was conducted with the FSW peers. Discussions have begun with the Department of Health to adopt the peer model which is in line with the National strategic plan to provide services to female sex workers in South Africa (2016 -2019).

2.4.7 Responses to the evaluation questions

1. What was the main effect of the intervention on the use of HIV/SRH services and commodities by FSWs?

Using the pre-post measurement of the cross sectional survey, we see that there is a marked difference in the use of HIV/SRH services and commodities by FSWs in Durban, from baseline to the final evaluation. If one looks at access to commodities we see similar patterns of condom use, a more diverse method mix for contraception, and much higher rates of HIV testing (ever tested and frequency of testing). There was also a much greater increase in access to HIV care and antiretroviral treatment. The composite index calculated for HIV/STI service and commodity use at baseline and for the final evaluation provides further evidence of this dramatic increase. There are a number of factors to consider when drawing conclusions as to the reasons for the outcomes presented, but it is important to note that the policy and service provision environment for FSWs changed dramatically from baseline in Durban. This is in part due to the DIFFER intervention, which enhanced outreach activities by Department of Health facilities and linked the intervention facility to a FSW peer organisation. Thus, FSWs in the catchment area were offered HIV testing and counselling services, STI testing and treatment and cervical cancer screening regularly. Furthermore, FSW networks were made aware of the different services health facilities provide, and this may have had a wider effect. It is important to note that this hypothesis could not be tested however, and conclusions are subject to interference from other factors which we cannot account for.

The second question we sought to measure is the change, if any, of where FSWs seek or access care. Due to changes in the instrument between baseline and endline there is difficulty making direct comparisons between where FSWs seek HIV/SRH care (this includes HIV testing and care, STI treatment and contraception). All locations were less commonly reported in the second survey, if one looks at proportions. However, public health facilities continue to be by far the main source of care (which is not surprising given the South African health system model), and is again followed by peer educators and entertainment venues, and then organisations. Peer educators/CHW were relatively more reported than entertainment venues, which indicates that they may have become a more important source of services than at baseline, but because of the bias we cannot make a definite conclusion. There appears to be no substantial differences in regards to where FSWs usually go for general medical care. These results are not unexpected, and positive interactions with providers in public health facilities as reported in the FGDs may have encouraged FSWs and their networks to seek healthcare at those facilities.

The third aspect measured is the reduction of stigma and discrimination of FSWs. However, no substantial change was seen in the proportion of FSWs reporting to disclose that they are a FSW when visiting a public health facility. Most FSWs found that they were not treated differently from other users at public health facilities, and this proportion was a little higher in the second survey. Negative interactions with staff at public health facilities was raised as a barrier to healthcare access in the FGDs, and is likely the reason no change was measured on this indicator. Similarly, to baseline, healthcare providers acted as gatekeepers to healthcare access for FSWs, and this was especially evident for foreign FSWs who were asked to produce identification when attending a healthcare facility. The proportion of FSWs who experienced contact with a peer/ community educator did not change between the two surveys, but many reported that when they did have contact this was a fellow FSW.

Therefore, the proportion of FSWs who had a contact with a FSW peer educator did substantially and significantly increase. Nevertheless, more than half of FSWs appear unreached by the peer outreach.

2. Was the intervention feasible/ practicable to implement?

The intervention was feasible to implement as planned with few barriers experienced. The intervention was able to adapt to changing circumstances in the public health landscape in South Africa, through regular communication with intervention stakeholders. The intervention fostered and sustained successful collaborations between government and the NGOs currently serving the FSW community. These linkages and partnerships have continued beyond the intervention in order to provide services to the FSW community. FSWs continue to access services at the public healthcare facility. Brothel managers continue to engage with the NGOs and Healthcare facility to ensure uninterrupted supply of condoms, ARVs, STI treatment and Family planning methods.

3. Was the intervention adequately responding to the needs, in accordance with national policies and guidelines, and acceptable to beneficiaries, providers, health managers and policy makers?

The intervention was harmonised with national policies and strategies, some of which drew on preliminary findings from DIFFER to inform their development. Buy-in by national and local policy makers was achieved with great success and contributed largely to the success of the intervention.

Health managers and service providers were constantly engaged for the duration of the study and intervention, and the different components of the intervention were found acceptable by them.

4. Is the intervention financially and institutionally sustainable on a long-term, and can it be rolled out on a larger scale?

Preliminary findings from the cost analysis conducted by UCL found that the intervention in Durban was financially viable, and certain aspects of the intervention have been adopted by study stakeholders following the conclusion of the study. The DIFFER project continues to engage with the Department of Health, as they look to adopt certain aspects of the intervention.

2.4.8 Conclusions

The primary goal of the evaluation was to assess the impact of the intervention on access and uptake of the selected HIV and SRH services; to explore changes in the proportion of FSW who reported participating in sex worker targeted interventions or being in contact with a peer providing outreach services, and changes in accessing integrated SRH/HIV services by FSW and the general female population. The Endline showed that more FSWs were testing for HIV in this time period than in 2012, the focus group discussions supported this trend with more FSWs discussing testing and reporting not fearing 'a positive result' this is in contrast to the baseline where this was the highest rated barrier to testing. Using a mix-methods approach of analysis we show that the model adopted demonstrated that by working together and pooling resources intervention partners were able to improve confidentiality in public health-care settings, strengthen their monitoring systems, facilitate access to the FSW through NGOs and establish two way linkages between the public health facility and the NGOs. NGOs successfully educated FSW about their rights to access to health-care. The intervention allowed the public health services to engage directly with high risk groups such as FSW through outreach. The intervention assisted both horizontal and targeted services to work together to focus attention and resources on the needs of FSW, pioneer and test new approaches to improving access to health services for FSW. The intervention was complimentary, using the strengths of each partner. For example, NGOs generally have more expertise in working at the community level and can train and capacitate health care providers in the public sector, and the public sector have skills that allows them to provide healthcare services and health promotion beyond condom promotion and information sharing. These successes opened the door to advocacy at the policy level. As has been shown, interventions that support effective HIV prevention methods, and are tailored and delivered to FSW

could reduce the epidemic in the longer term; therefore efforts to prevent HIV transmission among FSW and reduce discrimination among HIV positive FSW should continue to be a priority in prevention efforts. Thus, a scale-up of the DIFFER project, or components thereof, in the South African context is recommended where possible.

3 Project Indicators

After the baseline analysis, a selection was done of a set of appropriate indicators to measure the effect of the intervention on the uptake of services by FSW. The results of the comparison of these indicators are presented in Table 73. The graphs in Figure 4 and Figure 5 visualise the main indicators.

Overall, uptake of services, as measured by the face-to-face interviews, increased at all 4 sites. This is best demonstrated by the composite indexes that all substantially increased, and most of these increases where statistically significant. This indicates that the implemented intervention packages had a clear effect.

When assessing each service separately, we note that uptake of some services consistently increased at all sites, and that uptake of other services varied by site. The services that saw a strong increase across sites are principally HIV testing and cervical cancer screening. A much larger proportion of HIV negative FSW had been tested for HIV in the past 6 months at all sites (more than doubling at some sites), and this increase was statistically very significant. It has to be observed though that the large increase in Mysore might be a result of reporting bias at baseline. Also uptake of cervical cancer screening saw an impressive increase at some sites. Only in Mombasa, the effect was less. Ever having used a female condom was another indicator that consistently increased across sites, at least at those sites where the female condom is being promoted.

The effect on other commodities and services is less uniform. The number of HIV positive FSW who were in HIV care was at all sites higher than at baseline, but only in Durban this increase was large and significant. It has to be noted though that the measurement of this indicator in Durban might have suffered some measurement bias at baseline, and that the actual increase might be less. Also the use of a non-barrier contraceptive method increased at all sites, but only in Durban the increase was substantial enough to be statistically significant. In Mysore the indicator was already high at baseline and no further increase was observed. Coverage of peer outreach, as measured with the indicator 'having been contacted by a FSW peer educator in the past year', also consistently increased, except for Mysore where it was already 100%. We observe nevertheless that the coverage in the three African sites is still far from reaching that target. Having sought care for STI symptoms also increased at all sites, except Mysore.

Indicators that appear less affected by the intervention are those on male condom use and attendance of public health services. Condom use with clients was already high at most sites and didn't substantially further increase, except in Mombasa. Condom use with non-paying partners, and in particular with regular non-paying partners, was however low and we do not observe any major improvement. At some sites we even noted a decrease. The overall condom indicator, having used consistently a condom with all type of partners in the past month, remained stable in Mysore and Durban, but did significantly increase in Tete and Mombasa. Disclosing that she is a FSW when visiting a public health facility did not substantially change in the African sites, where public health care providers are expected to perform a risk assessment among SRH clients. At baseline most FSW in Mombasa and Tete said that they feel treated as everyone else when visiting public health facilities, and this did not substantially change. In Mysore and Durban there was an increase and, in particular, FSW in Mysore who tell the provider that they are a FSW now feel much more treated as everyone else than at baseline.

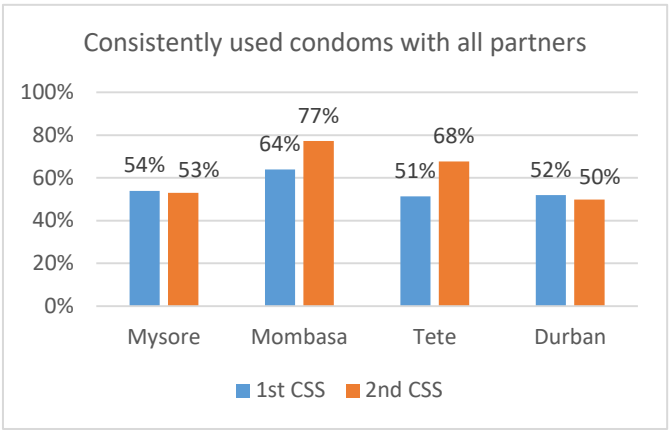
Table 83: Project indicators – Comparison between 1st and 2nd CSS

