



POPULATION AND HEALTH RESEARCH INSTITUTE
&
PROGRAMME NATIONAL DE SANTE DE L'ADOLESCENT



Situation Analysis for Delivering Integrated Comprehensive Sexual and Reproductive Health Services for displaced population of Kasai, Democratic Republic of Congo



Miabi general referral hospital

RESEARCH REPORT

KINSHASA, JUNE 2020

*In memory of Parfait Gahungu Ndongu passed away
on May 21, 2020 during the finalization of this document.*

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The findings and conclusions in this report are those of the authors and do not necessarily reflect positions nor policies of the donor.

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ACRONYMS

ANC	Antenatal care
AIDS	Acquired Immunodeficiency Syndrome
CHW	Community Health Workers
CSO	Civil Society Organizations
DHS	Demographic and Health Survey
DRC	Democratic Republic of Congo
ECSA-HC	East, Central and Southern Africa Health Community
ECOWAS	Economic Community of West African States
FGD	Focus group Discussion
FP	Family planning
GBV	Gender-based violence
HDMIS	Harmonization of Health Data Management Information System
HIV	Human immunodeficiency virus
HP	Health providers
ICSRHS	Integrated Comprehensive Sexual and Reproductive Health Services
IEC	Information Education and Communication
KAP	Knowledge, Attitudes and Practices
KII	Key Informant Interview
MoPH	Ministry of Public Health
NGO	Non-Governmental Organizations
PI	Principal investigator
PHERI	Population and Health Research Institute
PNC	Post natal care
PNSA	Programme National sur la Santé des Adolescents
PHC	Primary Health Care
SOC	Scientific Oversight Committee
SC-VBG	Sous-Cluster sur les violences basées sur le genre
SRH	Sexual and Reproductive Health
SRHRS	Sexual and Reproductive Health Right
SRHRS	Sexual and Reproductive Health Right services
SRHS	Sexual and Reproductive Health Services
STI	Sexually Transmitted Infection
UNFPA	United Nations Population Fund
VBG	Violences Basées sur le Genre
WHO	World Health Organization

EXECUTIVE SUMMARY

Introduction

Delivering integrated sexual and reproductive health services (SRHS) in emergencies is important to save lives as well as to combat poverty, inequities and social injustice. It is estimated that more than 60% of preventable maternal deaths occur in conflict areas among displaced and refugee population. Between 2016 and 2018, unprecedented violence erupted in the Kasai region, in the Democratic Republic of Congo (DRC), the Kamuina Nsapu Insurgency. This study aimed to: assess the availability of SRHS in the displaced camps in the three provinces (Kasai, Kasai Central and Kasai Orientale); Evaluate the SRHS needs among women of reproductive age (12-49); Explore sexual and reproductive health rights (SRHR) aspects of women, including adolescent girls in this humanitarian crisis context; Identify barriers and challenges in the field of SRH; and describe current provider's capacity to provide SRH services (including health workers capacity and other issues as specified as well).

Methodology

The situation analysis consisted of a mixed study design combining quantitative and qualitative research. Quantitative data collected information from 1,440 households, 2,297 women of reproductive age (12-49), 41 health facilities and 67 health care providers. Qualitative data included 30 key informant interviews (KIIs) and 12 focus group discussions (FGDs): six with young people (15-24) and six with adult people (25&+). Quantitative data analysis combined chi-square test and analysis of proportions, whereas qualitative data analysis included content and thematic analyses.

Key Findings

Characteristics of participants

The large majority of households were headed by a man. On average, there were 2.3 sleeping rooms per household compared to 6.6 people per household on average. The mean duration of staying in the current village was 20 months (1 year and 8 months).

Adolescent girls represented 35% of respondents. About half of women were in union (married or living together) and about 55% women ever gave birth. Among the respondents interviewed, 31% attended at least secondary schools whereas 50% never attended school.

Of the 41 health facilities surveyed, the majority of the health facilities (73%) were Health/Post centers and 15% were Referral hospitals/ Referral Health Centers. Health facilities managed by Non-Governmental Organizations (NGO) and private represented 46% of the sample, whereas public institutions and Faith-based health facilities represented 27% respectively. Nearly half of health facilities (46%) reported receiving financial support from the Government, whereas 29% relied only on funding from patients. All institutions were operating at 24 hours daily.

The majority of health services' providers (58% of 67 surveyed) were men, 27% were less than 30 years of age and 30% were 40 or above, and 79% were nurses. Medical doctors (specialists and generalist) represented only 4% of health services' providers.

The majority of Key Informants (18 out of 30) were 40 years of age or older and attended college or university.

FGDs conducted with young men included 28 participants, of which 18 were adolescents (under 20). All interviewed men were students, among which 24 were enrolled in secondary school and four were enrolled at the college or university. The FGDs with the Young females included 27 participants, among which 20 were adolescents (under 20) and almost all were enrolled in secondary school.

FGDs with Adults comprised of 28 men aged (25-59) and 28 females aged (25-49). The majority of the male participants were more than 34 years of age, while, for the women, the large majority of females (20 out of 28) were aged between 25-34 years.

Sexual and reproductive health needs

Almost all stakeholders identified unintended pregnancies, low utilization of family planning methods (cause of unintended pregnancies) and abortion (consequence of unintended pregnancies, especially among adolescents) as the main sexual and reproductive health problems for the displaced women in the Kasai region.

Out of 802 adolescent girls (aged 12-19) surveyed, 60.1% (482) ever had menstruation, among whom 71% reported having at least one or more symptoms during menstruation.

The large majority of displaced women (85%) who reported a recent pregnancy in the survey from the three sites reported experiencing one or more complications during pregnancy and 20% experienced complications during delivery. The most common delivery-related complications included: fever (61%), heavy bleeding (49%) and prolong labor (41%). The prevalence of these problems differed by age and province of residence.

The large majority of surveyed women reported to have ever heard about STIs (77%), whereas, 34% of participants reported ever had a history of STIs. The most commonly reported STI symptoms, included vaginal itching (17%), burning urination (15%), painful urination (13%), pelvic pain (12%), rash in the genital area and pain during sexual intercourse (10%).

The most common SRH problems reported by men and adolescent boys were sexually transmitted infections and HIV.

Sexual and reproductive health seeking behaviors

Menstrual health and hygiene

Among adolescents who had menstruation, 74% were using clothing as absorbent, while only 17% reported using sanitary hygiene pads. About one adolescent in five (20%) who experienced physical symptoms during menstruation used self-medication to treat physical symptoms and 30% did not consult with any person to manage their physical symptoms during menstruation.

Antenatal Care

403 of the women in the sampled reported to have given birth since their arrival in Kasai. Of these, 66% reported receiving at least one ANC visit. However, only 20% of these women reported receiving at least four ANC visits. The most common services received during ANC included measurements of: weight (71%), height and blood pressure (59%) and uterine height (54%). Only, 11% of participants who received ANC obtained ultrasound services during ANC.

Delivery Care

Overall, 84% of women delivered in health facilities, with the highest proportion in Kasai Central (88%) and the lowest percentage in Kasai (79%). The proportion of women who gave birth in a health facility was slightly higher among adolescent girls (90%) compared to adult women (84%). Only 2.5% of the women reported having a Caesarian section delivery.

Postnatal Care

Overall, 56% of women who gave birth received PNC. This proportion was higher among women living in Kasai Oriental and lower among adolescent mothers and women living in the Kasai province. For the majority of women (95%), PNC was received at a health facility.

Family planning (FP)

51% of the women in the survey reported to have ever heard about at least one family planning method. Of these methods, the most commonly known methods were: Condoms (39%), pills (29%), implants (28%) and injection (25%). Sterilization (male and female) and emergency contraception were least known. Overall, current use of any family planning method was 17%, ranging from as low of 9% among adolescents to as high as 21% among adult women. The most common family planning methods used included: condom (6%) followed by injectables (4%), pills (3.5%) and implants (3%). Traditional family planning methods was reported by 7% of participants.

Menstruation regulation (MR)

6% of the surveyed women had practiced menstruation regulation (MR). The different MR methods used included: service provided by health professionals (42%) -mainly at health facility, followed by self-intake of medications (25%) and service rendered by traditional healers (10%).

Healthcare seeking behavior for STI symptoms

Out of 753 women who reported ever experiencing STIs-related symptoms, 41% sought care, and of whom 77% sought care at health facilities. Whereas 88% of the surveyed women reported to have ever heard about HIV/AIDS, only 6% of sexually active

women got an HIV test. Out of 114 women who got HIV test, the large majority (85%) knew their HIV status during the survey.

Availability of resources

Human resources

Among the 41 surveyed health facilities, a total of 13 facilities had at least one full time Medical Doctor. All (6) reference hospital and refence health center had at least one full time medical doctor as required by the Government. A total of 138 Nurses were working in the 41 health facilities surveyed during data collection, among whom 122 were full time staff. A total of 34 Trained birth attendants (TBAs) and 15 midwives were working in the 41 health facilities during data collection of this study. A total of 16 out of 41 health facilities had at least a one laboratory technician.

A maximum of 14 facilities out of 41 (34%) had health workers trained on Helping Babies Breathe; five facilities had staff trained on “Helping Mothers Survive” and on “Clinical Management of Rape (CMR)” while four health facilities had their health workers trained on “management of domestic violence”. Only three health facilities out of 41 surveyed (7%) had their staff trained on “Psychological First Aid or Psychosocial Support” after rape and two health facilities had their staff trained on emergency response. Nursing supervisors and Nurses received all these trainings. Medical Doctors also received most of these the trainings available.

The most common training reported was on how to perform HIV testing (31%) followed by nutrition for mother and newborn (24%), counselling on family planning (20%) and HIV screening during ANC (19%).

Infrastructure

The large majority of health facilities (88%) had separate spaces allocated for medicine dispensing, Consultant's room (93%), labor room (90%) and Maternity OPD (90%). A total of 24 (58%) facilities reported that they have patient's waiting room, 44% had an ANC/PNC room and 42% had a Laboratory for tests. Five out of six referral hospitals had a general operation room. However, none of the facilities had an ambulance. Only 1 out of 6 referral hospital and two out of 35 health centers had separate emergency rooms to manage the emergency patient care. Likewise, only one referral hospital and one health

centers had an ultrasound, two referral hospital and one health center had blood transfusion room, two health centers had a breastfeeding room. The majority of the facilities (71% or plus) reported having good waste management systems within their capacity.

Availability of Sexual and Reproductive Health services

Antenatal Care

Almost all (90% or above) who were providing ANC, were performing most of the required physical examinations ANC, ie: maternal weight (90.2%), blood pressure (98%), edema (95%) fundal height (100%), foetal heartbeat (98%). However, only two referral hospitals and 2 health centers were performing ultra-sonograms.

Delivery and Postnatal Care

The large majority of the surveyed health facilities (90% or plus) reported that they were providing post-natal care, which included: counselling on breastfeeding, maternal Immunization, essential new born care and post-natal clinical history for fever. Four referral hospitals out of six and seven health centers out of 35 were able to perform caesarean section (27%). Four referral hospitals and 6 health centers were able to manage deliveries requiring vacuum extraction assistance; Five referral hospitals were performing blood transfusion and to identify and manage of puerperal psychosis. Only two health centers were able to perform blood transfusion, while 8 health centers were able to identify and manage of puerperal psychosis.

Availability of family planning and other SRH services

Majority (more than 70%) of health facilities were providing modern contraceptive methods, including male and female condoms, implants, injectable and pills. However, only one referral hospital and one health center were providing vasectomy; two referral hospitals and two health centers were performing tubectomy.

Almost all reference general hospitals were managing sexually transmitted Infections, including HIV/AIDS. However, only two out of five health post (other centers) were able to manage STIs and HIV cases.

Few health facilities (15%) were performing menstrual regulation. However, majority of surveyed health facilities were providing post-abortion care (51%) and managing miscarriage cases (68%).

Less than 50% of health facilities were equipped to provide post-rape cases. Only eight health facilities out of 41 surveyed (19%) had written protocol/ SOP for provision of clinical management of rape.

This study found that more than 50% of health facilities had specific adolescent friendly health services available.

Sexual and reproductive health kits

Majority of health facilities reported ever received condoms kits (66%), Injectables (63%) and oral contraception kits (56%). However, less than 10% reported ever received Referral level kit for reproductive health (7%), blood transfusion kits and vacuum extraction delivery kits (5%).

Barriers and challenges in the field of SRH

Overall, three major barriers to using SRHS were of concern to women in this research, these included: “did not feel the necessity of using SRHS” (42%), unawareness of the services (19%) and lack of money (10%).