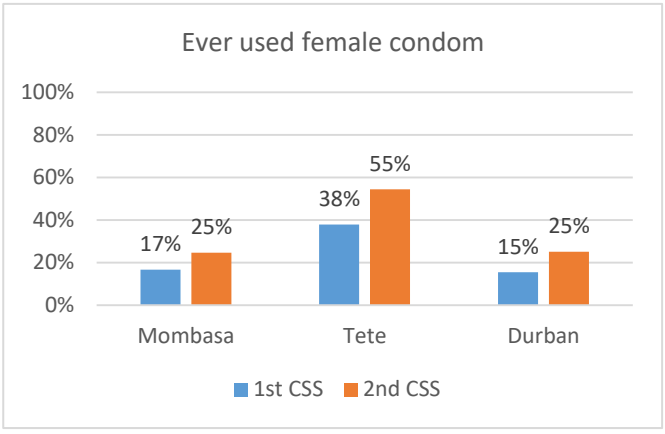
	Mysore, India			Mombasa, Kenya			Tete, Mozambique			Durban, South Africa		
	RDS-adjusted %			RDS-adjusted %			RDS-adjusted %			RDS-adjusted %		
	1st CSS	2nd CSS	p-value	1st CSS	2nd CSS	p-value	1st CSS	2nd CSS	p-value	1st CSS	2nd CSS	p-value
Condom use												
% of FSW who report that they used a condom the last time they had sex with a regular client												
	93.3	95.9	0.313	87.7	98.5	<0.001	98.3	86.7	<0.001	86.6	83.1	0.463
% of FSW who report that they used a condom the last time they had sex with a regular non-paying partner												
	63.0	53.8	0.211	61.7	50.8	0.151	43.3	49.8	0.472	61.5	44.7	0.022
% of FSW who reported to have always used a condom with their last new client, regular client, regular non-paying partner and occasional non-paying partner in the last month, and who do not desire to become pregnant												
	53.9	53.0	0.296	63.9	77.2	0.012	51.3	67.7	0.003	51.9	49.9	0.984
% of FSW who report to ever have used a female condom												
	-	-	-	16.6	24.6	0.140	37.9	54.5	0.003	15.4	25.1	0.012
% of FSW who knows their regular partner's HIV status												
	57.3	48.5	0.467	41.8	82.6	<0.001	28.7	27.4	0.777	16.3	61.6	<0.001
STI care												
% of FSW who report that they had an abnormal vaginal discharge or a genital sore or ulcer during the last 12 month, who report that they sought care in a health facility												
	74.4	55.8	0.281	87.6	95.6	0.198	80.0	87.8	0.147	84.7	95.4	0.004
% of FSW who report that they had an abnormal vaginal discharge or a genital sore or ulcer during the last 12 month												
	34.8	22.3	0.058	29.6	44.2	0.010	49.5	48.4	0.505	68.8	67.1	0.601
HIV Testing Services												
% of FSW who did not test positive for HIV more than 6 months ago, who report that they were tested for HIV less than 6 months												
	40.5	87.4	<0.001	70.9	87.6	<0.001	56.9	76.6	0.001	40.9	83.2	<0.001
HIV care												
% of FSW reporting to be HIV positive, who are currently using HIV care services												
	(92.7)*	(94.7)**	0.741	88.8	(92.0) **	0.986	84.0	88.9	0.649	35.5	91.8	<0.001
% of FSW testing positive for HIV, who are currently in ART												
	(92.8)*	(79.0)**	0.776	76.9	(80.0)**	0.453	69.0	62.2	0.355	12.9	61.2	<0.001
All HIV prevention and care commodities and services												
% of FSW that, <u>if needed</u>, consistently used condoms with all type of partners AND sought care for last STI episode AND was tested for HIV in the last 6 months AND was currently in HIV care												
	23.3	41.0	0.004	43.7	67.6	<0.001	29.8	42.4	0.011	13.3	21.0	0.071

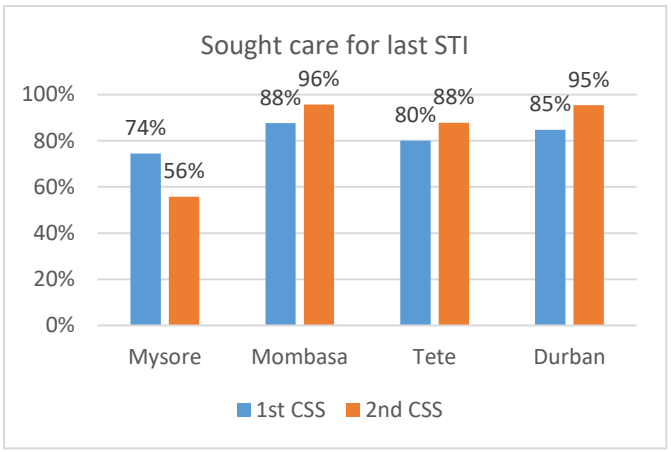
	Mysore, India			Mombasa, Kenya			Tete, Mozambique			Durban, South Africa		
	RDS-adjusted %			RDS-adjusted %			RDS-adjusted %			RDS-adjusted %		
	1st CSS	2nd CSS	p-value	1st CSS	2nd CSS	p-value	1st CSS	2nd CSS	p-value	1st CSS	2nd CSS	p-value
Contraception use												
% of FSW who report that they are not currently pregnant, not wanting to become pregnant and able to conceive, who report that they currently use a non-barrier method to prevent pregnancy												
	85.1	85.3	0.964	65.6	72.6	0.080	70.4	74.5	0.326	33.4	52.0	0.001
% of FSW who report that they are not currently pregnant, not wanting to become pregnant and able to conceive, who report that they currently use a method to prevent pregnancy												
	95.8	100.0	-	98.4	93.8	0.035	86.0	97.4	<0.001	91.3	97.7	0.019
% of FSW who report to ever have used emergency contraception												
	2.4	6.7	0.283	38.1	37.7	0.556	13.1	7.8	0.021	27.9	25.0	0.428
% of FSW that had a pregnancy that miscarried or was aborted in the last five years												
	8.0	7.2	0.752	30.6	45.0	0.002	7.5	-	-	37.6	23.4	0.002
Cervical cancer screening												
% of FSW who ever tested for cervical cancer												
	11.5	56.0	<0.001	14.4	21.2	0.127	0.0	16.9	-	29.0	51.2	<0.001
% of FSW 30 years and older who ever tested for cervical cancer												
	13.6	60.5	<0.001	21.1	26.0	0.389	0.0	25.5	-	44.8	68.5	0.039
All SRH commodities and services, other than HIV prevention and care												
% of FSW that, if needed, used a non-barrier contraceptive method AND had ever been screened for cervical cancer AND had sought medical care for last forced sex												
	25.7	51.4	<0.001	40.9	44.3	0.186	33.1	40.5	0.157	19.4	37.9	<0.001
All HIV/SRH commodities and services												
% of FSW that, if needed, used all HIV/SRH commodities and services as above described												
	5.6	21.9	<0.001	18.5	30.3	0.002	10.1	18.4	0.006	5.3	7.2	0.183
Stigma and discrimination												
% of FSW who discloses as being a FSW when visiting the public health services												
	-	-	-	26.3	30.4	0.384	46.0	28.9	0.002	15.8	13.3	0.389
% of FSW who report they are treated just like everyone else, when visiting the public health services												
	74.0	87.2	0.021	91.8	92.4	0.731	94.8	86.9	0.022	84.3	93.6	0.109
% of FSW who report they disclose to be a FSW, who feel treated just like everyone else when visiting the public health services												
	20.0	78.7	<0.001	91.5	77.8	0.075	93.1	87.3	0.119	69.2	82.5	0.667
Peer outreach												
% of FSW who report that they have been in contact with any peer educator in the community in the last 12 months												

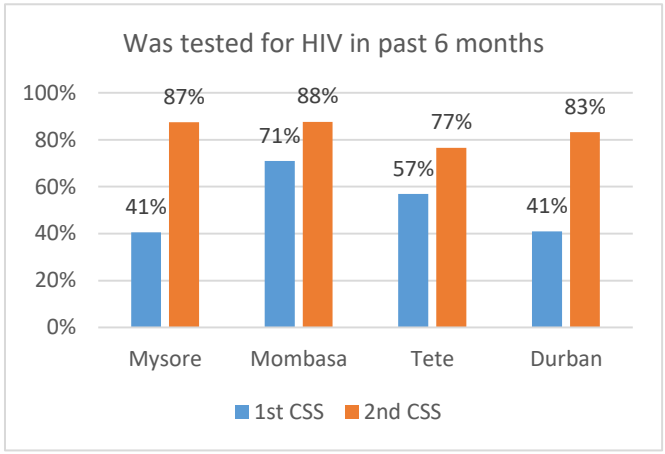
	Mysore, India			Mombasa, Kenya			Tete, Mozambique			Durban, South Africa		
	RDS-adjusted %			RDS-adjusted %			RDS-adjusted %			RDS-adjusted %		
	1st CSS	2nd CSS	p-value	1st CSS	2nd CSS	p-value	1st CSS	2nd CSS	p-value	1st CSS	2nd CSS	p-value
	99.6	100.0	-	32.6	34.3	0.549	48.8	42.2	0.398	46.2	47.3	0.998
% of FSW who report that they have been in contact with a FSW peer educator in the last 12 months												
	99.6	100.0	-	12.7	30.6	<0.001	25.4	29.2	0.340	22.8	37.2	0.009
% of FSW who report that they have had at least 10 contacts with any peer educator in the community in the last 12 months												
	98.1	91.7	0.057	5.7	4.7	0.289	0.8	7.4	0.002	14.8	18.8	0.390

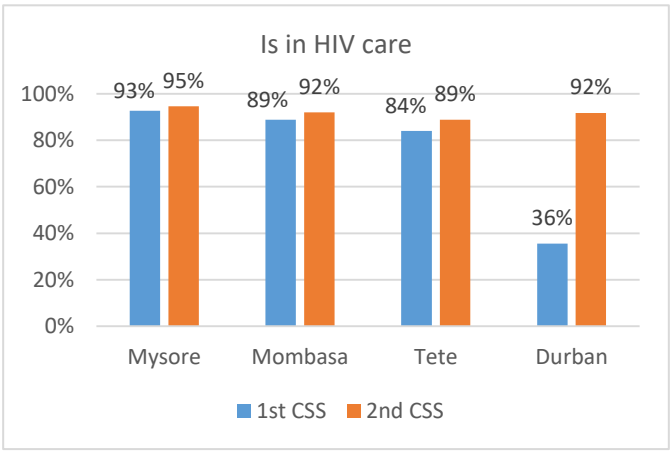
Figure 4: Main HIV prevention and care indicators











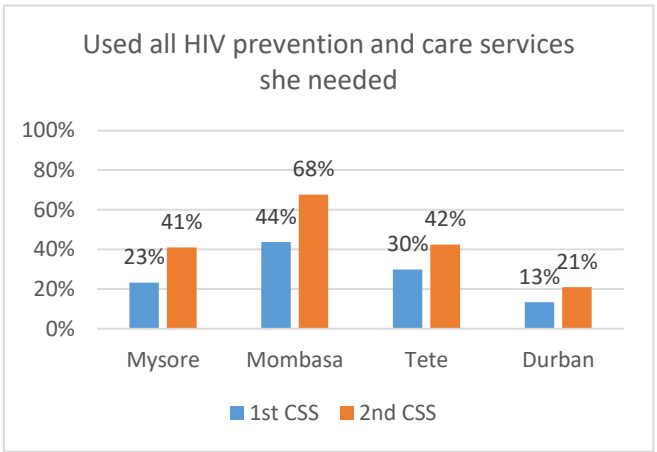
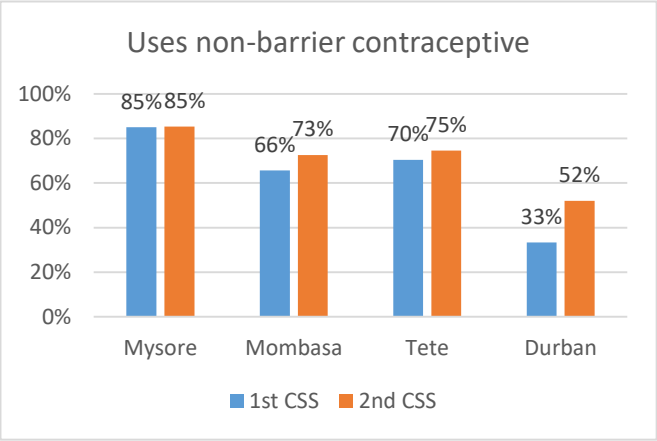
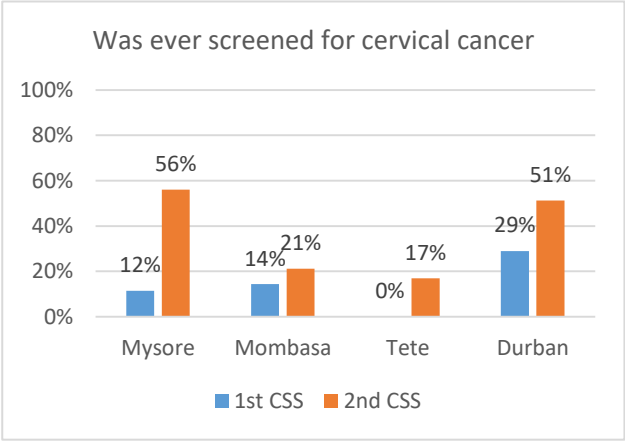
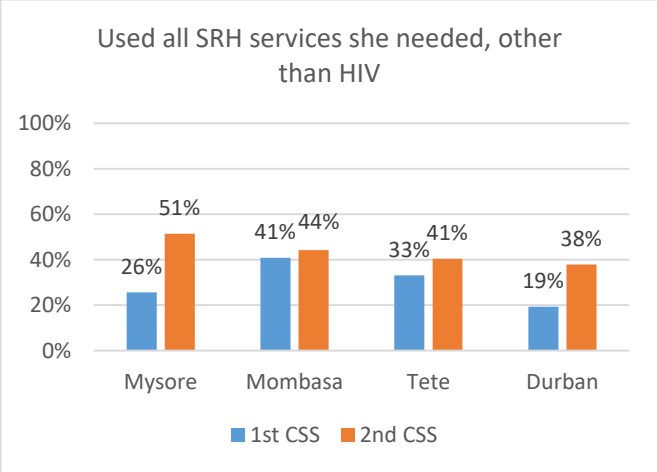
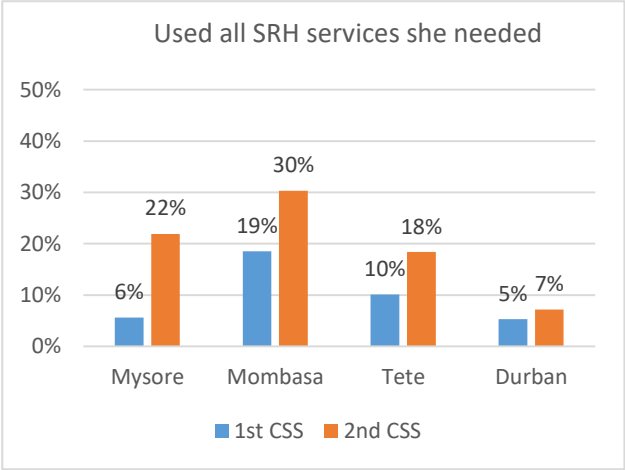


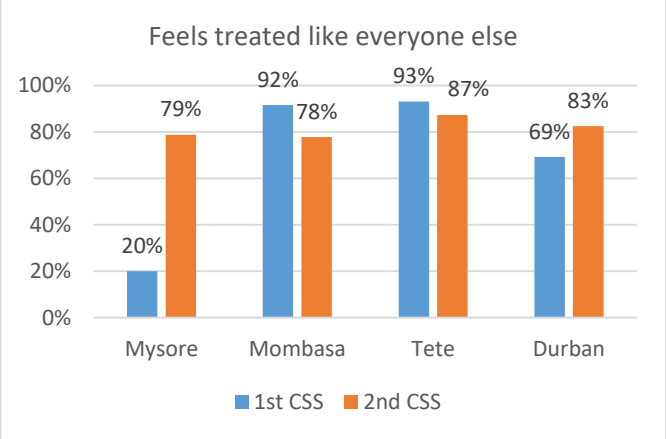
Figure 5: Other SRH care indicators

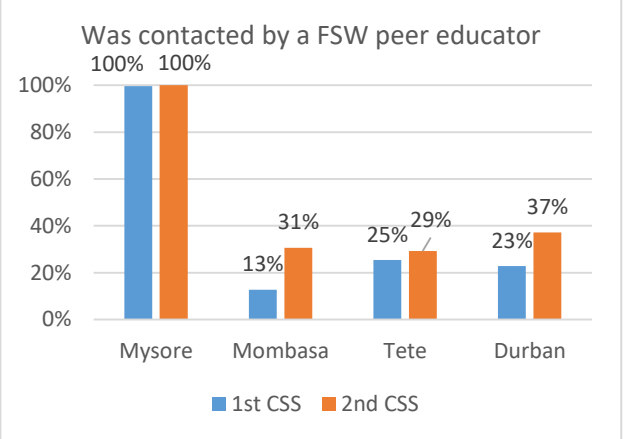












4 Main conclusions

The DIFFER project was successful in designing, piloting and testing a package of interventions, aimed at improving access to and uptake of SRH services among FSW, in four different settings. The situation and context at baseline were very different across the four settings, and therefore the interventions had a different scope, approach and focus in each site. Nevertheless, some overall lessons can be learned.

Uptake of SRH services

The interventions had a clear effect on the uptake of services by FSW at all study sites. This is best reflected in the composite service use indexes that were measured at baseline and end-line through the cross-sectional surveys, and that substantially and significantly increased. Although each intervention had focused on those services most relevant to their context, the uptake of some services consistently increased at all sites. Cervical cancer screening had been low at baseline across sites and a substantial increase in uptake was achieved everywhere. Also regular HIV testing was at end-line more commonly done than at baseline at all sites. Durban was the site where the uptake of services was the lowest at baseline, and where the greatest effect was observed. For example, enrolment in HIV care was extremely low at baseline, but reached a similar high level as in the other sites at end-line.

Nevertheless, uptake of all HIV and SRH commodities and services is not yet optimal at any of the sites and access needs further improvement, in particular at the African sites. While great advances in cervical cancer screening were observed, it is still insufficiently reaching all FSW. The coverage of peer outreach in the three African sites increased as a result of the intervention, but is still far from reaching the 100% of the Mysore programme. The use of dual contraception, combining consistent condom use with a non-barrier contraceptive method, needs to be further strengthened, particularly in Durban. At some sites, specific barriers to care were identified that need to be addressed, such as the difficulties for foreign FSW to obtain ARVs in Tete and Durban.

The manner in which the increase in uptake was achieved differed substantially across sites, but it is noteworthy that at all sites it appears to have been mostly achieved by an increase in the uptake of services provided by targeted interventions, rather than an increase in the use of public health services. In Mysore, the biggest impact was a result of the expansion of the services offered by the Ashodaya clinic, be it at the clinic or through outreach, to include cervical cancer screening and family planning. Also in Mombasa it was mostly an increase in the use of services offered at the Drop-in Clinic or the targeted HIV testing unit established at one of the health centres. In Durban and Tete, it appears that the targeted outreach services had the biggest impact.

Each of the sites established context-specific mechanisms to improve access to the public health SRH services. In Mysore and Durban a concept of health care/health system navigators and accompanied referrals was tested. In Tete FSW-focal points were appointed at certain facilities, and at all sites health care providers were sensitised or trained in FSW-friendly services. Although these approaches were highly appreciated by beneficiaries, providers, managers and policy makers, the final evaluation was not able to demonstrate a substantial effect on the use of public health services. For example, in Durban the number of FSW who reported in the CSS to be familiar with the health system navigators remains limited, and in most focus groups FSW reported that although access to public health services had improved there were still important barriers remaining. It is also noteworthy that in the African sites, where the objective was to establish a provider-client relationship of mutual respect, most FSW still avoid disclosing that they engage in sex work out of fear of being badly received. In addition, in the two most resource-limited sites, Mombasa and Tete, the quality of public services is hampered by regular stock-outs, long waiting times and the habit of asking for bribes. It is important to develop these approaches further, and to carefully monitor and evaluate their effect on service uptake.

Feasibility

In Mysore and Durban, it was perfectly feasible to implement the designed intervention package. In Durban, this was achieved by establishing a strong collaboration between, the DIFFER partner, non-governmental organisations already providing services in the field, and a governmental clinic. The lesson learned is that through a collaborative effort, tapping into the complementary available resources and skills, it is possible to have a comprehensive intervention. In Tete, however, the intervention was designed to address all gaps identified in the situational analysis, but in practice it turned out that the available resources, and the policy environment, did not allow the implementation of some key components. Also in Mombasa, the resources were not sufficient to, for example, to expand the peer outreach component to the desired level. The resources currently available at these sites are insufficient to ensure a comprehensive and effective FSW-targeted intervention. At both these sites, because it is illegal, it was also not possible to include termination of pregnancy among the offered services, despite the fact that this was a service highly desired and needed by the FSW.

Adequacy and scalability

In all four countries interventions specifically targeting FSW are endorsed by policy makers, health managers and service providers. The preferred strategy of how to improve access to services differs however substantially, in particular for clinical services. In India, the concept of having a clinic providing clinical services specifically to FSW has been adopted as a national strategy for some time. Also in Mombasa the existing drop-in clinics are fully endorsed by the government. In Mozambique however, the government opted for a strategy to ensure adequate access to the public health services by making them key population-friendly, challenging the successful concept of the Night Clinic that was an essential component of the tested intervention, and prohibiting a replication of the tested model elsewhere in the country.