Barriers to use Antenatal Care (ANC)

Lack of financial resources was the main reason behind why (22%) some displaced women did not attend ANC, followed by lack of feeling the necessity to attend ANC (7%) or ignorance of the location of such services (5%).

Barriers to use SRHS during pregnancy and for delivery

About 20% of women did not have enough financial resources to attend health facility during pregnancy or did not feel necessity of attending health facility despite complications during pregnancy. The main reasons behind why women delivered in a non-hospital-based setting included lack of money to attend facilities (58%) and distance to health facility (23%).

Barriers to use PNC

Similarly, for women who did not receive postnatal care, this was also due to the lack of financial resources (40%) and their perception that postnatal care was not necessary (40%).

Lack of financial resources was also reported as the main reason why women did not seek menstrual regulation care (39%) or care for STI (28%); while 38% of women did not feel necessity of seeking MR services (38%) at health facilities or to attend health facility when they observed STI symptoms (34%).

Areas of Improvement

To increase access to and use of Sexual and Reproductive Health and Rights (SRHR) in the Kasai region, stakeholders and participants to the study suggested conducting the following activities:

- Sensitization and community mobilization to improve the use SRHS
- Reduce the cost of health care or promote free access to SRHS to women of reproductive age.
- Increase the number of equipped health facilities in the region.
- Regular training of health staff and increase number of medical doctors.

Conclusion

In conclusion, the results of this assessment indicated that the majority of displaced women of reproductive health in Kasai are exposed to and at risk of poor SRH outcomes, including unintended (often) pregnancy, Gender-based violence (GBV), STIs and risk of maternal morbidity and mortality. Effective actions to address these SRH needs of women of girls require community sensitization and mobilization to increase awareness of SRH issues, raise women's interests as well as trust to use the needed SRHS and empower institutional and individual capacity-building activities to improve the quality and availability of the SRHS.

Furthermore, findings indicate that it is essential for the government to create more health facilities, adequately equip existing health facilities as well as improve financial accessibility to services (including to access to free SRH primary care).

INTRODUCTION

Delivering integrated sexual and reproductive health services (SRHS) in emergencies is important not only to save lives but also to combat poverty and social injustice. More than 60% of preventable maternal deaths occur in conflict areas and among the displaced (World Health Organization (WHO), 2019).

Between 2016 and 2018, unprecedented violence erupted in the Kasai region, in the Democratic Republic of Congo (DRC), the Kamuina Nsapu Insurgency. Medias, Civil Society Organizations (CSO) and Non-Governmental Organizations (NGO) reported massacres, public executions, rapes. During this period, about three million women and adolescent girls have been forced to be displaced; and faced several sexual and reproductive health challenges. Between August 2016 and May 2017, the “Sous-Cluster sur les violences basées sur le genre (SC-VBG)” in DRC (2017) resulted in 1,429 reported GBV incidents in the 49 service delivery points in the provinces of Kasai, Kasai Central and Kasai Oriental. Rape cases represented 79% of reported incidents, whereas sexual assault and forced marriage represented respectively 11% and 4% of the reported Gender Based Violence (GBV) among women and adolescent girls (Sous-Cluster sur les violences basées sur le genre (SC-VBG) en République Démocratique du Congo, 2017).

Against this background, the world health organization (WHO) and its partners through the Health Cluster, are working in three countries, among which is the Kasai region in the Democratic Republic of Congo, to strengthen the capacity of health cluster partners and local health providers to enhance provision and delivery of SRHR services as well as to reduce unmet needs. In the Kasai region, about three million women and adolescent girls were displaced due to the Kamuina Nsapu crisis, as already indicated. The 2013 Demographic and Health Survey (DHS), conducted before the Kamuina Nsapu crisis, reported poor reproductive health indicators in Kasai (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014). This region has the highest fertility rates nationally (8 children per women versus the national average of 6.6 children per woman), as well as, significantly lower modern contraceptive prevalence (6%) and relatively low unmet needs for FP (20% compared to the national average estimated at 28%).

An SRH services and outcomes assessment is essential to identify gaps regarding SRH services availability, SRH needs and outcomes among women and adolescent girls living in the displaced camps of the Kasai region (Kasai, Kasai Central and Kasai Oriental) in DRC. This assessment aimed to: assess the availability of SRHS in the displaced camps in the three provinces; Evaluate the SRHS needs among women of reproductive (12-49); Explore sexual and reproductive health rights (SRHR) aspects of women, including adolescent girls in this humanitarian crisis context; Identify barriers and challenges in the field of SRH; and describe current health system's capacity to provide SRH services (including health workers capacity).

In light of this, this report provides an overview of the status of sexual and reproductive needs and available SRH services in Kasai, Kasai Central and Kasai Oriental. The document summarizes key findings in terms of SRHR needs, availability of SRH services and barriers to use SRH services. The information presented here is hoped to provide WHO, DRC policy-makers and other international, regional and national stakeholders with a better understanding of the SRH needs in the Kasai. It is hoped that the results observed shape the needed improvements to enhance the quality and effectiveness of SRH services delivery, quality and response.

This report is divided into eight main sections. The first section of this report covers the design and methodology adopted for this study, which revolved around triangulating both the quantitative and qualitative data. The quantitative research data included information from 1,440 households, 2,213 women of reproductive age (12-49), 41 health facilities and 67 health providers. The qualitative research data included 30 KIIs and 12 FGDs, four per province (one with young male, one with young female, one with male 25 and plus, and one with female aged 25 and plus). This section also describes the data analysis methods employed, encompassing chi-square and analysis of proportion for quantitative data; and content and thematic analyses for qualitative data.

The second section describes the demographic profile and socioeconomic characteristics of the different populations of this assessment. The third section focuses on perceived SRH needs. The fourth section describes SRH seeking behaviours across the three sites. Section five describes the SRH related resources and needs (human resources & Infrastructure)

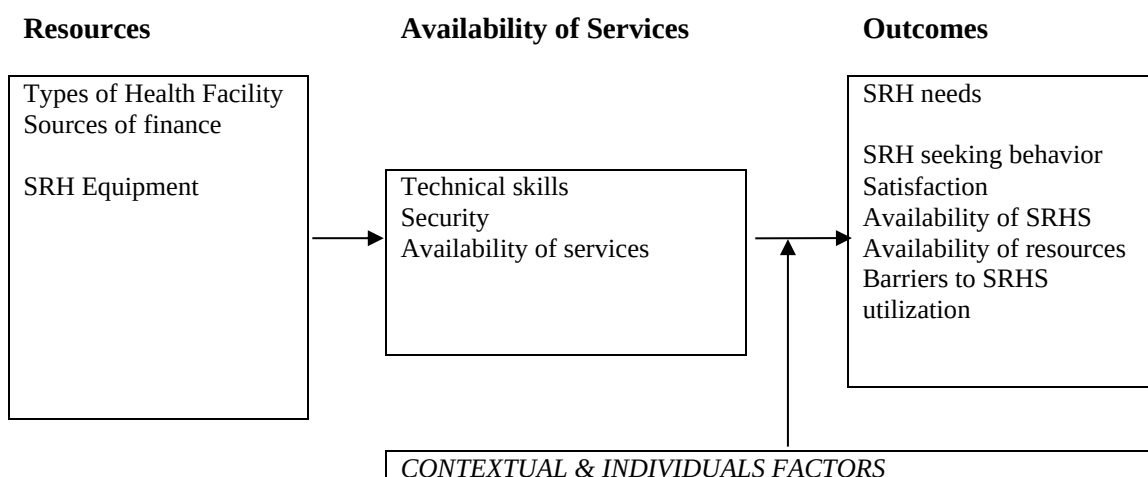
across the three sites and focuses on: (1) Human resources: background, training and availability- across the three sites; and (2) Infrastructure (Operations, disposal of medical waste, type of SRH services, availability of RH kits, etc) - across the three sites. The sixth section describes the overall women's and adolescent girls' experiences with the health system/facilities and barriers to service use; Section seven discusses key findings focusing on patterns across the three sites, gaps, and study limitations. The last section of this report provides a set of key recommendations aligned with the result sections, coupled with a conclusion summarizing key findings and recommendations.

I. METHODOLOGY

1.1 Conceptual framework

The situation analysis consisted of a mixed-methods study design combining quantitative and qualitative research in Kasai among displaced women of reproductive aged (12-49) and relevant stakeholders. The study used secondary and primary data, and combined community-based surveys with data from health facilities. Figure 1 describes the study conceptual framework adapted from « Clinic-Based Family Planning and Reproductive Health Services in Africa» (Miller et al, 1998).

Figure 1: Conceptual Framework



To note, each component of the conceptual framework is in line with the study objectives.

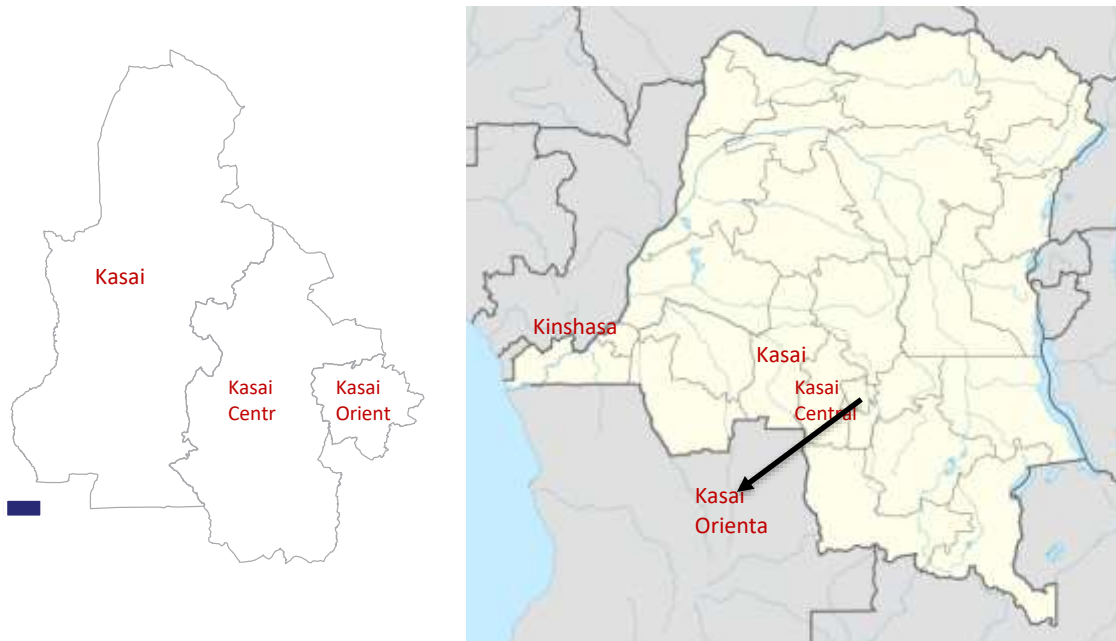
1.2. Study Site

This assessment, as noted, was conducted in three provinces: Kasai, Kasai central and Kasai Oriental. Figure 2 presents the study location, while Table 1 describes the study context, including sexual and reproductive health indicators.

Overall, the status of many of the SRH indicators in the Kasai region were within the national average, with few exceptions as they pertain to (See Table 1):

- Proportion of adolescents who begun childbearing were below the national average
- Prevalence of traditional contraceptive methods were above the national average
- Percentage of women who received advices on pregnancy danger' signs and proportion of women who ever got HIV test were below the national average.

Figure 2 – Map of the Kasai region (Kasai, Kasai central and Kasai oriental)



The province of Kasai has an area of 95,631 km². It has an estimated population of three million in 2017 (Institut National de la Statistique (INS), 2017), of which approximately 40% are displaced. It includes five territories: Dekese, Ilebo, Luebo, Kamonia and Mweka. The city of Tshikapa is its capital town. It has 18 health zones, among which 11 were affected by the Kamwina Nsapu conflict (Sous-Cluster sur les violences basées sur le genre (SC-VBG) en République Démocratique du Congo, 2017).