In all countries, some components or aspects of the tested intervention were identified by stakeholders as good candidates for scaling-up. In India, the integration of HIV services with other SRH services is a new approach and the findings of the DIFFER project offer an opportunity to adopt this approach in the national AIDS Control strategy that is currently being revised. In Mozambique, the peer outreach model, adapted from the Avahan model, could be an inspiration for the national peer outreach strategy. In South Africa first steps are already being taken to adopt the tested peer model as a national strategy. In all countries, the tested systems to improve linkage between targeted and public services were highly appreciated and could potentially be rolled-out on a larger scale. In Mozambique this includes the concept of focal points, and in South Africa and India the health care or health systems navigators. Finally, the approach to mobilise the FSW community and have them play a greater role in the interventions, which was still a rather new approach at the African sites, was greatly appreciated and should be further expanded.

Sustainability

Stakeholders judged the long-term sustainability of the tested interventions as good, because of being endorsed by policy makers and the FSW community, and using mostly existing programmes and structures. This is however with the condition that sufficient resources are made available. In Mysore, the intervention was built on a long-standing well-established programme, led by the FSW-community and partially financed by the government. It is therefore without doubt the most sustainable of the four tested interventions, although it should be noted that during the course of the intervention this site was challenged by a temporary interruption of government funding. Also in Durban sustainability appears good, because the government is committed to supporting the type of activities that were tested at their facility, and the perspectives for long-term funding of the NGOs look good. However, in Mombasa and Tete the interventions are greatly dependent on short-term project based funding. In none of these countries do the governments appear to be willing to finance activities or services specifically targeting sex workers, be it peer outreach, community mobilisation or clinical services, and

these can therefore only be maintained with continuous funding from external partners and the presence of non-governmental actors. Advocacy is therefore needed among all possible sources of funding, to establish a sustainable system to provide the finances needed for such interventions.

5 Annexes

1. Standard CSS Questionnaire
2. Standard FGD guide
3. Standard KI interview guide

Annex 1: Cross-sectional survey questionnaire

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
	INT_ID	Interviewer ID	[___|___]	Must be two digits
	CODENUM	What is the participants coupon code?	[___|___|___|___|___]	*Values 001-XXX*
	CONSENT	Did the participant provide informed consent for the questionnaire?	1. Yes	
			2. No	*End Survey*
	REF_SEED	Is this participant a SEED?	1. Yes	*Go to DEM_AGE1 and REF1 to REF2 is valid skip*
			2. No	
DEMOGRAPHIC DATA				
	INTERVIEWER: I am going to start with asking you some basic information about you.			
	DEM_AGE1	In what month and year were you born?	[____|____] (month)	
			98. Don't know the month	
			[____|____|____|____] (year)	
			9998. Don't know the year	
	DEM_AGE2	How old did you turn on your last birthday?	[____|____] (age)	
			98. Don't know	
	DEM_RES1	Which country were you born?	1. XXX	
			96. Other Country (specify): _____	*Go to DEM_COU3 and DEM_COU2 is a valid skip*
			97. Refused	
			98. Don't know	
	DEM_RES2	If you were born in *(country of study)*, which province/state were you born in?	*(to be defined)*	
	DEM_RES3	If you weren't born in *(city of study)*, when did you arrive here? Or, if you can't remember the date, how long have you lived here?	Arrived: [____|____] (month) [____|____|____|____] (year)	
			[__ |__] (number of years living in XXX)	
			[__ |__] (number of months living in XXX, if less than 1 year)	
			97. Refused	
			98. Don't know	
			99. Valid skip	
	DEM_RES4	In what neighbourhood is your primary residence? *(Only to be asked where relevant)*	*(to be defined)*	

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
	DEM_RES5	In the last 12 months, have you been away from your residence for more than one month at a time?	1. Yes	
			2. No	
			7. Refused	
Marital history				
	INTERVIEWER: Now I am going to ask you some questions about your marital status. These may or may not apply to you.			
	MARITAL1	Are you currently married or living together with a man as if married?	1. Yes, Currently Married	*Go to MARITAL4 and MARITAL2 to MARITAL3 is valid skip*
			2. Yes, Living With A Man	
			3. No, Not In Union	
			7. Refused	
	MARITAL2	Have you ever been married or lived together with a man as if married?	1. Yes, Formerly Married	
			2. Yes, Lived With A Partner	
			3. No	*Go to FSEXNUM1 and MARITAL3 to MARITAL4 is valid skip*
			7. Refused	
			9. Valid skip	
	MARITAL3	What is your current marital status: widowed, divorced, or separated?	1. Widowed	*Go to FSEXNUM1 and MARITAL4 is valid skip*
			2. Divorced	
			3. Separated	
			7. Refused	
			9. Valid skip	
	MARITAL4	Is your partner living with you now or is he staying elsewhere?	1. Living together	
			2. Staying Elsewhere	
			7. Refused	
			9. Valid skip	
SEXUAL HISTORY				
	INTERVIEWER: Now I am going to ask you some questions about sexual history. These questions can be sensitive. Please remember that you do not have to provide answers to questions you do not feel comfortable answering.			
	FSEXNUM1	In total, with how many different men have you had sexual intercourse in the past **week**? Sex being defined as vaginal or anal sex. If you don't remember, give your best estimate.	|____|____] (number of partners)	
			97. Refused	
			98. Don't know	
			99. Valid skip	
	FSEXNUM2	In total, with how many different men have you had sexual intercourse in the past **month**? If you don't remember, give your best estimate.	[____|____|____] (number of partners)	
			997. Refused	
			998. Don't know	
	FSEXNUM3	Of these (response from FSEXNUM2), how many were regular non-paying male partners (husband, boyfriend or live-in-partner)?	[____|____|____] (number of partners)	
			997. Refused	
			998. Don't know	
			999. Valid skip	
	FSEXNUM4		[____|____|____] (number of partners)	

#	NEW CODE	QUESTION	RESPONSES			SKIPS
		Of these (response from FSEXNUM2), how many were other non-paying partners (casual or occasional partners, one-night stands)?	997. Refused			
			998. Don't know			
			999. Valid skip			
	FSEXPAY1	Of these (response from FSEXNUM2), how many were a first time paying sexual partners? **READ DEFINITION OF PAYING PARTNER: A paying partner is a partner who gave money or gifts in return for sex)**	[____|____|____] (number of partners)			
			997. Refused			
			998. Don't know			
			999. Valid skip			
	FSEXPAY2	Of these (response from FSEXNUM2), how many were repeat paying sexual partners (a paying sexual partner that you have had sex with at least once before)?	[____|____|____] (number of partners)			
			997. Refused			
			998. Don't know			
			999. Valid skip			
CONDOM USE WITH CLIENTS						
	Now I' m going to ask you a series of questions about the last first time client and the last regular client you had who paid you for sex in the last 3 months.			**Last 1st client**	**Last regular client**	
	P1_MCP	When did you **last** have sex with this paying client?	# days ago OR	[__|___]	[__|___]	
			# weeks ago OR	[__|___]	[__|___]	
			# years ago	[__|___]	[__|___]	
	P1_FSX1	During the past 3 months, how many times did you have sexual intercourse (vaginal or anal) with this person?	Number of times	[__|___]	[__|___]	
			997. Refused	[__|___]	[__|___]	*Goto P1_FSX3 andP1_FSX2 is valid skip*
			998. Don't know	[__|___]	[__|___]	*Goto P1_FSX3 andP1_FSX2 is valid skip*
			999. Valid skip	[__|___]	[__|___]	
	P1_FSX2	How many of those times that you had intercourse, did you use a male or female condom, and how many of those times did you not use a male or female condom?	Number of times condom used	[__|___]	[__|___]	
			Number of times NO condom used	[__|___]	[__|___]	
			997. Refused	[__|___]	[__|___]	
			998. Don't know	[__|___]	[__|___]	
			999. Valid skip	[__|___]	[__|___]	
	P1_FSX3	The last time you had sex with this person was a male or female condom used?	1. Yes			
			2. No			
			7. Refused			
			8. Don't know			
			9. Valid skip			
CONDOM USE WITH NON-CLIENTS						

#	NEW CODE	QUESTION	RESPONSES			SKIPS
	Now I am going to ask you a series of question about your regular non-paying male partner (husband, boyfriend or live-in-partner) and the last other non-paying partner (casual or occasional partners, one-night stand) you had sex with in the last 3 months.			**Regular partner**	**Other non-paying partner**	
	P2_RLTN	What was your relationship to this person? **READ OUT ANSWERS. RECORD ONLY ONE ANSWER.**	1. Permanent			
			2. Steady			
			3. Casual			
			4. One night stand			
			7. Refused			
			8. Don't know			
	P2_MCP	When did you **last** have sex with this person ?	# days ago OR	[__|___]	[__|___]	
			# weeks ago OR	[__|___]	[__|___]	
			# years ago	[__|___]	[__|___]	
	P2_HIV1	The last time you had sex with this person did you know his HIV status?	1. Yes			
			2. No			*Go to P2_HIV3 and P2_HIV2 is valid skip*
			7. Refused			
	P2_HIV2	What did you know this persons HIV status to be?	1. HIV Negative			*Go to P2_FSX1 and P2_HIV3 is a valid skip*
			2. HIV Positive			*Go to P2_FSX1 and P2_HIV3 is a valid skip*
			7. Refused			*Go to P2_FSX1 and P2_HIV3 is a valid skip*
			9. Valid skip			
	P2_HIV3	What did you believe this persons HIV status to be?	1. HIV Negative			
			2. HIV Positive			
			7. Refused			
			8. Don't know			
			9. Valid skip			
	P2_FSX1	During the past month, how many times did you have sexual (vaginal or anal) intercourse with this person?	Number of times	[__|___]	[__|___]	*If P2_FSX1=0 then go to P1_FSX3 and P2_FSX2 is valid skip*
			997. Refused	[__|___]	[__|___]	*Go to P1_FSX3 and P2_FSX2 is valid skip*
			998. Don't know	[__|___]	[__|___]	*Go to P1_FSX3 and P2_FSX2 is valid skip*
			999. Valid skip	[__|___]	[__|___]	
	P2_FSX2	How many of those times that you had intercourse, did you use a male or female condom, and how many of those times did you not use a male or female condom?	Number of times condom used	[__|___]	[__|___]	
			Number of times NO condom used	[__|___]	[__|___]	
			997. Refused	[__|___]	[__|___]	
			998. Don't know	[__|___]	[__|___]	
			999. Valid skip	[__|___]	[__|___]	
	P1_FSX3	The last time you had sex with this person was a condom used?	1. Yes			
			2. No			
			7. Refused			
			8. Don't know			

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
			9. Valid skip	
SEXWORK				
	INTERVIEWER: Now I am going to ask you some questions on your sex work.			
	SXWK1	In the past week, how many times did you have sex for money or gifts?	[____|____|____] (times)	
			997. Refused	
			998. Don't know	
	SXWK2	In the past month, how many times did you have sex for money or gifts?	[____|____|____|____] (times)	
			9997. Refused	
			9998. Don't know	
	SWINC1	In the past month, what was the average amount of money you received in exchange for having sex?	[____|____|____|____|____] (XXX)	
			99997. Refused	
			99998. Don't know	
	SWINC2	In the past month have you earned money for doing work other than sex?	1. Yes	
			2. No	*Goto CONDOM1; SWINC3 and SWINC4 is valid skip*
			7. Refused	*Goto CONDOM1; SWINC3 and SWINC4 is valid skip*
			8. Don't know	*Goto CONDOM1; SWINC3 and SWINC4 is valid skip*
	SWINC3	In the past month, what was your income from this other work?	[____|____|____|____|____] (XXX)	
			99997. Refused	
			99998. Don't know	
			99999. Valid skip	
CONDOMS AND LUBRICANTS				
	INTERVIEWER: Now I am going to ask you about condom and lubricant use.			
	CONDOM1	Where do you usually obtain male condoms? **DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Government health facility	
			02. Private Clinic	
			03. Pharmacy	
			04. Shop/Supermarket	
			05. Café/Bar/Disco	
			06. Gas Station	
			07. Hotel	
			08. Market/Stand	
			09. At Work	
			10. Street Vendor	
			11. Friends	
			12. Peer Educators	
			13. Organizations	
			14. School	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know	
	CONDOM2	Have you had a male condom break during sex in the past year?	1. Yes	
			2. No	
			7. Refused	

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
			8. Don't know	
	CONDOM3	Do you find male condoms to be very affordable (price), somewhat affordable, or not affordable? **RECORD ONLY ONE ANSWER.**	1. Free	
			2. Very affordable	
			3. Somewhat affordable	
			4. Not affordable	
			7. Refused	
			8. Don't know	
	CONDOM4	Do you find male condoms to be sufficiently available? **RECORD ONLY ONE ANSWER.**	1. Sufficiently	
			3. No opinion	
			4. Not sufficiently	
			7. Refused	
			8. Don't know	
			9. Valid skip	
	FEMCON1	How often do you use a female condom? **RECORD ONLY ONE ANSWER.**	1. Don't know what a female condom is	*Goto HEALTH1; FEMCON2 and FEMCON3 is valid skip*
			2. Never	*Goto HEALTH1; FEMCON2 and FEMCON3 is valid skip*
			3. Rarely	
			4. Often	
			5. Always	
			7. Refused	*Goto HEALTH1; FEMCON2 and FEMCON3 is valid skip*
			8. Don't know	*Goto HEALTH1; FEMCON2 and FEMCON3 is valid skip*
	FEMCON2	How many times would you say you used it in the past year?	[____|____|____|	
			997. Refused	
			998. Don't know	
			999. Valid skip	
	FEMCON3	Do you find female condoms to be sufficiently available? RECORD ONLY ONE ANSWER.	1. Sufficiently	
			3. No opinion	
			4. Not sufficiently	
			7. Refused	
			8. Don't know	
			9. Valid skip	
HEALTH UTILIZATION				
	INTERVIEWER: Now I am going to ask you some questions about your experience with the health care system.			
	HEALTH1	Where do you normally go for healthcare? **DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Public Hospital/Health Centre	
			02. Private Clinics	
			03. Pharmacy	
			04. Clinic/services targeting high-risk groups	
			05. Traditional Doctor	
			96. Other (specify):_____	
			97. Refused	

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
			98. Don't know	
	HEALTH2	During the last twelve months have you sought medical care for any reason?	1. Yes	
			2. No	*Go to HEALTH4 and HEALTH2 to HEALTH3 is valid skip*
			7. Refused	*Go to HEALTH4 and HEALTH2 to HEALTH3 is valid skip*
			8. Don't know	*Go to HEALTH4 and HEALTH2 to HEALTH3 is valid skip*
	HEALTH3	During the past year, did you experience any difficulty getting medical care **because of being a female seks worker**?	1. Yes	
			2. No	*Go to HEALTH4 and HEALTH3 is valid skip*
			7. Refused	*Go to HEALTH4 and HEALTH3 is valid skip*
			8. Don't know	*Go to HEALTH4 and HEALTH3 is valid skip*
			9. Valid skip	
	HEALTH4	What difficulty did you experience? **DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Was refused to be attended	
			02. Had to wait longer	
			03. Was badly attended by the health care provider	
			04. Had to pay more	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know	
			99. Valid skip	
	HEALTH5	How much did you pay the last time you visited this place, including costs of transport, services, tests and medicines?	[____|____|____|____|____] (XXX)	
			99997. Refused	
			99998. Don't know	
	HEALTH6	How would you rate the way you were attended?**RECORD ONLY ONE ANSWER.**	1. Very good	
			2. Good	
			3. Normal	
			4. Bad	
			5. Very bad	
			7. Refused	
			8. Don't know	
CONTRACEPTION/ UNINTENDED PREGNANCIES				
	INTERVIEWER: Now I am going to ask you some questions about getting pregnant and what you can do to avoid getting pregnant. Remember that everything you say here is confidential and nobody will know it was you that gave the answers. If you feel uncomfortable answering certain questions you can always refuse to answer them.			
	PREGN1	Have you been pregnant in the past 5 years? If so, how many times were you pregnant?	[____|____] (number of times)	*If 0 goto CONTR1; PREGN2 to UNINT3 is valid skip*
			97. Refused	*goto CONTR1; PREGN2 to UNINT3 is valid skip*
			98. Don't know	*goto CONTR1; PREGN2 to UNINT3 is valid skip*
	PREGN2		1. Yes	

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
		Have you ever had a pregnancy that miscarried or was aborted in the last five years?	2. No	
			7. Refused	
			8. Don't know	
			9. Valid skip	
	UNINT1	In the last five years, did you ever got pregnant while you didn't want to get pregnant at that time?	1. Yes	
			2. No	*If 0 goto CONTR1; UNINT2 to UNINT3 is valid skip*
			7. Refused	*If 0 goto CONTR1; UNINT2 to UNINT3 is valid skip*
			8. Don't know	*If 0 goto CONTR1; UNINT2 to UNINT3 is valid skip*
			9. Valid skip	
	UNINT2	What did you do? **DO NOT READ OUT ANSWERS. RECORD ONLY ONE ANSWER.**	1. Kept the pregnancy	
			2. Went to a Public Hospital/Health Centre for an abortion	
			3. Went to a Private Clinic for an abortion	
			4. Went to another type of clinic: _____	
			5. Went elsewhere for an abortion	
			7. Refused	
			8. Don't know	
			9. Valid skip	
	UNINT3	Are you very satisfied, satisfied, a little satisfied, or not satisfied with the current availability of services for unwanted pregnancies? **RECORD ONLY ONE ANSWER.**	1. Very satisfied	
			2. Satisfied	
			3. A little satisfied	
			4. Not satisfied	
			7. Refused	
			8. Don't know	
			9. Valid skip	
	CONTR1	Are you currently doing something or using any method to delay or avoid pregnancy, or have you been sterilised?	1. Has been sterilised	*Goto CONTR3; CONTR2 is valid skip*
			2. Using contraceptive method	
			2. Not sterilised and not using contraceptive method	
			7. Refused	*Goto EC; CONTR2 to CONTR7 is valid skip*
			8. Don't know	*Goto EC; CONTR2 to CONTR7 is valid skip*
			9. Valid skip	
	CONTR2	**If not doing something to avoid pregnancy**: Why not? **RECORD ONLY ONE ANSWER.**	1. I want to get pregnant	*Goto EC; CONTR3 to CONTR7 is valid skip*
			2. I am currently pregnant	*Goto EC; CONTR3 to CONTR7 is valid skip*
			3. I am unable to conceive	*Goto EC; CONTR3 to CONTR7 is valid skip*
			4. Other: _____	*Goto EC; CONTR3 to CONTR7 is valid skip*
			7. Refused	*Goto EC; CONTR3 to CONTR7 is valid skip*

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
			8. Don't know	*Goto EC; CONTR3 to CONTR7 is valid skip*
			9. Valid skip	
	CONTR3	**If doing something to avoid pregnancy**: Which method are you using? **RECORD ALL MENTIONED.**	01. Partner is sterilised	
			03. IUD	
			04. Injectables	
			05. Implants	
			06. Pill	
			07. Condom	
			08. Female condom	
			09. Diaphragm	
			10. Foam/jelly	
			11. Lactational amenorrhea method	
			12. Rhythm method	
			13. Withdrawal	
			14. Other modern method	
			15. Other traditional method	
			97. Refused	
			98. Don't know	
			99. Valid skip	
	CONTR4	Where did you obtain this method last time? **DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Public Hospital/Health Centre/Health Post	
			02. Private Clinic	
			03. Clinic/services targeting high-risk groups	
			04. Pharmacy	*Goto CONTR6; CONTR5 is valid skip*
			05. Traditional Doctor	*Goto CONTR6; CONTR5 is valid skip*
			96. Other (specify):_____	*Goto CONTR6; CONTR5 is valid skip*
			97. Refused	*Goto CONTR6; CONTR5 is valid skip*
			98. Don't know	*Goto CONTR6; CONTR5 is valid skip*
			99. Valid skip	
	CONTR5	Can you tell me the name of the clinic or drop in centre you last went to?	(open ended) _____	
			99997. Refused	
			99998. Don't know	
			99999. Valid skip	
	CONTR6	Why did you go there instead of somewhere else? **DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Cost	
			02. Shorter waiting times	
			03. Nearby	
			04. Where I always go	
			05. Quality of care	
			06. Privacy	
			07. Welcoming/Friendly Health personnel	
			08. It was indicated/referred	
			96. Other (specify):_____	