Table 1 – Sexual and reproductive health indicators in Kasai, Kasai central and Kasai oriental

Indicators	Kasai	Kasai central	Kasai oriental	DRC
Area(km ²)	95,631	59,111	9,545	2,345,409
Population (millions)	4.0	4.0	5.0	92.0
Adolescents who ever begun childbearing	24.9	23.1	18.8	27.2
Have ever heard about at least one family planning method	91.6	94.6	95.5	93.0
Have ever heard about any modern method	79.4	92.9	91.8	89.9
Prevalence of traditional contraception	22.4	12.3	5.7	12.6
Prevalence of modern contraception	6.7	6.3	5.8	7.8
Prevalence of condom	2.1	3.0	2.3	3.4
% of women who did not attend antenatal care (last birth)	11.5	8.6	13.9	9.9
% of women whose weight was measured during ANC	76.0	86.2	91.6	88.7
% of women whose Height was measured during ANC	26.7	36.6	54.9	52.7
% of women whose blood pressure was measured (ANC)	76.7	72.8	70.5	74.5
% of women who received blood test during ANC	53.9	48.3	67.0	62.4
% of women who received Urine analysis during ANC	39.7	25.4	57.5	53.1
% of women who received tetanus vaccine during ANC	57.8	68.0	67.3	65.5
% of women who received advice on danger sign during ANC	36.6	50.1	57.5	62.8
% of women (last birth) who did not receive post-natal care	60.6	43.2	67.2	51.5
Prevalence of sexually transmitted infection (STI)	6.5	5.8	15.3	9.1
% of women who ever heard about HIV	85.5	93.2	97.4	94.0
% of women who ever got HIV test	7.1	16.6	19.8	22.1
% of women who know her HIV status	5.8	14.2	18.6	19.5

Sources: (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014);

In 2013, Kasai province had the highest prevalence of contraceptive use (22% for traditional and 6.7% for modern methods) compared to Kasai central (12.3% and 6% respectively) and Kasai oriental (5.7% and 5.8% respectively). The province had lower SRH indicators compared to other Kasai provinces regarding: (1) HIV prevalence (proportion of women who ever heard about HIV (79%), % who ever got HIV test (7%) or knew their HIV status (6%); (2) Weight was measured for 76% of women compared to 86% and 92% for Kasai central and Kasai oriental respectively during ANC; (3) Height was measured for 27% of women compared to 37% and 55% for Kasai central and Kasai oriental respectively during ANC ; (3) percentage of women who did not received tetanus vaccine was estimated at 58% in Kasai compared to more than 67% in Kasai central and Kasai oriental (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014).

Kasai Central province measures 59,111 km². It had an estimated population of 3.5 million inhabitants in 2017 (Institut National de la Statistique (INS), 2017). This province encompasses the following five territories: Tshimbulu, Demba, Dibaya, Kazumba and Luiza. Kananga is the city capital. The Kasai central province has 26 health zones, of which

24 have been affected by the conflict (Sous-Cluster sur les violences basées sur le genre (SC-VBG) en République Démocratique du Congo, 2017).

Analysis of SRH indicators (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014) shows that Kasai central province had the highest proportion of women who received tetanus vaccine (68%). The province had the lowest proportion of women who did not: (1) attend ANC (9%) compared to Kasai (12%) and Kasai oriental (14%); (2) receive post-natal care (43%) compared to Kasai (60%) and Kasai oriental (67%); and (3) receive urine analysis (25%) compared to Kasai (40%) and Kasai oriental (58%).

Kasai Oriental province has an area of 9,545 km². It had an estimated population of about 3.3 millions in 2017. It includes five territories among which Tshilenge, Lupata pata, Katanda, Miabi and Kabeya Kamwanga. The city of Mbuji Mayi is its chief town. The last two territories were the most affected by the conflict. It has 19 Health Zones (HZs), eight of which were affected by the conflict, ie 50% (Sous-Cluster sur les violences basées sur le genre (SC-VBG) en République Démocratique du Congo, 2017).

Kasai oriental had the lowest prevalence of traditional (6%) and modern (6%) contraception use compared to Kasai (22% for traditional methods and 7% for modern contraception) and Kasai central (12% for traditional methods). The province had the higher proportion of women regarding HIV prevention: 97% of women ever heard about HIV, 20% ever got HIV test and 19% knew their HIV status. Like Kasai central, Kasai oriental had the higher proportion (95%) of women who ever heard about any family planning method compared to Kasai (92%). Proportion of women who did not attend ANC (14%) and those of women who did not receive post-natal care (67%) were higher in Kasai oriental compared to Kasai (12% and 61% respectively) and in Kasai central (9% and 43% respectively). Kasai oriental province had higher proportions of women who got weight and height measurement during ANC (92% and 55% respectively) compared to Kasai (76% and 27% respectively) and Kasai central (86% and 37% respectively). Proportion of women who received blood test (67%), urine analysis (58%) and advice about danger signs during ANC were also higher in Kasai oriental compared to Kasai and Kasai central (See

Table 1). The province had also the higher prevalence of STIs (15%) compared to 6% in the two other provinces.

In particular, in the Kasai province, the major part of the survey was conducted around Tshikapa, the city capital, while in Kasai central, the survey covered the area including Kananga, the city capital. In Kasai oriental, the study was conducted in Miabi health zone. The selection of these assessments sites was made based on the availability of displaced people in the villages and accessibility during the rainy season.

1.3 Data Sources

The study combined qualitative and quantitative research methods. The quantitative arm revolved around community and health facility surveys. The qualitative arm revolved around Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) with key stakeholders and frontline health care providers. Actual data collection was conducted from in October 2019.

1.3.1 Quantitative Surveys

Community-based quantitative survey

The community-based survey included two questionnaires: the household questionnaire (Annex A1) and the woman questionnaire (Annex A2).

The Household Questionnaire includes a cover sheet to identify the household and a form on which all members of the household and visitors are listed (Household Schedule). This form was used to obtain information about each household member, such as: name, sex, age, education, marital status and relationship to the head of household. The household questionnaire was used as well to identify and recruit eligible women for the Woman Questionnaire (Annex 2). Women aged 12-49 years in every selected household, who are members of the household (those that usually live in the household) and visitors (those who do not usually live in the household but who slept there the previous night), were eligible to be interviewed. The Household Questionnaire also collected information on housing characteristics such as type of water source, sanitation facilities, quality of flooring, and ownership of durable goods. The household questionnaire ([Annex A1](#)) was administered to the head of household or any other credible respondent.

The Woman's Questionnaire covered the following sections:

- Background characteristics, Questions covered age, marital status, education, employment, media exposure, place of residence and migration information.
- Reproductive health behavior, Questions covered: dates of all births and pregnancies that did not end in a live birth over the last three years (2016-2019), current pregnancy status, fertility preferences, and future childbearing intentions of each woman of reproductive age (12-49).
- Services utilization, questions covered: antenatal and postnatal care, place of delivery, who attended the delivery, birth weight, and the nature of complications during pregnancy for recent births.
- Family planning, questions covered: knowledge and use of specific contraceptive methods, access source to contraceptive methods, exposure to family planning messages, informed choice, and unmet need for family planning. For women not using contraception, questions are included on knowledge of a source of contraception.
- Menstrual regulation and abortion section
- Sexually transmitted diseases
- Adolescent sexual and reproductive health: questions covered: menstrual health, exposure to comprehensive sexuality education and attitudes toward SRH.

Sampling

An average of 18 villages or enumeration areas (displaced camps) were selected per province to ensure heterogeneity within the province and representativeness of displaced people. The number of villages selected depended on the number of villages where the displaced population tended to cluster in each province. Depending on the size of the selected village, an average of 25 households were randomly selected to ensure representativeness based on a comprehensive household listing.

It should be noted that selecting a fixed number of households per enumeration area, avoids the disadvantage of variable sample sizes per enumeration area but it does not produce a self-weighted sample, particularly, where data are not available. However, there are circumstances under which this method could approximate the results of self-weighted

samples of households, particularly if the measures of size are updated immediately prior to sample selection of EAs.

Box 1 summarizes the list of selected villages in each of three sites of the Kasai province.

BOX 1 – List of surveyed villages per province

Kasaï	Kasaï central	Kasaï Oriental
Bena kasa	Bena Mande	Bakua Kasansa
Brazza	Kambote	Bakua Mukanya
Camp kimbaguiste	Kanyuka	Bena Mbayi
Carriere	Kapanda	Bena Muamba
de la mosquee	Malole	Boyaboya
Kabukabuka	Muamba Mbuyi	Central
Kamwenekele	Ndesha mission	Cinyama
Kananga	Nganza Commune	Commercial
Lusanga	Nganza Muimba	Kankala
Mabondo	Ntambue	Kantundu
Marché centrale	Shatshi Kumba	Komba
Mataba	Tshiawu	Nkongo
Mbumba	Tshilumba	Nsumpi
Medaille	Tshingeshi	Nyikinyiki
Mfuki	Tubuluku	Tshintenta
Mosengo		Tshinyama
Mpokolo		Tshitolo
Sai-sai		
Saint martyr		
Samy 2		
Shayesu		
Tit 1		
Tit 2		

It should as well be indicated that the sampling varied from one site to another in each of the three provinces, depending on the province context (availability of displaced people) and some related field constraints and mainly inaccessibility during the rainy season.

Theoretically, a total of 1,500 households were targeted for the survey, which rendered a final sample 1,483 households, i.e. yielding a coverage rate of 99%. Sample size was determined by employing the following formula:

$$n = \frac{z^2 * pq}{e^2} * DE$$

- z (z-score) is the number of standard deviation (error) by which an estimate is above or below the average, assuming normal distribution. Z has the standard normal distribution with mean zero and variance one, $z \sim N(0,1)$. Given the significance level, α , z-score depends on whether it is a one-sided, $z=F^{(-1)}(1-\alpha)$, or two-sided test (effect), $z=F^{(-1)}(1-\alpha/2)$, where $F(z)$ is the cumulative

distribution function of z . For this study, the significance level, α , is set at 0.05, where z -score for two-sided test is 1.96 and for one-sided test z is 1.645;

- e is the margin of error calculated by multiplying the z -score and the standard error of the estimate. In the above formula, e is fixed based on the level of precision we would like to achieve;
- p is the proportion of women and adolescents (12-49) with SRH needs. In absence of accurate data, this proportion is estimated set at 0.50 (50%);
- q is $1 - p$, proportion of a women and adolescents (12-49) without SRH needs.
- DE is the design effect. The design effect is the ratio of the variance of the estimate under a specific (given) design over the variance of the estimate under the simple random sampling.

Applying this formula with a confidence interval of 95% ($Z=1.96$), a marginal error of 5% (0.05), coupled with a refusal rate of about 10% and design effect of 1.2, rendered an estimated needed sample of a minimum of 480 women of reproductive age (12-49) per site, which was rounded up at 500 women.

Sample size selection ranged from 96.6% in Kasai to 100% in Kasai central and Kasai Oriental (Table 2). The questionnaire completion rates were above 100% for the women survey (121%) for women survey, which meant that more than 1.5 women (aged 12-49) were surveyed per household.

Table 2 - Distribution of the estimated and surveyed samples by province

	Target	Kasai Surveyed	Compl. Rate	Kasai central Surveyed	Compl. Rate	Kasai Oriental Surveyed	Compl. rate	Total Target	Surveyed
Households	500	483	96.6	500	100	500	100	1500	1483
Women*	650*	642	98.8	882	135.7	833	128.2	1950	2357

Note: We assumed that there are about 1.3 women of reproductive health per household

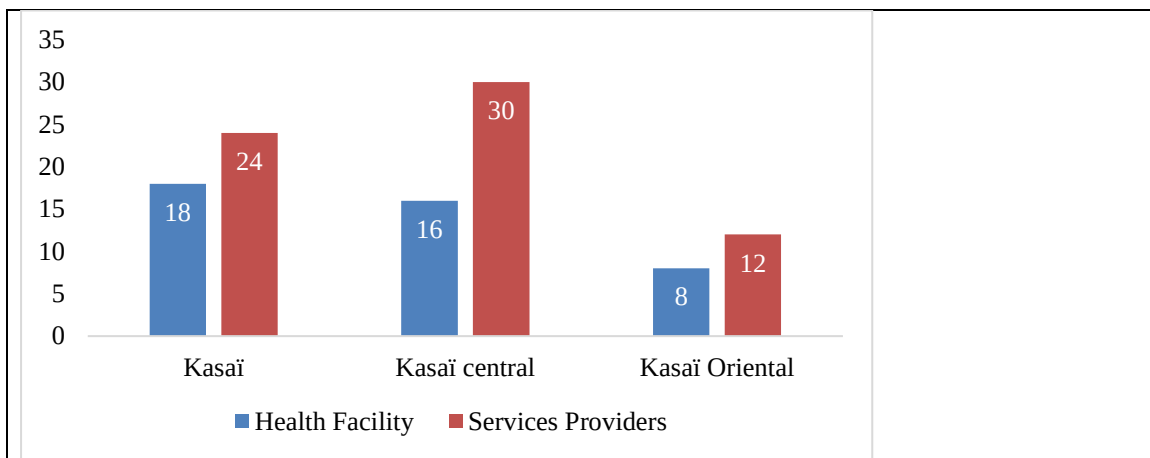
After data cleaning, the total sample size consisted of 1,440 selected households and 2,213 interviewed women of reproductive age (12-49).