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
			97. Refused	
			98. Don't know or don't remember	
			99. Valid skip	
	CONTR7	Are you very satisfied, satisfied, a little satisfied, or not satisfied with the current availability of contraceptive services? **RECORD ONLY ONE ANSWER.**	1. Very satisfied	
			2. Satisfied	
			3. A little satisfied	
			4. Not satisfied	
			7. Refused	
			8. Don't know	
	EC	Did you ever take an emergency pill immediately following unprotected sex to prevent a pregancy from occurring?	1. Yes	
			2. No	
			7. Refused	
			8. Don't know	
STI/RTI				
	INTERVIEWER: Now I am going to ask you some questions about sexually transmitted diseases. These are diseases you can get from having sex with someone.			
	STI1	Sometimes women experience an abnormal discharge from their vagina. During the last 12 months, have you had an abnormal discharge from your vagina?	1. Yes	
			2. No	
			7. Refused	
			8. Don't know	
	STI2	Sometimes women have a sore or ulcer near their vagina. During the last 12 months, have you had a sore or ulcer near your vagina?	1. Yes	
			2. No	*If ST1=2, 7 or 8 then STI3 to STI7 is valid skip*
			7. Refused	*If ST1=2, 7 or 8 then STI3 to STI7 is valid skip*
			8. Don't know	*If ST1=2, 7 or 8 then STI3 to STI7 is valid skip*
	STI3	IF HAD DISCHARGE, SORE OR ULCER: The last time you had this problem did you seek any kind of advice or treatment?	1. Yes	
			2. No	*Goto VCT1; STI4 to STI7 is valid skip*
			7. Refused	*Goto VCT1; STI4 to STI7 is valid skip*
			8. Don't know	*Goto VCT1; STI4 to STI7 is valid skip*
			9. Valid skip	
	STI4	IF HAD DISCHARGE, SORE OR ULCER: The last time you had this problem where did you go? Any other place? **DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Public Hospital/Health Center/Health Post	
			02. Private Clinic	
			03. Clinic/services targeting high-risk groups	
			04. Pharmacy	
			05. Traditional Doctor	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know	
			99. Valid skip	
	STI5	Can you tell me the name of the clinic or drop in center you last went to?	(open ended): _____	
			99997. Refused	

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
			99998. Don't know	
			99999. Valid skip	
	STI6	Why did you go there instead of somewhere else? **DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Cost	
			02. Shorter waiting times	
			03. Nearby	
			03. Where I always go	
			04. Quality of care	
			05. Privacy	
			06. Welcoming/Friendly Health personnel	
			07. It was indicated/referred	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know or don't remember	
			99. Valid skip	
	STI7	Are you very satisfied, satisfied, a little satisfied, or not satisfied with the availability of services for this type of problems? **RECORD ONLY ONE ANSWER.**	1. Very satisfied	
			2. Satisfied	
			3. A little satisfied	
			4. Not satisfied	
			7. Refused	
			8. Don't know	
			9. Valid skip	
HIV TESTING HISTORY				
	INTERVIEWER: Now I am going to ask you some questions about HIV testing and your experience. Remember that you do not have to answer any questions you do not feel comfortable answering.			
	VCT1	Have you ever been tested for HIV?	1. Yes	
			2. No	*Go to CERVIC1*
			7. Refused	*Go to CERVIC1*
			8. Don't know	*Go to CERVIC1*
	VCT2	IF TESTED: When was the last time you were tested?	01. Less than 3 Months	
			02. Between 3 to 6 Months	
			03. 6 to 12 Months	
			04. 1 to 2 Years	
			05. 3 to 5 Years	*Goto VCT7; VCT3 to VCT6 is valid skip*
			06. Five 5 Years Or More	*Goto VCT7; VCT3 to VCT6 is valid skip*
			97. Refused	*Goto VCT7; VCT3 to VCT6 is valid skip*
			98. Don't know	*Goto VCT7; VCT3 to VCT6 is valid skip*
			99. Valid skip	
	VCT3	IF TESTED: Where was the last test done?	02. Public Hospital/Health Centre/Health Post: OPD	
			02. Public Hospital/Health Centre/Health Post: VCT centre	
			02. Public Health Facility: Youth Friendly Services	
			02. Public Health Facility: PMTCT	

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
		READ OUT ANSWERS. RECORD ALL MENTIONED.	03. Blood Donation	
			04. Private Clinic/Lab	
			05. Clinic/services targeting high-risk groups	
			08. Community T&C	*GotoVCT5; VCT4 is valid skip*
			96. Other (specify):_____	
			97. Refused	*GotoVCT5; VCT4 is valid skip*
			98. Don't know	*GotoVCT5; VCT4 is valid skip*
			99. Valid skip	
	VCT4	Can you tell me the name of the clinic or drop in centre you last were tested?	(open ended): _____	
			99997. Refused	
			99998. Don't know	
			99999. Valid skip	
	VCT5	Why did you go there instead of somewhere else? **DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Cost	
			02. Shorter waiting times	
			03. Nearby	
			03. Where I always go	
			04. Quality of care	
			05. Privacy	
			06. Welcoming/Friendly Health personnel	
			07. It was indicated/referred	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know or don't remember	
			99. Valid skip	
	VCT6	Are you very satisfied, satisfied, a little satisfied, or not satisfied with the availability of HIV testing services? **RECORD ONLY ONE ANSWER.**	1. Very satisfied	
			2. Satisfied	
			3. A little satisfied	
			4. Not satisfied	
			7. Refused	
			8. Don't know	
			9. Valid skip	
	VCT7	What was the result of your most recent HIV test?	1. Positive	
			2. Negative	
			3. Indeterminate	
			4. Didn't get results	
			7. Refused	
			8. Don't know	
			9. Valid skip	
HIV CARE AND TREATMENT				
	INTERVIEWER: Can I confirm with you what you just said about your HIV status. Please, let me stress again that all information you give me is absolutely confidential.			*If participant confirms that she is HIV negative, goto CERVIC1; POS1 to POS11 is valid skip*

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
	Because you have said you know your HIV status to be positive, I am now going to ask you some questions about HIV treatment.			
	POS1	Have you seen a nurse, doctor or other health care provider for a medical evaluation or care related to your HIV infection?	1. Yes	*Goto POS3; POS2 is valid skip*
			2. No	
			7. Refused	*Goto POS3; POS2 is valid skip*
			8. Don't know	*Goto POS3; POS2 is valid skip*
			9. Valid skip	
	POS2	IF NOT: Why didn't you see a nurse, doctor or other health care provider? Any other reason? **DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Was n' told to	
			02. Haven't had the time yet	
			03. Don't know where to go	
			04. Too costly	
			05. I am scared of being stigmatised	
			06. Distance is far	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know	
			99. Valid skip	
	POS3	Are you currently being followed for your HIV infection or taking ARVs?	1. Yes, being followed but not yet taking ARVs	
			2. Yes, taking ARVs	
			3. No	*Go to CERVIC1; POS4 to POS7 is valid skip*
			7. Refused	*Go to CERVIC1; POS4 to POS7 is valid skip*
			8. Don't know	*Go to CERVIC1; POS4 to POS7 is valid skip*
			9. Valid skip	
	POS4	**If taking ARVs or being followed for your HIV infection**, where do you go? **READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Public Hospital/Health Centre	
			02. Private Clinics	
			03. Clinic/services targeting high-risk groups	
			04. Pharmacy	*Goto Pos6; Pos5 is valid skip*
			05. Traditional Doctor	*Goto Pos6; Pos5 is valid skip*
			06. Not here in XXX, but in another city	
			96. Other (specify):_____	*Goto Pos6; Pos5 is valid skip*
			97. Refused	*Goto Pos6; Pos5 is valid skip*
			98. Don't know	*Goto Pos6; Pos5 is valid skip*
			99. Valid skip	
	POS5	Can you tell me the name of the clinic or hospital you receive ARV or are being followed for your HIV infection?	(open ended): _____	
			99997. Refused	
			99998. Don't know	
			99999. Valid skip	
	POS6	Why did you go there instead of somewhere else?	01. Cost	
			02. Shorter waiting times	

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
		DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.	03. Nearby	
			03. Where I always go	
			04. Quality of care	
			05. Privacy	
			06. Welcoming/Friendly Health personnel	
			07. It was indicated/referred	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know or don't remember	
			99. Valid skip	
	POS7	Are you very satisfied, satisfied, a little satisfied, or not satisfied with the availability of services for your HIV infection? **RECORD ONLY ONE ANSWER.**	1. Very satisfied	
			2. Satisfied	
			3. A little satisfied	
			4. Not satisfied	
			7. Refused	
			8. Don't know	
			9. Valid skip	
CERVICAL CANCER SCREENING				
	INTERVIEWER: Now I am now going to ask you some questions about testing for cervical cancer.			
	CERVIC1	Have you ever been tested for cervical cancer?	1. Yes	
			2. No	*Got to RAPE1 and CERVIC2 to CERVIC3 is valid skip*
			7. Refused	*Got to RAPE1 and CERVIC2 to CERVIC3 is valid skip*
			8. Don't know	*Got to RAPE1 and CERVIC2 to CERVIC3 is valid skip*
			9. Valid skip	
	CERVIC2	IF TESTED: Where was the last test done? **READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Public Hospital/Health Centre	
			02. Private Clinic	
			03. Clinic/services targeting high-risk groups	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know	
			99. Valid skip	
	CERVIC3	Can you tell me the name of the clinic or hospital you last were tested?	(open ended): _____	
			99997. Refused	
			99998. Don't know	
			99999. Valid skip	
SEXUAL VIOLENCE				
	INTERVIEWER: Now I am going to ask you some questions about your personal experience with violence. These questions can be sensitive and you can refuse to answer any question that makes you uncomfortable.			
	RAPE1	In the past 12 months, how many times did anyone force	[____|____] (number of times) (00=never)	*If 00, go to STIGMA1; RAPE2 to RAPECARE5 =valid skip*

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
		you to have sex with them by sexually assaulting or raping you?	97. Refused	*Go to STIGMA1; RAPE2 to RAPECARE5 =valid skip*
			98. Don't know	*Go to STIGMA1; RAPE2 to RAPECARE5 =valid skip*
	RAPE2	Was a condom used the last time someone forced you to have sex?	1. Yes	
			2. No	
			7. Refused	
			8. Don't know	
			9. Valid skip	
	RAPECARE1	Did you seek medical treatment or support after this happened?	1. Yes	
			2. No	*Goto STIGMA1; RAPECARE2 to RAPECARE5 is valid skip*
			7. Refused	*Goto STIGMA1; RAPECARE2 to RAPECARE5 is valid skip*
			8. Don't know	*Goto STIGMA1; RAPECARE2 to RAPECARE5 is valid skip*
			9. Valid skip	
	RAPECARE2	Where did you seek care? **READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Public Hospital/Health Centre/Health Post	
			02. Private Clinic	
			03. Clinic/services targeting high-risk groups	
			04. SGBV clinic	
			05. Traditional Doctor	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know	
			99. Valid skip	
	RAPECARE3	Can you tell me the name of the clinic or centre you sought care?	(open ended) _____	
	RAPECARE4	Why did you go there instead of somewhere else? **DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.**	01. Cost	
			02. Shorter waiting times	
			03. Nearby	
			04. Where I always go	
			05. Quality of care	
			06. Privacy	
			07. Welcoming/Friendly Health personnel	
			08. It was indicated/referred	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know or don't remember	
			99. Valid skip	
	RAPECARE5	Are you very satisfied, satisfied, a little satisfied, or not satisfied with the availability of services for victims of violence?	1. Very satisfied	
			2. Satisfied	
			3. A little satisfied	
			4. Not satisfied	