In addition to the household and women surveys, facility assessments and health care providers' interviews were conducted.

Facility Audit/ Inventory

The Facility audit (inventory) questionnaire ([Annex B1](#)) was used for these assessments. It aimed to provide general information on the health facility, staffing, availability of SRHS, safety and hygiene, diagnosis of STIs/ HIV, equipment and supplies, the use of SRHS as well as indicators for measuring the quality of care and stock-outs. It also included instructions for questions that fieldworkers needed to ask the facility manager and those for which a simple facility observation needed to be documented. Figure 3 describes the distribution of health facility surveys per province.

Figure 3 – Number of Health facilities and Health care providers surveyed



Note: A health care provider is an individual health professional or a health facility organization licensed to provide health care diagnosis and treatment services, including medication, surgery and medical devices. Health care providers often receive payments for their services rendered from health insurance providers.

A total of 20 health facilities (1 per village) per province was targeted, assuming a minimum of one health facility per village. A total of 41 health facilities (compared to 60 desired for selection) were audited. This number was lower in Kasai oriental (8) compared to Kasai central (15) and Kasai (18). Three factors were attributed to the difference in the number of health facility selected. First, some villages did not have any health facility. Second the conflict has destroyed some health facilities and thus they were not functional. Last, some health providers left the region because of the conflict.

Providers' Interview

The providers' interviews aimed to gather information on providers' characteristics and

qualifications; their perceptions about the program and confidence in training received; experience and perceptions of the service delivery environment; perceived challenges; and future recommendations. In particular, the [health provider's interview questionnaire \(Annex B3\)](#) collected the following information: background characteristics (including education and work experience); General pre-service and in-service training; experience on counselling on family planning services; experience in maternal health; experience in the management of sexually transmitted infections, including HIV/AIDS; availability of diagnostic services and working conditions.

All mid-level providers working in family planning service provision (outpatient clinics; post-partum care; post-abortion care; and other health areas if services are integrated) were eligible for these interviews. We aimed to interview three health providers per health facility to get a total sample of 180 health providers (ie. **60 providers in each site**). This, however, was not possible and the survey collected information from **67** health services providers (ie 37% of the originally desired sample), yielding to an average of 1.6 health services providers per health facility. Low coverage was observed in Kasai Oriental. The main reasons influencing this providers' sample selection were due to low number of health facility covered (41 instead of 60) and the low number of staffs by health facility. Except for general referral hospitals that had more than one health providers, the majority of the other health facilities had only one health service provider and a nurse supervisor.

1.3.2 Qualitative Surveys

The qualitative surveys consisted of 30 KIIs and 12 FGDs. Box 2 summarizes the content of each group and the sampling process for each.

Box 2 - Sampling frame and characteristics for qualitative activities

Activity	Sampling Strategy	Respondent Groups	Estimated Numbers/ site
Key Informant Interviews (KIIs)	Opportunistic/purposive emergent sampling	Influential workers, GBV group, UNFPA & WHO focal points community: religious leaders, teachers, Health Professional (formal and informal, CHWs)	10 people per province
Focus Group Discussions (FGDs): <i>to understand SRHR services, providers (external and internal), violence, young men's role in camp (frustration, stressors), do they use services, cost of services, general expectations from work & life)</i>	Purposive sampling	Males (less than 25; 25-59), Females (Less than 25; 25-49).	4 FGDs per province

The KIIs consisted of semi-structured interviews with principal stakeholders, including religious leaders, SRH implementing partners in the region, and members of civil society organizations (CSOs)). A total of 30 key informants were selected (10 per province/ site). In particular, they included: village leaders, school managers and teachers, health professional, journalists, staff of NGOs working on sexual and reproductive health, religious leaders (priests and pastors), youth leaders, civil society organizations, staff of international organizations (UNFPA, WHO, etc.), males and females. They aimed to provide insights pertaining to SRH service availability and utilization from a broad range of actors.

Their selection was based on the following inclusion criteria: (1) A member of the local community; (2) knowledge and involvement in sexual and reproductive health related activities; (3) a professional or leader of opinion (member of a local or international organization, teacher, community leader, churchmen, etc.); and (4) provided consent for the interview.

In addition, we conducted FGDs with adult male members of the community, mainly because for many of the selected households, they were the main decision makers. Interviewing the adult members of the household was also perceived important because it helps to provide an overview about men's prevailing perceptions around access to SRH services, needs and use among the families. The FGDs also aimed to capture the level of male engagement; inquire about their preferred methods of engagement; and to explore

factors that could enable better participation in FP decision-making and prevention of Gender-based violence, STI/HIV/AIDs. They were also interviewed about their perceptions around the importance of Sexual and Reproductive Health programs, particularly in the Kasai, around: perceived benefits, perceived threats of SRH problems, perceived barriers regarding implementation of SRH and mitigation strategies, and sustainability aspects of SRH programs/ interventions. The FGD guide is found in [Appendix C4](#).

The selection of the focus group participants was based on: age, gender and being displaced from the Kamwina Nsapu conflict. In total, we conducted 12 FGDs, four per province based on age and sex of participants. Two FGDs were conducted with men and two with women. For each, two were conducted with adults and two with youth.

The FGDs were conducted in Tshiluba, the national language spoken in the three Kasai regions (Kasai, Kasai Central and Kasai Oriental). The collected materials were further translated and transcribed from Tshiluba to French using Microsoft Word.

1.4 Data analysis

Quantitative data analysis was conducted using Stata15 (StataCorp, 2015) and revolved around univariate and bivariate analyses (using chi-square and analysis of proportion). All bi-variate statistical analyses were set at 95% confidence interval (CI) or p-value <0.05.

The qualitative component of the study used thematic analysis to examine program content and included both inductive and deductive coding techniques. Data reduction consisted of coding the most central themes, followed by a systematic analysis of related themes using coding matrices to identify relationships. Epi data and Nvivo 12 supported qualitative data analysis process, which included identification of verbatims.

To reduce threats to validity, data analysis strategies encompassed a triangulation approach consisting of a comparison of findings from different data sources (both the qualitative and quantitative) to examine the extent to which evidence converges. This strategy allowed for identifying consistencies and/or inconsistencies within the underlying evidence from literature.

1.5 Ethical considerations

The ethical approval for this study was obtained from the National Ethical Committee, who approved the research protocol and data collection tools on September 13, 2019 (Annex A1). This was followed by the technical approval that was obtained from the Secretary General of the ministry of health that granted authorization to conduct the study in Kasai, Kasai central and Kasai Oriental on September 27, 2019 and was followed by subsequent approvals from provincial heads of the health department to conduct the study in the selected health zones and villages.

All participants in this research provided informed consent. All participants were instructed that they had the full right to participate or decline without losing any benefits or rights. They were also informed that they were free to withdraw from the study at any point, decline from answering questions if they felt uncomfortable. Individual privacy was strictly maintained during data collection. Supervisors and data collectors were properly trained to respect participants' privacy and rights to immediately end the study, if privacy was violated. Confidentiality was maintained at each step of data collection and data analysis. There were no identifiers linked to the individuals' data. All surveys were secured, with access given to the research team only.

1.6 Data quality

In order to ensure data quality, the research team developed and implemented various quality control measures throughout the study process.

The following strategies were used to monitor and preserve data quality standards: (1) the study instruments will be tested to ensure their relevance and validity; (2) All fieldworkers were trained and assessed before actual data collection; (3) Close supervision of fieldworkers; (4) Organization of daily debriefing meeting, including all field staff for sharing experiences, lessons learned and challenges; (5) All data entry clerks were trained and assessed before actual data entry; (6) data entry was performed using software and computer validation programs that allowed for checking the logical consistency of data (7) Both quantitative and qualitative data were reviewed for accuracy, consistency and

completion at the end of each day; (7) analysis of the completeness of information as well as identification of outliers during data cleaning and data analysis.

II. RESULTS

The section summarizes the results of this assessments by describing: the Demographic profile and characteristics of the different samples of this assessment, the SRH needs (across women, girls, men and boys) across the three sites, SRH Health Seeking behaviors (across women, girls, men and boys) across the three sites, SRH related resources (human resources & Infrastructure) across the three sites, and the overall experience with the health system/facilities and barriers to service use.

1. CHARACTERISTICS OF PARTICIPANTS

This section provides an overview of demographic and socioeconomic characteristics of surveyed households, health facilities and population.

1.1 Characteristics of households

A total of 1,483 households were randomly selected in the three Kasai. However, analyses focused on 1,440 households, by eliminating missing values. Table 3 summarizes the distribution of households by selected socio-economic characteristics.

The number of sleeping rooms in the household was used as a proxy indicates for crowding. On average, there were 2.3 sleeping rooms per household. This number ranged from 1.9 in Kasai to 2.4 in Kasai Central and Kasai Oriental. At the same time, there were 6.6 people per household on average, varying from 5.8 in Kasai to 7.2 in Kasai Oriental.

Table 3 – Characteristics of surveyed households

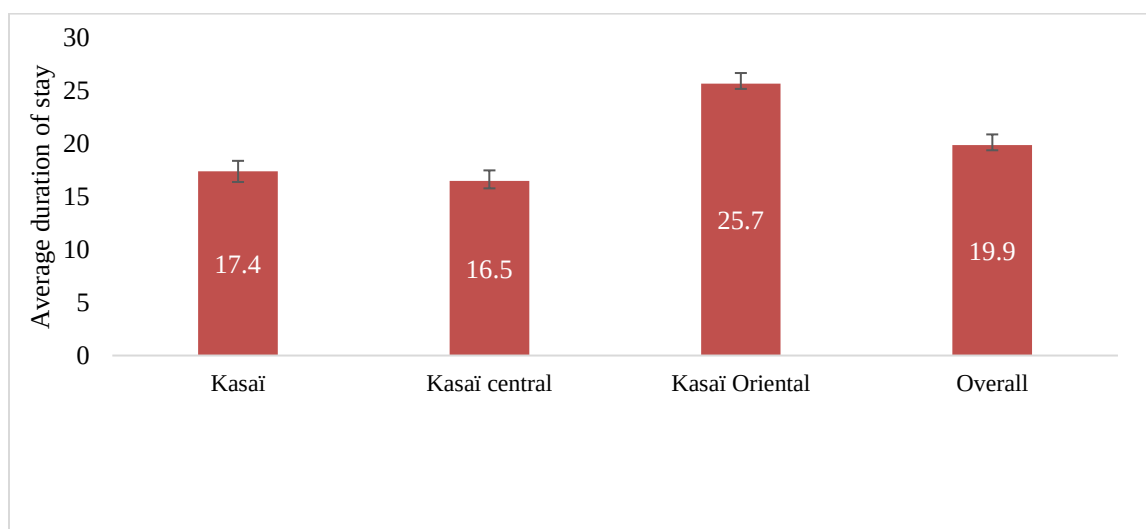
	Kasai	Kasai Central	Kasai Oriental	Total
Total number	469	486	485	1,440
Average sleeping rooms	1.9	2.4	2.4	2.3
Average Number of members	5.8	6.8	7.2	6.6
Walls' materials				
No walls/ rudimentary/ uncovered adobe	42.2	33.9	13.0	29.6
Bricks, Cement blocks, Covered adobe	57.8	66.1	87.0	70.4
Roof materials				
Natural/ Rudimentary	4.9	4.7	0.6	3.4
Zinc/iron sheets/ Ceramic tiles, etc	95.1	95.3	99.4	96.6
Floor materials				
Natural floor (earth/sand/dung, wood)	95.7	89.9	93.6	93.1
Modern material (Cement, vinyl, etc.)	4.3	10.1	6.4	6.9
Sex of head of household				
Male	85.7	87.0	88.2	87.0

Female	14.3	13.0	11.8	13.0
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The above-described household characteristics was used as a proxy measure for socioeconomic status of household members. Overall, Bricks, Cement blocks, covered adobe are the common walls' material (70%). The proportion of households living in rudimentary walls' materials (wood, uncovered adobe) was higher in Kasai (42%) compared to Kasai Central (34%) and Kasai Oriental (13%). The large majority of households (97%) were living in zinc/iron sheet regardless of the province. Among flooring materials, earth and wood are the most common (more than 90% in the three provinces). Modern flooring materials, including cement and vinyl was used in less than 10% of the households, except for Kasai Central. Almost, nine in 10 households were headed by men (87%), a common pattern observed in all the three provinces.