#	NEW CODE	QUESTION	RESPONSES				SKIPS
		RECORD ONLY ONE ANSWER.	7. Refused				
			8. Don't know				
			9. Valid skip				
STIGMA/DISCRIMINATION							
	INTERVIEWER: Now I am going to ask you some questions about any experiences you might have had because of being a sex worker.						
	STIGMA1	In the past 12 months, have you ever been refused a service or been discriminated in any other way because of being a sex worker?	1. Yes				
			2. No				*Go to STIGMA3 and STIGMA2=valid skip*
			7. Refused				*Go to STIGMA3 and STIGMA2=valid skip*
			8. Don't know				*Go to STIGMA3 and STIGMA2=valid skip*
	STIGMA2	**IF YES:** What was it that you were refused and how many times? DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.	Responses	Never	Once	More than once	
			a. Refused access to a bar or other entertainment venue	1	2	3	
			b. Refused a service at a health facility	1	2	3	
			c. Refused a social service	1	2	3	
			d. Other1:_____	1	2	3	
			e. Other2:_____	1	2	3	
	STIGMA3	When visiting the public health services, do you disclose yourself as being a FSW?	1. Yes				
			2. No				
			7. Refused				
			8. Don't know				
	STIGMA4	When visiting the public health services, how do you feel treated by the health care workers? **READ OUT ANSWERS. RECORD ONLY ONE ANSWER.**	1. Normal, just like everyone else				
			2. Slightly less well than other clients				
			3. Much worse than other clients				
			7. Refused				
			8. Don't know				
EMPOWERMENT/CAPABILITY							
	INTERVIEWER: Now I am going to ask you some questions about who usually takes the decisions.						
	EMPOW1	Who will usually decide if you will use a condom or not with a paying client?	1. I will				
			2. The client will				
			3. Someone else will: _____				
			7. Refused				
			8. Don't know				
	EMPOW2	Have you ever refused a client because he did not want to use a condom?	1. Yes				
			2. No				
			7. Refused				
			8. Don't know				
	EMPOW3		01. Yes				

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
		During the past 3 months, did you participate in any group, organisation, network or association that defends the rights of female sex workers?	02. No	*Goto PEEREDU1; EMPOW4 is valid skip*
			97. Refused	*Goto PEEREDU1; EMPOW4 is valid skip*
			98. Don't know	*Goto PEEREDU1; EMPOW4 is valid skip*
	EMPOW4	Can you tell me the name of the group or organisation?	(open ended): _____	
			99997. Refused	
			99998. Don't know	
			99999. Valid skip	
PEER EDUCATION				
	INTERVIEWER: Now I am going to ask you some questions about your experience with peer educators.			
	PEEREDU1	Have you been in contact with any peer educator in the community in the last 12 months?	1. Yes	
			2. No	*Goto Netsize1 and PEEREDU2 to PEEREDU5 is valid skip*
			7. Refused	*Goto Netsize1 and PEEREDU2 to PEEREDU5 is valid skip*
			8. Don't know	*Goto Netsize1 and PEEREDU2 to PEEREDU5 is valid skip*
	PEEREDU2	Have any of the peer educators you have been in contact with been female sex workers?	1. Yes	
			2. No	
			7. Refused	
			8. Don't know	
			9. Valid skip	
	PEEREDU3	Which organization was supporting these peer educators? For which organisation were they working? **RECORD ALL MENTIONED.**	01. Organization 1	
			02. Organization 2	
			03. Organization 3	
			04. Organization 4	
			05. Organization 5	
			06. Organization 6	
			07. Organization 7	
			08. Organization 8	
			96. Other (specify): _____	
			97. Refused	
			98. Don't know	
			99. Valid skip	
	PEEREDU4	How many times have you been in contact with the peer educator in the last 12 months?	[__|__|__] (number of times)	
			997. Refused	
			998. Don't know	
			999. Valid skip	
	PEEREDU5	What services or information did you receive from the peer educator?	01. General HIV/STI prevention/transmission information	
			02. Condoms	
			03. Referral for STI Treatment	

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
		DO NOT READ OUT ANSWERS. RECORD ALL MENTIONED.	04. Referral for VCT	
			96. Other (specify):_____	
			97. Refused	
			98. Don't know	
			99. Valid skip	
NEEDS				
	We are almost finished.			
	NEEDS1	After going through all these different health services, how would you say the availability of these services is in comparison with 3 years ago?	1. Much better	
			2. Better	
			3. The same	
			4. Worse	
			5. Much worse	
			7. Refused	
			8. Don't know	
	NEEDS2	What health service do you feel is still most needed?	_____ _____	
SEXUAL NETWORKS				
	INTERVIEWER: To finish, I am going to ask you some questions about your sexual identity and your network.			
		INTERVIEWER: Please take your time to carefully think about these questions. Please give me your best estimates. You do not need to give me their names. They may or may not identify themselves as being female sex workers. This includes anyone that has sex for money or gifts. Please give me your best estimate. IF PARTICIPANT DOESN'T KNOW OR DOESN'T REMEMBER, PROBE FOR AN APPROXIMATE NUMBER OR RANGE.		
	NETSIZE1	Approximately how many other women who have sex for money do you think live in and around <Study area>?	[__|__|__|__|__|__|__] (number of MSM) (000=none)	
			(0000000=none)	
	NETSIZE2	Of those <RESPONSE FROM NETSIZE1>, how many do you know by name and they know yours?	[__|__|__|__|__|__|__] (number of MSM) (000=none)	
			(0000000=none)	
	NETSIZE3	Of those <RESPONSE FROM NETSIZE1>, how many can you contact in the next month?	[__|__|__|__|__|__|__] (number of MSM) (000=none)	
			(0000000=none)	
	NETSIZE4	How many of them <FROM NETSIZE3> have you seen or met in the last one month?	[__|__|__|__|__|__|__] (number of MSM) (000=none)	
			(0000000=none)	

#	NEW CODE	QUESTION	RESPONSES	*SKIPS*
	CODENUM2	INTERVIEWER: Re-enter the participants coupon code	[___|___|___|___|___]	*If CODENUM2 is not equal to CODENUM1 have interviewer reenter CODENUM1 and CODENUM2*

Diagonal Interventions to Fast Forward Enhanced Reproductive Health (DIFFER)

FOCUS GROUP DISCUSSION INTERVIEW GUIDE FOR FEMALE SEX WORKERS

Focus Group Identification Number:	
Facilitator:	
Note taker:	
Date of Focus Group (date/month/year):	
Start Time:	
Stop Time:	
Tape Check Performed by:	
Transcriber:	
Transcription Date (date/month/year):	

Note to facilitators: *For the optimal use of this tool it is important to read through the tool carefully and prepare all the equipment required (i.e. index cards, markers, flipcharts etc.) prior to the start of the focus group discussion. Conducting this focus group well will yield results which are core to the success of the overall project.*

Introduction and Description of Project:

Hello, and thank you for agreeing to participate in this focus group discussion. My name is _____, and I am the facilitator for this group. [Introduce colleagues, observer, etc].

The purpose of a focus group is to learn about your ideas and opinions on a certain topic. Today, we will be discussing the topic of the use of healthcare services by you and other female sex workers and what your most important needs are in terms of sexual and reproductive health. We will be talking about where you go for services, how you appreciate those services and what are your most important needs. The discussion will last approximately 1 and a half hours.

At the end of the discussion, please could you stay behind to complete a short questionnaire on your background details.

Lead questions	Secondary questions and probes
1 Knowledge and use of SRH/HIV services	
1.1 What do you understand by 'sexual and reproductive health and HIV services'? Participants are requested to list the services they consider as 'sexual and reproductive health and HIV services'. The facilitator notes responses down on a flipchart paper visible to the whole group. Responses may be discussed among the group, especially if there is disagreement. Terms used by the participants must not be changed by the facilitator, e.g. if participants use the term 'abortion' instead of 'termination of pregnancy the facilitator must refer to the service as 'abortion' throughout the discussion. If multiple names are used for one service, the participants are encouraged to reach a consensus on the term that will be used by the group to refer to that particular service. After the cards are grouped together in this way, the facilitator then asks participants to either draw or use objects (pictures, figurines, coloured cards) to represent each service. This will allow illiterate participants to recognise and actively participate in the discussion. The services are then listed on a flipchart or other flat surface.	Discuss each service listed. What services (if any) are missing from the list generated in this exercise? *If not mentioned, PROBE for:* • Male condoms • Female condoms • Lubricants • Family Planning • Emergency contraception • HTC/HIV counselling and testing • HIV care (including ART/PEP) • STI care • Cervical cancer screening services • Care for unwanted pregnancies • Post abortion care • Sexual & Gender-based violence services
1.2 Where do you <u>currently</u> go when you need to access these services (services listed in Q1.1)? (Facilitator moves methodically down the list of services ranked in Q1.1 and obtains responses from the group on each service)	The facilitator should be sure to allow participants to list a range of different places. If facilities are listed by name, the facilitator should also establish whether they are public/private/NGO-provided, and if they are in the XXX area, or outside the city. *In addition, ask:* • Are these the same facilities that most sex workers in this area use (or sex workers known to the participants)?
1.3 Can you tell me <u>why</u> you go there? (Facilitator moves methodically down the list of services ranked in Q1.1 and obtains responses from the group on each service)	
2 Access to SRH/HIV services	

2.1 Have you, or other sex workers you know, been <u>able to access</u> these services if and when needed? Do you feel they are sufficiently available? (Facilitator moves methodically down the list of services ranked in Q1.1 and obtains responses from the group on each service)	*PROBE further for:* Actual experiences of being denied access, or where access was difficult • Where? • When? • What happened? • What did you do next? [In the case of condoms and lubricant:] Experiences of shortages • When? • For how long? • What did you do to overcome them?
2.2 When looking back over the past 2 years, do you think that the access and availability has improved, remained the same or has deteriorated? (Facilitator moves methodically down the list of services ranked in Q1.1 and obtains responses from the group on each service)	*If participants answer that the offer has improved or deteriorated, ask why they think so*
2.3 Think about the last time you accessed these services. How would you <u>rate the quality</u> of services you received? Are you satisfied with the care and treatment that you received when accessing these services? (Facilitator moves methodically down the list of services ranked in Q1.1 and obtains responses from the group on each service)	*PROBE further for:* • Staff attitudes • Limited time available to providers • Resources available • Needs not met by consultation • Cost • GOOD experiences of accessing services