The mean duration of stay in the current village among the displaced was 20 months (1 year and 8 months). Figure 4 describes the average duration of stay in current villages, which ranged from 16.5 months in Kasai central to 25.7 months in Kasai Oriental.

Figure 4 – Duration of stay in the village since settlement



1.2 Characteristics of women

Table 4 describes the distribution of the surveyed women by selected characteristics. More than half of participants were living in union (i.e. married or living together), except in Kasai Central (47%). The majority of surveyed women ever experienced childbearing. The proportion of women who did not have any childbearing experience ranged from 37% in Kasai to 48% in Kasai Oriental. Less than 10% of surveyed women headed their

households, while around 40% were the wives of the head of household. The vast majority of respondents were Christians (Catholic and Pentecostal followed by protestant).

Most women in the Kasai region had some formal education. More than half of respondents in Kasai Oriental never attended school. This proportion was around 44% in the two other provinces. 31% of the participants attended secondary schools (with rates varying from 23% in Kasai Oriental to 39% in Kasai).

While majority of women were involved in some form of income generating activities at the time of data collection, less than 5% (overall) were working in the formal sectors, which centered around farming, manual work and running small business.

Considering the year of arrival in the considered village, Table 4 shows that majority of women in Kasai Oriental (65%) were displaced to their current location in 2017, while in Kasai and Kasai Central, the majority of participants were displaced to their current location in 2017 and 2018.

Table 4 – Characteristics of female participants

Characteristics	Kasaï		Kasaï Central		Kasaï Oriental		Total	
	%	N	%	N	%	N	%	N
Age								
12-14	13.1	83	17.2	144	15.2	125	15.3	352
15-19	15.9	101	18.5	155	23.5	194	19.6	450
20-24	17.1	109	14.7	123	16.7	138	16.1	370
25-29	13.7	87	11.5	96	10.3	85	11.7	268
30-34	12.4	79	13.3	111	10.7	88	12.1	278
35-39	8.2	52	9.5	79	10.6	87	9.5	218
40-44	5.8	37	4.8	40	6.4	53	5.7	130
45-49	10.1	64	5.6	47	5.6	46	6.8	157
Do not know (DKN)	(3.8)	24	4.9	41	(1.1)	9	3.2	74
Marital status								
Never married	28.3	180	39.2	328	44.61	368	38.1	876
Union	64.3	409	51.0	426	47.4	391	53.4	1,226
Divorced/ Separated/ Widow	7.4	47	9.8	82	8.0	66	8.5	195
Parity (Children ever born (CEB))								
0	39.6	252	45.7	382	47.9	395	44.8	1,029
1	5.7	36	4.9	41	4.6	38	5.0	115
2	9.1	58	4.8	40	5.7	47	6.3	145
3	8.7	55	6.7	56	6.7	55	7.2	166
4	6.8	43	8.9	74	6.6	54	7.4	171
5&+	30.2	192	29.1	243	28.6	236	29.2	671
Relationship to Household head								
Head of Household	9.0	57	8.9	74	7.6	63	8.5	194
Spouse	40.4	257	32.1	268	37.9	313	36.5	838
Child/ daughter	32.2	205	47.3	395	37.7	311	39.7	911
Others	18.4	117	11.8	99	16.7	138	15.4	354
Religion								
Catholic	26.1	166	42.2	353	31.6	261	34.0	780
Protestant	15.3	97	13.8	115	12.5	103	13.7	315
Evangelical/Pent	30.4	193	27.0	226	37.2	307	31.6	726
Other Christians	23.3	148	15.6	130	17.5	144	18.4	422
Muslim	5.0	32	(1.4)	12	1.2	10	2.4	54
Education								
No education/DNK	43.9	279	45.3	379	59.3	489	49.9	1,147
Primary	16.8	107	21.5	180	17.1	141	18.6	428
Secondary&+	39.3	250	33.1	277	23.6	195	31.4	722
Occupation								
Unemployed/Household	14.1	86	8.7	68	11.0	89	11.0	243
Farm/Fisher	17.8	109	23.0	179	16.3	132	19.1	420
Fire wood seller	7.0	43	8.9	69	5.6	45	7.1	157
Manual workers	20.3	124	27.7	216	17.2	139	21.8	479
Small business	38.1	233	25.2	196	45.4	368	36.2	797
Modern sector/ Monthly wage labour	(2.8)	17	6.6	51	4.6	37	4.8	105
Year arrived in the village								
2016	9.0	57	3.1	26	10.3	85	7.3	168
2017	35.2	224	32.2	269	64.9	535	44.8	1,028
2018	28.3	180	32.2	269	12.1	100	23.9	549
2019	19.8	126	23.6	197	6.1	50	16.2	373
DNK	7.7	49	9.0	75	6.7	55	7.8	179
Total	100	636	100	836	100	825	100	2,297

() Number < 30. Total number varies because some variables have missing values

1.3 Characteristics of health facilities

The DRC health system has several different types of health facilities that provide different types of healthcare services. These facilities differ in size of catchment area, types of providers, and availability of services. This study intended to target 60 health facilities, and manage to survey 41 of them. Seven health facilities were surveyed in Kasai Oriental compared to 18 and 16 were surveyed respectively in Kasai and Kasai Central.

Table 5 summarizes the characteristics of the surveyed health facilities. Overall, the majority of the health facilities (73%) surveyed were Health/ Post centers and 15% were Referral hospitals/ Health Centers.

Table 5 – Characteristics of surveyed health facilities

	Kasai	Kasai central	Kasai Oriental		Overall
Type					
Referral Hospital/ Referral Health Center	4	1	1	14.6	6
Health/ Post Center	13	14	3	73.2	30
Other Health facilities	1	1	3	12.2	5
Management					
Government	2	7	2	26.8	11
NGO/ private	13	1	5	46.4	19
Faith-based (Confessionals)	3	8	0	26.8	11
External source of finance					
Government/Public	1	15	3	46.3	19
NGO	1	0	1	4.9	2
Private	9	1	2	29.3	12
No external support	7	0	1	19.5	8
Operations days					
7 days	18	16	7	100	41
Operations hours					
24 Hours	18	16	7	100	41
Total	18	16	7	100	41

Health facilities were predominantly managed by either Non-Governmental Organizations or the private sector (represented 46% of the sample); while public, institutions and Faith-based health facilities represented 27% respectively. Nearly half of health facilities (46%) reported receiving financial support from the Government, while 29% relied only on direct self-funding from fees for services. All institutions were operating at 24 hours daily.

This survey also targeted health services' providers. In total, 67 health service providers were surveyed. Table 6 describes the characteristics of health services' providers. The majority of health services providers (58%) were male, 16% were living in Kasai Oriental, 45% in Kasai Central and 39% in Kasai, 27% of the health services providers were 30 years of age or younger and 30% were 40 years of age or above. Sixty-two percent (62%) of the

surveyed health services' providers attended college or university; 79% were nurses while only 4% were medical doctors (specialists and generalist).

Table 6 – Characteristics of health providers

Characteristics	Kasaï %	Kasaï central %	Kasaï Oriental %	Total %	N
Sex					
Male	17	15	7	58.2	39
Female	9	15	4	41.8	28
Age					
<30	6	10	2	26.9	18
30-39	15	10	4	43.3	29
40&+	5	10	5	29.9	20
Education					
Primary		1	0	1.5	1
Secondary	8	10	6	35.8	24
College	15	15	5	52.2	35
University/Medical Doctor & +	3	4	-	10.4	7
Occupation					
Generalist medical doctor	-	2	-	3.0	2
Specialist medical doctor	1	11	-	1.5	1
Nursing professional	16	6	5	47.8	32
Associate degree nurse	9	4	6	31.3	21
Midwifery professional	-	3	-	6.0	4
Enrolled nurse / enrolled midwife	-	-	-	4.5	3
Laboratory technician/assistant	-	2	-	3.0	2
Pharmacist		1	-	1.5	1
Other	-	1	-	1.5	1
Total	26	30	11	100.0	67

1.4 Characteristics of participants to qualitative surveys

Table 7 summarizes the characteristics of the 30 Key Informants interviewed. The majority of participants (18 out of 30) were 40 years of age or older and had either college or university education. Twelve participants (40%) out of the 30 key informants were community mobilization leaders, who worked for either the civil societies or the health zone communities, nine worked in either the education or health sector. Of the sample, 14 (46.7%) had less than five years- experience in their current posts.

Table 7 – Characteristics of Key Informants

Background characteristics	Number
Age	
30-39	12
40-49	11
50& +	7
Education	
Primary	2
Secondary	10
College/ University	18
Occupation	
Health zone Community leaders	6
Leaders of neighbourhood	2
Leaders of Civil society organization	6
Education professionals (Teachers and Head masters)	5
Religious leaders	3
Health services providers	4
International institutions staff: WHO, UNFPA, FAO	3
Journalist	1
Years of Experience	
<5 years	14
5-9	7
10&+	9
Total	30

As indicated, 12 FGDs were conducted in the three Kasai regions. Three FGDs were conducted with young men (less than 25). These included 28 participants, of which 18 were adolescents (under 20). All interviewed men were students, among which 24 were attending to secondary school and four were attending to either college or university.

The FGDs with the young females included 27 female participants, among which 20 were adolescents (under 20) and almost all were in secondary school. Table 8 describes the characteristics of youth participants who participated in the FGDs.

Table 8 – Characteristics of Youth FGDs (aged 15-24) participants

Background characteristics	Male	Female
Age		
15-19	18	20
20-24	10	7
Education		
Primary	-	-
Secondary	24	27
College/ University	4	-
Occupation		
Students	28	26
Others	0	1
Total	28	27

For the FGDs with Adults, these included 28 men aged (25-59) and 28 females aged (25-49). Table 9 summarized the background characteristics of these participants. The majority of the male participants were more than 34 years of age while for the women, the larger majority of females (20 out of 28) were between 25-34 years.

Table 9 – Characteristics of Adult FGDs participants

Background characteristics	Male	Female
Age		
25-34	5	20
35-49	11	8
50&+	12	-
Education		
Primary	1	1
Secondary	16	16
College/ University	11	11
Occupation		
Unemployed/ Household work		6
Agriculture/ Farms	17	-
Small business/ Sales	7	13
Public administration & Teachers	4	-
Other	-	9
Total	28	28

The majority of the men were involved in agriculture; while, for the women, the majority were in small businesses or sales.

2. SEXUAL AND REPRODUCTIVE HEALTH NEEDS

This section describes the main findings for the sexual and reproductive health (SRH) needs among women of reproductive (12-49) and men (15-59) in Kasai, Kasai Central and Kasai Oriental. Specific focus will be made on the SRH needs as they pertain to: safe motherhood, family planning, HIV/AIDS and other sexually transmitted infections (STIs) as well as domestic violence. Data was collected from a random representative sample of 1,440 women of reproductive age and was triangulated with data from the qualitative arms of this research (KIIs and FGDs).

2.1 Sexual and reproductive health needs among women

Almost, all stakeholders conceded that unintended pregnancies, low utilization of family planning methods (cause of unintended pregnancies) and unsafe abortion (consequence of unintended pregnancies, especially among adolescents) were the major sexual and reproductive health problems for women.

“Nowadays girls have pregnancies before marriage because often they trade in sex without using a condom. Then, as soon as they are pregnant out of shame and fear of the parents, their first reflex is abortion” (Man aged 25-59 from Kananga)

Other problems listed included gender-based violence, sexually transmitted infections, both of which were cited to contribute to complications during labor and, thus, lead to increased risks of maternal mortality.

2.1.1 Menstrual Health and Sexual Activity

Menstruation or menses is the natural bodily process of releasing blood and associated matter from the uterus through the vagina as part of the menstrual cycle. It occurs in approximately monthly cycles throughout a woman's reproductive life (12-49), except during pregnancy. Menstruation can affect lives, particularly for adolescents. Indeed, many girls and women experience symptoms (such as crampy, headache, etc) with each monthly period which can affect school attendance and other activities. Furthermore, use of unhygienic menstrual material can lead to infection.

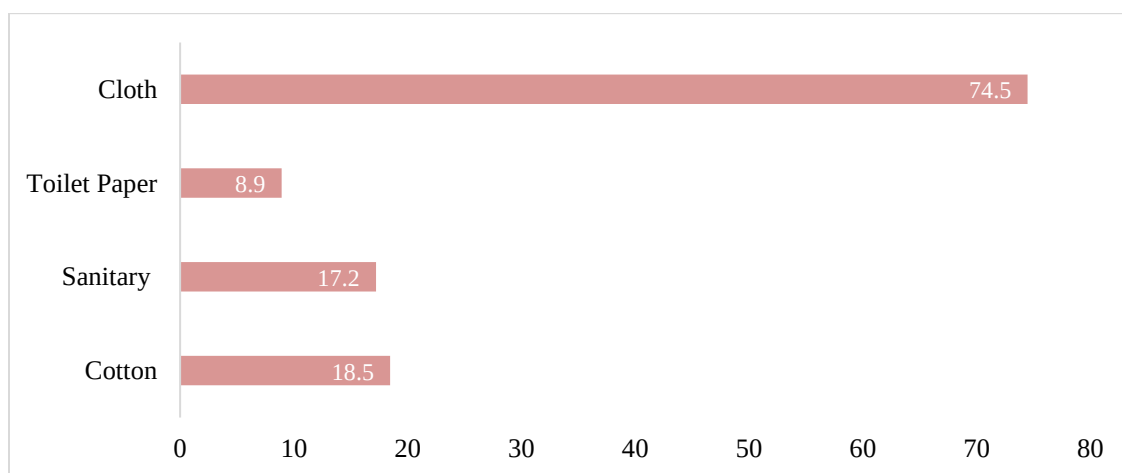
Menstrual health and hygiene (MHH) consist of access to menstrual hygiene products to absorb or collect menstrual blood, privacy to change the materials, and access to facilities

to dispose of used menstrual management materials (Unicef, 2019). It can be particularly challenging for girls and women in developing countries, especially those living in humanitarian context where clean water and toilet facilities are often inadequate.

According to the United Nations, adequate menstrual health and hygiene management is defined as for drinking water, sanitation, and hygiene assume that “*Women and adolescent girls using clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials*” (Unicef, 2019; Sommer & Sahin, 2013).

This section describes menstrual health and hygiene of displaced adolescents in Kasai, Kasai central and Kasai oriental. Out of the total 802 adolescent girls (aged 12-19) surveyed, 60.1% (482) were menstruating, of which 74.5% used clothing as absorbent, followed by 17% using sanitary pads and 18% using cotton. Seventeen percent (17%) of adolescent girls in the sample refused to answer this question. Figure 5 summarizes the distribution of adolescents ever experiencing menstruation by type of absorbents used.

Figure 5 - Use of absorbents during menstruation



These findings are consistent with results of previous studies conducted in low-and-middle incomes countries (LMIC) which reported cloth, sanitary pads and tissue paper as the most commonly used menstrual hygiene products (République Démocratique du Congo.

Ministère de l'Enseignement Primaire, Secondaire et Professionnel et Ministère de la Santé Publique, 2018)Hennegan, et al., 2016; Sumpter & Torondel, 2013; Sommer, et al., 2013).

Table 10 summarizes symptoms observed and care seeking behavior during menstruation period.

Table 10 - Physical symptoms during menstruation and health care seeking behavior among adolescents

	12-14	15-19	Total
<u>Total Number (Denominator)</u>	116	364	480
<u>Physical symptoms during menstruation</u>			
Abdominal pain	47.9	53.4	52.1
Lower back pain	23.1	29.6	28.0
Pain in upper legs and thighs	1.7	5.2	4.4
Nausea	5.1	9.0	8.1
Tiredness	17.1	22.7	21.4
Body-aches	8.6	11.2	10.6
Dizziness	7.7	11.8	10.8
Headache	17.9	17.5	17.6
Joint pain	2.6	3.8	3.5
Tender breasts	17.1	21.4	20.3
Nervousness	5.1	7.9	7.3
No symptoms	33.3	27.1	28.6
<u>Management of physical symptoms during menstruation</u>			
Take rest	35.3	40.5	39.2
Drink warm water	2.6	4.2	3.8
Take hot shower/use a heating pad/heat patch	4.3	5.3	5.1
Self-medication (buy from local drug store)	18.1	21.2	20.5
No measures taken	19.8	18.4	18.8
<u>Consultation for the physical symptoms during menstruation</u>			
Did not consult with anyone	25.9	31.6	30.2
Discussed with mothers/ sisters/ family members	31.3	28.2	28.9
Discussed with husband	-	3.6	3.1
Friends	1.7	5.3	4.4
Health professionals	2.6	3.1	2.9
Others	4.3	2.2	2.7

Seventy-one percent (71%) of the adolescent girls experiencing menstruation, reported at least one or more symptoms during menstruation. Among these adolescents, 39% reported to manage their symptoms by resting (this figure ranged from 35% among the young adolescent girls (12-14) to 40% among the older adolescent (15-19) girls). About one adolescent girl out of five (20%) used self-medication to treat related physical symptoms during menstruation. Furthermore, 30% of adolescent girls did not seek any consultation to manage their physical symptoms during menstruation, while, additional 30% preferred to consult with a family member, mainly their mothers and/or sisters.

These findings support conclusions from literature which stated that the management of physical menstrual symptoms depend on severity of the symptoms and might varies from individual to another (Rapkin, 2005). For some women, changes in lifestyle, taking rest can help relieve menstrual' symptoms, whereas other women consult health service providers for medication (Rapkin, 2005; Daugherty, 1998).

Sexuality, the expression of interest, orientation, and preference, is a normal part of adolescence. Adolescent sexuality includes multiple factors among which development of intimate partnerships, gender identity and sexual orientation (Tulloch & Kaufman, 2013). Adolescent girls' sexual history in the Kasai region is summarized in Table 11. Overall, about one adolescent in three had ever had a boyfriend. This proportion is higher among adolescent girls aged 15-19 (46%) compared to the younger adolescents (12-14).

Table 11 – Adolescents' Sexual History and Behavior

	12-14	15-19	Overall
Ever had a boy friend	9.7	45.6	29.8
Ever kissed on the mouth	3.4	27.3	16.8
Ever hugged	3.7	19.8	12.7
Ever touched our hands	8.0	31.6	21.2
Ever touched breasts	7.4	26.7	18.2
Ever had sexual intercourse	6.3	31.8	20.6
Number	352	450	802

Twenty percent (20%) of adolescents (aged 12-19) reported to be sexually active compared to 32 % for adolescent girls aged 15-19. Findings from the qualitative assessments (FGDs and KIIs) supported the same findings of early initiation of sexual activity among adolescents in the Kasai region.

"Not only girls initiate sexual intercourse early, most of them have sex with several partners, which increases the risk and prevalence of them having STIs/HIV and unwanted pregnancies" (Young girl, Miabi in Kasai Oriental)

It is worth to mention that proportion of adolescents (15-19) who ever had sexual intercourse is lower than 44% reported during the last Demographic and Health Survey (DHS) for the Kasai region (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014).

2.1.2 Pregnancy and Childbearing Experience

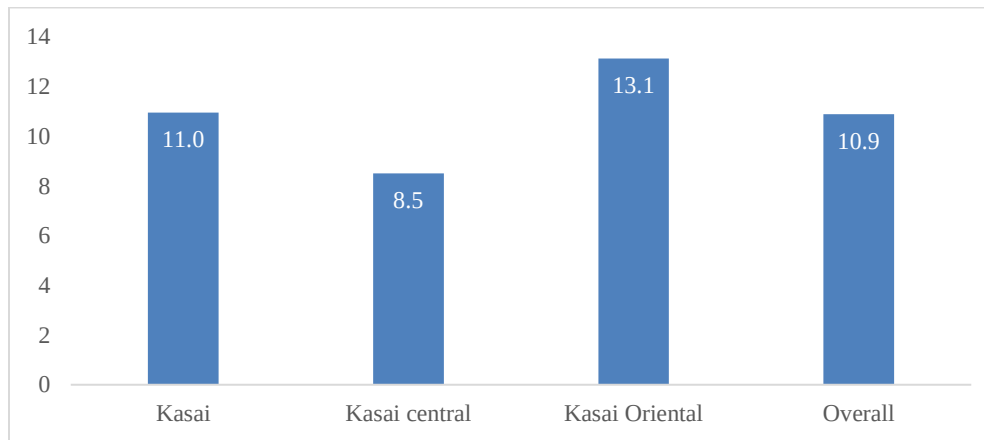
According to the United Nations, reproductive health implies a satisfying and safe sex life with access to good contraception, the ability to reproduce, and good care during pregnancy and childbirth (United Nations Population Fund, 2016). About 80% of the surveyed women who reported being sexually active experienced at least one pregnancy. Older women had significantly more pregnancies compared to younger women, across the three provinces (See Table 12).

Table 12 - Proportion of women who ever been pregnant in the Kasai region

	Kasai			Kasai central			Kasai Oriental			Overall		
	%	N	Chi2	%	N	Chi2	%	N	Chi2	%	N	Chi2
Age												
12-19	48.9	47		38.0	50		28.4	67		37.2	164	
20-24	67.0	109		60.2	123		63.0	138		63.2	370	
25-34	86.8	166	37.715**	88.4	207	111.68**	89.6	173	157.90**	88.3	543	286.69**
35&+	81.7	153		94.6	166		95.2	186		90.9	503	
Overall	76.8	475		79.1	541		77.6	564		77.9	1,580	

The study also assessed the proportion of women who reported pregnancy during the data collection period.

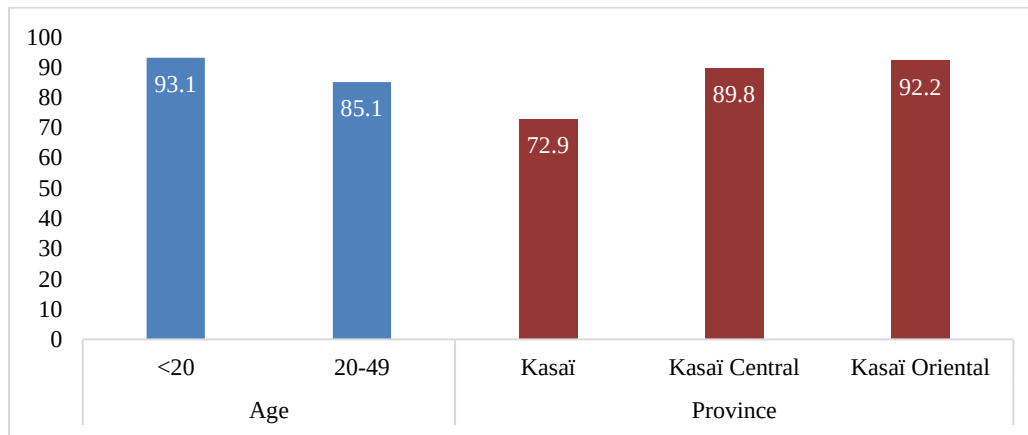
Figure 6 – Proportion of pregnant women during the study



Further, 11% of surveyed women were currently pregnant i.e. during data collection. This proportion ranged from 8.5% in Kasai Central to 13% in Kasai Oriental. It is also likely these figures are underestimated because women in prefer not to disclose their pregnancy status until it is physically noticeable.

The majority of maternal deaths in sub-Saharan Africa are associated with inadequately managed pregnancy. As far as pregnancy-related complications, 85% of the displaced women who reported ever and/or current pregnancy in the three sites, reported experiencing one or more related-complications (See Figure 7).

Figure 7-Proportion of women who had complication during pregnancy



Further, when comparing rates from across the three sites, the highest reported rates of pregnancy-related complications were observed in Kasai oriental and among older women aged 20-49 compared to adolescents (See Table 13 for the most common reported pregnancy-related complications by age distribution).

Table 13- Complications during pregnancy

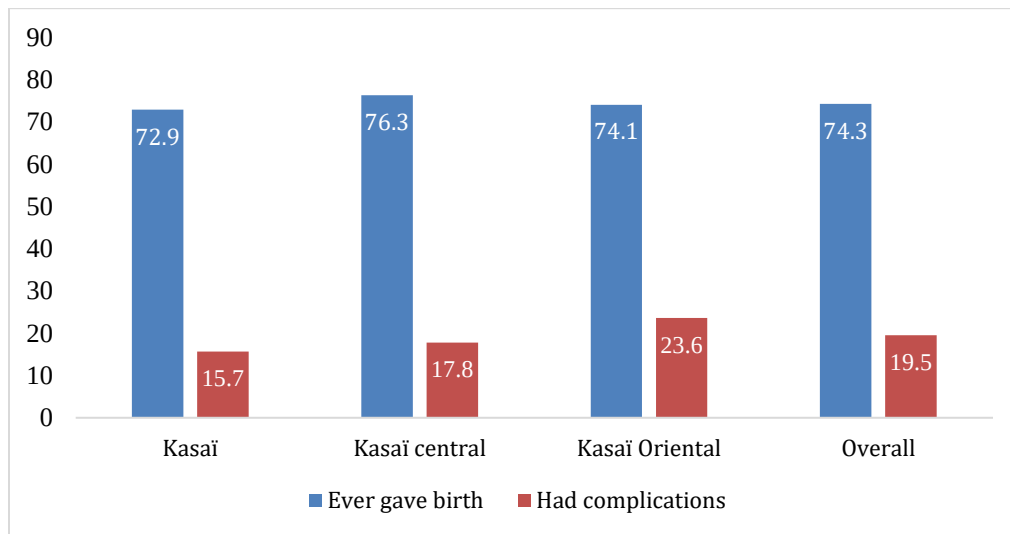
Had complication	<20	20-49	12-49
Bleeding	6.9	10.9	10.6
Fever	58.6	49.6	50.2
Frequent Vomiting	27.6	20.2	20.7
Headache/ Blurred vision	41.4	30.0	30.6
Oedema	13.8	6.9	7.4
Convulsion	-	3.5	3.2
Abdominal Pain	34.5	34.7	34.7
Less/no foetal movement	13.8	4.2	4.9
Blood pressure	6.9	2.9	3.2
Blood sugar	-	2.6	2.5
Number	29	377	406

The most common reported pregnancy-related complications included: fever (50%), abdominal pain (35%), headache (31%), frequent vomiting (21%), and bleeding (11%).