3 Stigma and discrimination		
	Now, let's talk about what happens when you go to the government health facilities.	
3.1	**How do you feel attended when you go there? Do the providers attend you differently when they find out that you are a sex worker, or do they attend you just as anyone else?**	*If a participant answers that she feels attended differently, explore in what way she is attended differently*
3.2	**Do you usually say that you engage in sex work when visiting a government health facility?**	*If a participant answers that she does not, explore why she doesn't*
3.3	**Have you ever been refused a health service because of being a FSW, or do you know of a FSW who was refused a health service?**	*If a participant says yes, explore:* *What service she was refused* *What happened exactly*
3.4	**When looking back over the past 2 years, do you think that the attendance at government health facilities has improved, remained the same or has deteriorated?**	*If participants answer improved or deteriorated, ask why they think so*

3.5	**Are there any other barriers (besides being badly attended) that make it difficult for you to access the government health facilities?**	*If yes, explore what barriers*
9	**Peer outreach**	
	Now let's talk about something different. There are educators who go out in the SW community to educate, sensitise and mobilise FSW. Do you know whom I am talking about? We call them peer educators.	
9.1	**Have you been approached by these educators during the past year?** **How often?** **Are these educators also FSW, or are these other type of educators?**	
9.2	**What type of messages did you receive from these educators?**	
9.3	**Did you receive any support from these educators?**	*If yes:* • *What type of support?* • *Ask to give examples*
9.4	**Are you satisfied with the current services/ support offered by these peer educators?**	*If not satisfied, explore why not*
9.5	**When looking back over the past 2 years, do you think that the services/ support offered by peer educators has improved, remained the same or diminished?**	*If participants answer that it has improved or diminished, ask why they think so*
10	**Community mobilisation**	
	Now, I wanted to talk about how FSW are organised in your community.	
10.1	**Is there some type of group here in (XXX) that represents FSW and defends their rights, that you now of?**	*If yes:* • *Let the participants explain what group this is* • *Ask who are the members of this group* • *Ask what their relationship with this group is* • *Ask how this group defends their rights*
10.2	**Are you satisfied with how the rights of FSW are defended here in (XXX)?**	*If not:* • *Why not?* • *What could be done to improve it?*
10.3	**When looking back over the past 2 years, do you think FSW are now better represented, worse represented than 2 years ago, or is the situation the same?**	*If participants answer better or worse, ask why they think so*
11	**Conclusion**	

	We are almost finished. I just have a few more questions before we end	
11.1	**Looking back at what we have discussed, what do you think would help FSW in getting appropriate health services?**	
11.2	**What is the most important need that still has not been sufficiently addressed?**	
11.3	**Do you have any questions for me about anything we have discussed?**	
11.4	**Is there anything else you would like to share?**	

This is the end of the focus group discussion. Thank you so much for sharing your ideas with us. Do you have any questions, or is there anything that you would like to add before we end?

Please could you remain behind after the group dissolves to answer a brief questionnaire about your socio-demographic background.

If you have further thoughts about any of the issues we discussed today, please call XXX, the Principal Investigator of the study for XXX, whose details are on the information sheet that you have been given.

Diagonal Interventions to Fast Forward Enhanced Reproductive Health (DIFFER)

FOCUS GROUP DISCUSSION: SOCIO-DEMOGRAPHIC QUESTIONNAIRE

Focus Group Identification Number:	Date: (dd/mm/yy)
Facilitator Name:	

Please circle the correct answer or fill in the blank where appropriate.

	QUESTIONS	CODING CATEGORY	SKIP
1	How old were you at your last birthday?	_____ (Age in years)	
2	What is the highest level of education you have **completed**?	None = 1 Primary school education = 2 Some secondary school education (but not matric) = 3 Matric = 4 Tertiary education = 5 Other (specify)_____ = 77	
3	How old were you when you first began to sell sex?	_____ Years old	
4	Where do you mostly sell sex? (Circle as many as applicable)	Bar or Club = 1 Shebeen = 2 Escort/Massage Agency = 3 Brothel = 4 Hotel/Motel = 5 Street = 6 At home = 7 Other(specify)_____ = 77	
5	Do you currently have a source of income aside from sex work?	Yes = 1 No = 2 Sometimes = 3 Not sure = 88	→Go to Q6 →Go to Q7 →Go to Q6 →Go to Q7
6	How often do you make this additional income (aside from sex work)?	Four or more times a week = 1 One to three times a week = 2 A few days a month = 3 Not on a regular basis = 4 Other(specify)_____ = 77	
7	How many times have you been pregnant?	Number: _____	
8	How many children have you given birth to?	Number: _____	
9	How many people are you supporting financially? (incl. children)	Number: _____	
10	In total, with how many different men have you had sexual intercourse [vaginal or anal sex] in the past <u>week</u>?	Number: _____ Don't know = 88	
11	In total, with how many different men have you had sexual intercourse in the past <u>month</u>? If you don't remember, give your best estimate.	Number: _____ Don't know = 88	
12	Of these (answered in Q11), how many were regular non-paying male partners (husband, boyfriend, or live-in-partner)?	Number: _____ Don't know = 88	
13	Of these (answered in Q11), how many were other non-paying partners (casual partners, one-night-stands)?	Number: _____ Don't know = 88	
14	Of these (answered in Q11), how many were paying sexual partners (clients)?	Number: _____ Don't know = 88	

Thank you for your participation in this study! We appreciate your input and time.

Annex 3: Key Informant Interview Guide

Diagonal Interventions to fast Forward Enhanced Reproductive Health (DIFFER)

KEY INFORMANT INTERVIEW GUIDE FOR MEMBERS OF POLICY AND COMMUNITY ADVISORY BOARDS

Discussion/ Interview Identification Number:	
Facilitator/ interviewer:	
Note taker:	
Date of Discussion/ Interview (date/month/year):	
Start Time:	
Stop Time:	
Tape Check Performed by:	
Transcriber:	
Transcription Date (date/month/year):	

PREAMBLE: Thank you for agreeing to participate in this discussion/interview. Our discussion today will be completely confidential. We appreciate the time you are giving us to discuss and share information around the DIFFER interventions.

At the end of the discussion/interview, please could you stay behind to complete a short questionnaire on your background details.

The DIFFER intervention has now been ongoing for XX months and we have reached the stage that we want to evaluate its performance. The objectives of this evaluation are to assess if the intervention is feasible/ practicable; appropriate, relevant and in accordance with national policies and guidelines; sustainable, both financially and institutionally; effective in improving access to, and use of, SRH care services, in particular for FSW, and in reducing stigmatisation of FSWs; the cost-effective and equitable.

The evaluation comprises several components, such as a cross-sectional survey and focus group discussions with female sex workers, the analysis of service statistics and costs, and interviews of SRH care users. An essential component is the feedback of people who have an important role in either designing policies and strategies, or managing programmes of SRH service provision, and ensuring access for vulnerable populations to these services. We therefore have a series of questions we would like to address with you.

	LEAD QUESTIONS	SECONDARY QUESTIONS & PROBES
SECTION 1. FEASIBILITY OF THE INTERVENTION		
	The first question we want to address relates to the feasibility/ practicability of the intervention.	
1.1	**What is your appreciation of the feasibility of the interventions that were developed in the context of the DIFFER project. Are they operationally and technically feasible (possible to implement), taking into account the constraints of the health systems and the community response capacity?**	If not covered sufficiently, **PROBE for** the following intervention components (but do not ask about each specifically): • Peer outreach • Community mobilisation • Targeted clinical services • Linkages with general SRH services • Strengthening general SRH services
1.2	**Is it legally feasible? Does the country's legislation and regulations allow the provision of the designed package of interventions?**	If not covered sufficiently, **PROBE for** legislation on: • Legislation on sex work/ soliciting SW clients • Legislation on termination of pregnancy
SECTION 2: APPROPRIATENESS AND RELEVANCE		
	What about the appropriateness of the intervention.	
2.1	**Is the intervention coherent with the national policies, strategies and operational guidelines?**	If not covered sufficiently, **PROBE for** the following intervention components: • Peer outreach • Community mobilisation • Targeted clinical services • Linkages with general SRH services • Strengthening general SRH services If certain components are not in accordance with national policies, explore what exactly is not in accordance.
2.2	**To your knowledge, do national policy and decision makers endorse this**	If it is said that some policy makers do not endorse the intervention, explore

	LEAD QUESTIONS	SECONDARY QUESTIONS & PROBES
	intervention?	why not.
2.3	**Is the package of interventions, to your knowledge, acceptable for local health managers, health providers and community workers? Do the health care providers and community workers endorse the intervention?**	If not covered sufficiently, **PROBE for** the following intervention components: • Peer outreach • Community mobilisation • Targeted clinical services • Linkages with general SRH services • Strengthening general SRH services If it is said that some do not endorse the intervention, explore why not.
2.4	**Do you have any information if the package of interventions is acceptable for the users/ beneficiaries?**	If it is said that it is not, explore why not.
2.5	**According to you, does the package of interventions respond to the needs of the target populations, in particular to the needs of FSW? Are there any outstanding gaps that were not sufficiently addressed by the project?**	If it is said that it is not, explore why not.
	SECTION 3: SUSTAINABILITY AND SCALABILITY	
	Now, let us address the sustainability of the intervention.	
3.1	**Let's first address FINANCIAL sustainability. According to you, can the intervention be sustained financially beyond the duration of the project, without continued support by the project?** *(Note: With financial sustainability we mean that funds can be guaranteed for the implementation of the interventions beyond the duration of the DIFFER project)*	If not covered sufficiently, **PROBE for** the following intervention components: • Peer outreach • Community mobilisation • Targeted clinical services • Linkages with general SRH services • Strengthening general SRH services If it is said not, explore why not. Explore in particular: • Government funding options • Long-term funding by international agencies

	LEAD QUESTIONS	SECONDARY QUESTIONS & PROBES
		• Public-private partnerships • User fees
3.2	**What about INSTITUTIONAL sustainability. Can the intervention be sustained institutionally over a long time period within the current health care and community systems?** *(Note: With institutional sustainability we mean that the implementation of the interventions can be continued without the current institutional support provided as part of the DIFFER project)*	If it is said not, explore why not. Explore in particular: • Institutional capacity of the public health system to continue supporting the interventions • Institutional capacity among non-governmental organisations
3.3	**Do you think the intervention can be scaled up or replicated elsewhere in the country?**	If not, explore why not
CONCLUSION		
	This is the end of our interview. Thank you so much for answering the questions and giving input into this project. Do you have any questions, or is there anything that you would like to add before we end?	