A study conducted among 1,489 female immigrants from sub-Saharan Africa reported 36% (542) of obstetrical complications, including gestational diabetes and hypertensive disorders among others (Bezanahary, et al., 2019).

Moreover, of the 74% of the women who gave birth since displacement into their current village of residence, 20% reported experiencing complications during delivery (See Figure 8).

Figure 8- Proportion of women who gave birth and those who faced complications during delivery



The most common encountered complications during delivery (Table 14), included: fever (61%), heavy bleeding (49%) and prolonged labor (41%). Findings from the FGDs indicated that the “delivery event” was perceived as a high-risk event for many women of reproductive age in the Kasai region (thus reflecting concerns of experiencing severe morbidity and/or mortality associated with complications during delivery).

Table 14 - Complications during delivery

Had complication	<20	20-49	12-49
Heavy Bleeding	(50.0)	49.1	49.2
Prolonged labor	(50.0)	40.4	40.7
Obstructed labor	(50.0)	10.5	11.9
Fever	(100.0)	59.6	61.0
Edema	-	12.3	11.9
Uterine rupture	-	1.8	1.7
Convulsion	-	5.3	5.1
Retained Placenta	-	5.3	6.8
Number	2	57	59

Notes: () <30

The prevalence of obstructed labor and edema among women who delivered since arrival in the current location was estimated at 11% and 12% respectively.

A study conducted in Northern Ethiopia, revealed that 90% of women out of 476 studied had faced complications during pregnancy, intra-partum and postpartum periods. Excessive bleeding (58.4%) and prolonged labor (23.7%) were the most common reported complications (Worku, et al., 2013).

On the other hand, forty-five (45%) of the women in the study sample never gave birth (this rate ranged from only 19% among women aged 20-49 to 91% among adolescent girls aged 12-19). It is also estimated to range 40% among women living in Kasai and increases to 48% among women living in Kasai Oriental. Further, the overall family size among the surveyed women was 3.0 children (See Table 15 for distribution of total number of children by province).

Table 15 - Distribution of women by number of children ever born

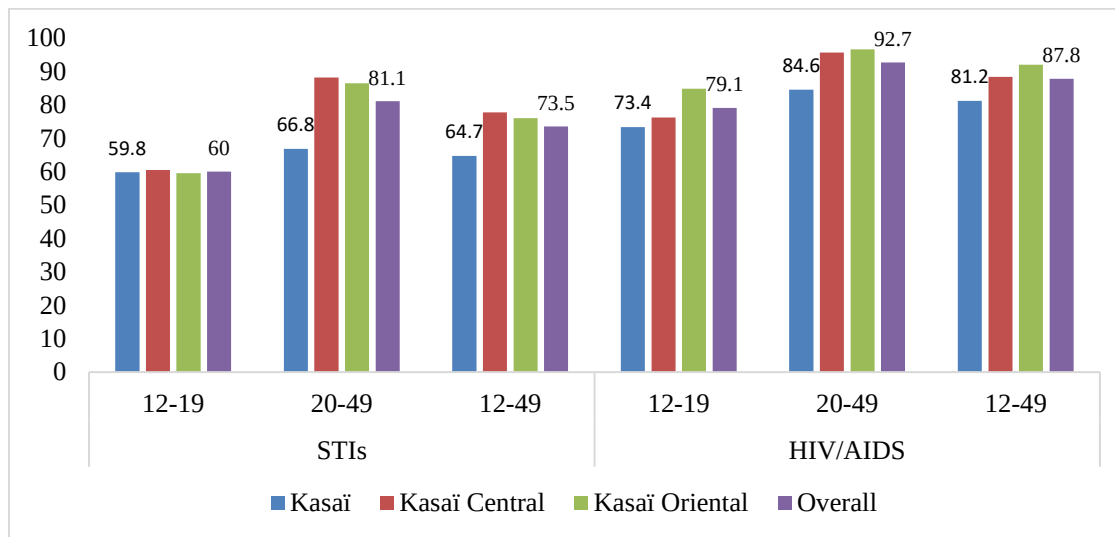
Number of children ever born	Kasai		Kasai central		Kasai oriental		Overall	
	%	N	%	N	%	N	%	N
0	39.7	243	45.4	356	47.8	390	44.7	989
1	5.4	33	4.7	37	4.4	36	4.8	106
2	9.0	55	4.8	38	5.8	47	6.3	140
3	8.3	51	6.8	53	6.6	54	7.1	158
4	6.9	42	8.8	69	6.5	53	7.4	164
5	7.4	45	8.4	66	6.0	49	7.2	160
6&+	23.4	143	21.2	166	22.9	187	22.4	496
Average	3.2	[2.9-3.5]	2.9	[2.6-3.1]	2.8	[2.6-3.0]	2.9	[2.8-3.1]

[] 95% confidence interval

2.1.3 Sexually transmitted infection

The majority of women reported that they ever heard about any STIs (74%) and 88% reported to have ever heard of HIV/AIDS (See Figure 9).

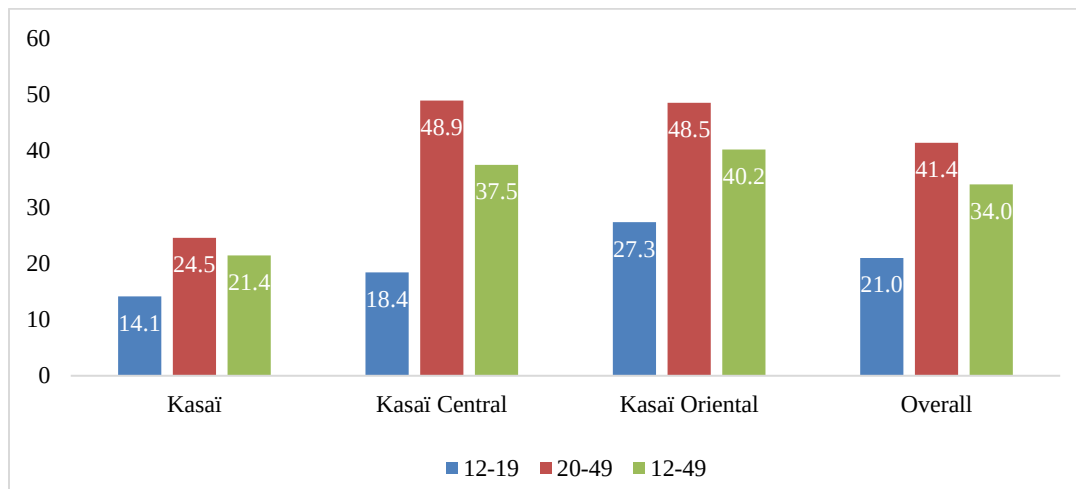
Figure 9 – Proportion of women who reported knowledge on STIs and HIV/AIDS



Irrespective of province, the proportion of women who had some knowledge of STIs and HIV/AIDS increased with age, these rates were lower for women living in Kasaï (65%) and highest among those living in Kasaï Central. Similarly, women’s knowledge of HIV was lower in Kasaï compared to those living in Kasaï Central (88%) and Kasaï Oriental (92%).

More than one out of three women (34%) reported to ever had a history of STIs. More women reported experiencing STIs- related symptoms in Kasaï Central (38%) and Kasaï Oriental (40%) compared to Kasaï (21%). Also, irrespective of province, the prevalence of a history of STIs infection was higher among the older women (aged 20-49) compared to the adolescent girls (aged 12-19) (See Figure 10 for distribution of STIs reported symptoms by province).

Figure 10 – Proportion of women who ever experienced some STIs symptoms



The most commonly reported STIs-related symptoms (Table 16) included: vaginal itching (17%), followed by burning urination (15%), painful urination (13%), pelvic pain (12%), rash in the genital area and pain during sexual intercourse (10%). Rectal pain, bleeding or discharge after having sex (4%), spotting between menstrual cycles and painless ulcers on the vagina (3%) were the least reported symptoms.

Table 16- History of having STI symptoms after coming to the village

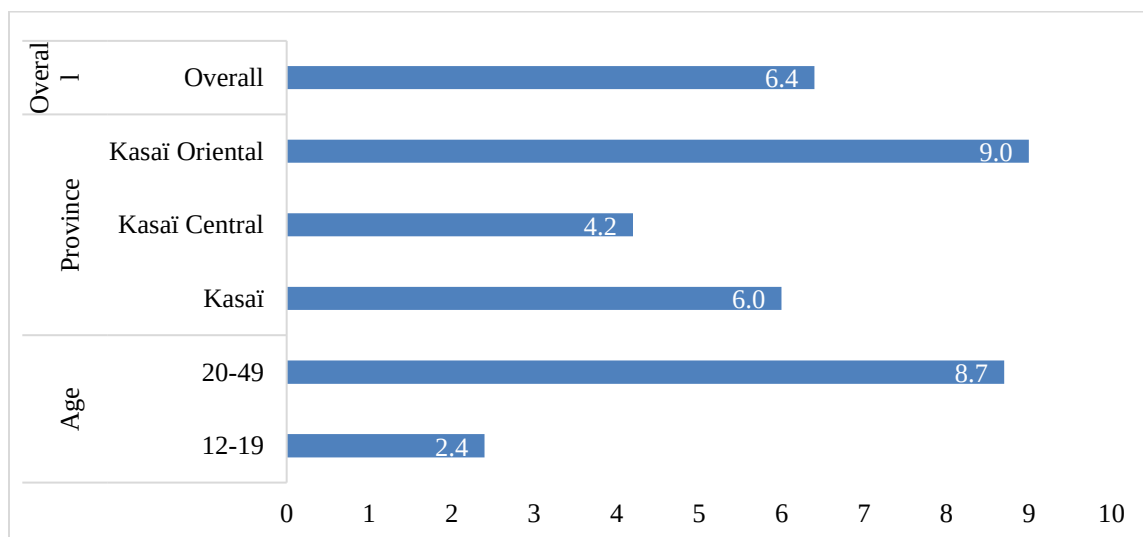
	12-19	20-49	12-49
Number	797	1,416	2,213
Vaginal itching	9.5	21.7	17.4
Blisters in the genital area	5.5	9.8	8.2
Rash in the genital area	4.5	13.5	10.3
Burning urination	9.9	18.1	15.1
Painful urination	7.8	15.8	12.9
Pain during intercourse	5.4	13.4	10.5
Spotting between menstrual cycles	1.1	4.1	3.0
Painless ulcers on the vagina	2.6	3.1	2.9
Pelvic pain	6.2	15.8	12.3
Rectal pain, bleeding or discharge after having sex	2.6	4.2	3.6

In 2013, proportion of women who ever had sexual intercourse in DRC who reported ever suffered from an STI was estimated at 12% in Kasai, 19% in Kasai central and 21.8% in Kasai oriental (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014). This proportion varied from 6% in Kasai and Kasai central to 15.3% in Kasai oriental. Vaginal discharge and genital ulcer were among other STIs listed (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014).

2.1.4 Menstrual Regulation

Menstrual regulation (MR) is the term applied to any treatment which is administered within 14 days of a missed menstrual period to ensure that a woman either is not pregnant or does not remain pregnant (Kessel, et al., 1975). This concept is not common in the Democratic Republic of Congo and is often confused with abortion. Overall, 6% of surveyed women reported to have ever practiced menstruation regulation (MR). MR was more common (9%) among adult women and in Kasai Oriental. The prevalence of MR was lower among adolescent girls (2%) and in Kasai (See Figure 11 for distribution of MR by age and province).

Figure 11 – Proportion of women who experienced Menstrual regulation



In Komanda camp in Ituru, about 10 medical abortions (using a pill or other non-surgical option) were reported every month in 2019 (Kavuo, 2019).

2.2 Sexual and reproductive health needs among men and boys

The most common SRH problems reported by men and adolescent boys included fear from and the prevalence of STIs and HIV/AIDs. Other problems mentioned included: sexual impotence and sterility, sexual performance and premature ejaculation, and dislike of family planning use, and particularly condom use. Majority of participants thought that men were responsible for gender-based violence (toxic masculinity); they do not like to use contraceptive methods, including condoms. Overall, men and boys predominantly worried about their sexual performance.

In summary, the most common SRH problems identified among displaced women in Kasai, Kasai Central and Kasai Oriental are summarized below (Box 3).

Box 3 – Sexual and Reproductive health reported problems

- 98% of adolescents who experienced menstruation reported symptoms.
- 20% of adolescents ever had sexual intercourse
- 80% of women who ever had sexual intercourse reported at least one pregnancy among whom 85% had experienced complications during pregnancy.
- 74% of women ever gave birth since arrival in the current location among whom 20% report complications during delivery.
- 6% of women reported Menstrual Regulation
- 34% of women reported a STI symptoms since arrival in the current site.
- STIs were more common SRH problem among men and boys.

The prevalence of problems differs by age and province of residence. However, these rates reflect the needs and the necessity for SRH services to meet and match the needs of this population.

3. SRH SEEKING BEHAVIOURS

With respect to SRH service use among women, in this section, we provide a summary of SRH seeking and use, particularly as it pertains to: management of symptoms during menstruation period, utilization of antenatal, delivery, and postnatal care as well treatment of STI's- related symptoms.

3.1 Pregnancy and post-pregnancy care

The proportion of women who did not attend to ANC visits ranged from as low as 29% in Kasai Central to 45% in Kasai. Only 20% of women who gave birth received at least four ANC visits, as recommended by WHO. There was no significant age difference in use of ANC care. The largest majority (93%) of women who received ANC, they received it at the health facilities- irrespective of age and province. See Table 17 for distribution ANC use among women by age and province by total number of visits and place of care.

Proportions of women who did not attend ANC were higher compared to that observed in 2013 (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014): Kasai (11.5%), Kasai central (8.6%) and Kasai oriental (14%).

Table 17- Number and place of ANC visits received among women who had pregnancy since displacement to the provinces

Characteristics	Number of Antenatal Care					Chi2	Place of Antenatal Care			Chi2
	N	0	1	2-3	4&+		Home	Health Facility	N	
Age										
12-19	28	35.7	14.3	32.1	17.9		-	(100.0)	19	
20-49	375	34.1	8.5	37.3	20.0	1.321	7.1	92.9	253	1.448
Province										
Kasaï	121	44.6	10.7	24.0	20.6		8.7	91.3	69	
Kasaï central	118	28.8	8.5	44.1	18.6	15.134**	8.1	91.9	87	1.769
Kasaï oriental	164	30.5	7.9	41.5	20.1		4.3	95.7	116	
Total	403	34.2	8.9	37.0	19.9		6.6	93.4	272	

Note: () Number < 30; ** Significant at 95% Confidence Interval (P-value <0.05).

It should be noted that among the 403 women who gave birth since their displacements to the Kasaï regions, 66% received at least one ANC visit. The most common services received during ANC included: measurement of weight (71%), height and blood pressure (59%) and uterine height (54%). Less than half of women who received ANC reported receiving: tetanus vaccination (49%), health awareness on danger signs (44%), urine test (37%) and blood test (31%). Only, 11% of the women who received ANC, were provided with ultrasound services during ANC (See Table 18). Adult women (aged 20-49) were more likely to receive blood pressure tests, measurement of uterine height and tetanus vaccination compared to adolescent girls (aged 12-19). No significant age differences were reported for other ANC services. The prevalence of ANC use was lower among women living in Kasaï (55%) compared to women living in the two other provinces in other provinces (70%).

Prevalence of ANC in the three provinces was lower compared to ANC coverage in 2013: Kasaï (55% versus 88% in 2013); Kasaï central (71% compared to 91% in 2013) and Kasaï oriental (69% versus 86% in 2013). Likewise, services received were lower compared to data reported in 2013 except for proportion of pregnant women who received height measure during ANC (See Table 18a).

Table 18-Services received during ANC visits (initial stage of influx)

Background		Proportion of women who received								
Characteristics	N	Weight	Height	Blood pressure	Blood test	Urine	Ultrasound	Uterine height	Tetanus vaccine	Advice on danger sign
Age										
12-19	19	(68.4)	(57.9)	(52.6)	(26.3)	(36.8)	(10.5)	(47.4)	(36.8)	(42.1)
20-49	256	71.1	58.6	59.8	31.6	37.5	11.3	54.7	50.4	44.1
Province										
Kasaï	71	64.8	63.4	59.2	33.8	47.9	16.9	43.7	38.0	40.8
Kasaï Central	86	76.7	68.6	69.8	46.5	48.8	17.4	52.3	52.3	53.5
Kasaï Oriental	118	70.3	48.3	51.7	18.6	22.9	3.4	61.9	54.2	39.0
Total	275	70.9	58.6	59.3	31.3	37.4	11.3	54.2	49.4	44.0

Note: () Number < 30

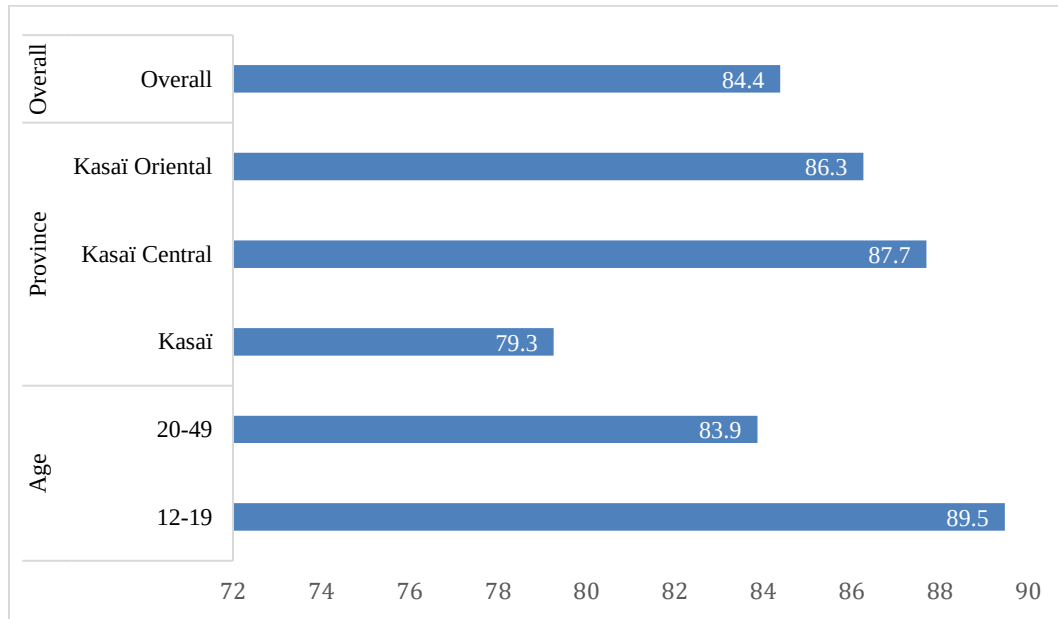
Table 18a-Services received during ANC in 2013

Background	Proportion of women who received						
Characteristics	N	Weight	Height	Blood pressure	Blood test	Urine	Advice on danger sign
Province							
Kasaï	377	76.0	26.7	76.7	53.9	39.7	76.7
Kasaï Central	410	86.2	36.6	72.8	48.3	25.4	72.8
Kasaï Oriental	427	91.6	54.9	70.5	67.0	57.5	70.5
Total	1214	84.6	39.4	73.3	56.4	40.9	73.3

Source: Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International (2014)

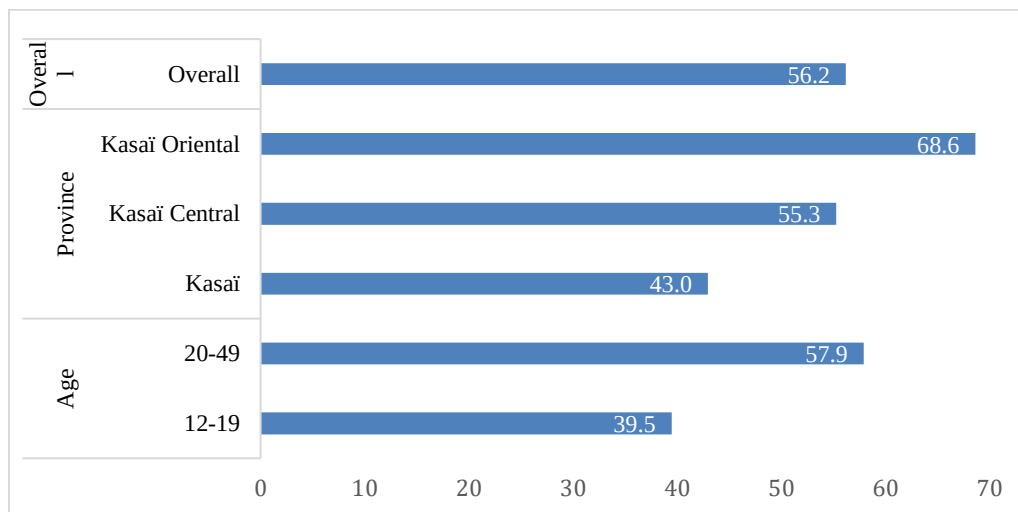
Overall, 84% of women delivered at health facilities, with proportions ranging between 88% in Kasai Central to 79% in Kasai. Proportion of women who gave birth at a health facility was higher among adolescents (90%) compared to adults (84%). Only 2.5% of the women reported having a Caesarian section during delivery. (See Figure 12 for the distribution of women who delivered in health facilities by age and province).

Figure 12 – Distribution of women who gave birth in health facility by age and province



Overall, 56% of women who gave birth received PNC. This proportion was higher among women living in Kasai Oriental and lower among adolescent mothers and women living in the Kasai province. For the majority of women (95%), PNC was received at a health facility (See Figure 13 for distribution of women who received PNC by age and province).

Figure 13 – Proportion of women who received PNC by age and province



3.2 Family planning and Knowledge of contraceptive methods

Nearly half of surveyed population (51%) reported to have ever heard about at least one family planning method. These proportions were slightly higher in Kasaï Central and Kasaï Oriental and among adult women (20-49) (at 55%). Of these methods, the most commonly known methods were: Condoms (39%), pills (29%), implants (28%) and injection (25%). Sterilization (male and female) and emergency contraception were least known. Table 19 displays the percentage of all women (aged 12-49), who have ever heard of the different contraceptive methods.

Analysis by province showed mixed results. Overall, the proportion of women who ever heard about family planning was lower in the Kasaï province. Yet in Kasai, women reported better knowledge of pills, injection and sterilization (male and female). The level of family planning knowledge (less than 60%) is lower compared to that more than 90% reported in 2013 (See Table 1).

Table 19- Knowledge of family planning methods

Background Characteristics	N	Any Method	Traditional methods				Modern methods								
			Any	Cycle beads	Periodic abstinence	Withdraw	Any	Pills	Emergency pills	Injectable	Condom	IUD	Implants	Male sterilization	Female Sterilization
Age															
12-19	797	28.2	7.9	3.9	5.6	4.8	27.5	12.0	4.7	10.1	24.2	5.2	11.1	1.4	1.3
20-49	1,416	64.3	14.3	8.6	7.3	7.1	63.6	38.4	5.8	32.7	47.1	15.6	37.6	2.8	2.9
Province															
Kasaï	612	40.2	3.9	3.1	2.4	2.1	39.9	31.6	3.8	25.6	32.6	12.0	18.5	3.8	3.7
Kasaï Central	785	55.2	15.7	10.5	5.6	5.7	54.8	30.2	6.3	24.6	46.5	11.8	26.8	1.8	2.3
Kasaï Oriental	816	56.0	14.6	6.0	10.7	9.8	54.7	26.0	5.8	23.9	36.1	11.8	36.2	1.7	1.4
Total	2,213	51.3	12.0	6.9	6.7	6.3	50.6	29.0	5.4	24.6	38.9	11.9	28.1	2.3	2.3

Note: () Number <30

For the older women, the most common information sources used by were from health professionals, including medical doctors and nurses, followed by from women friendly centers and pharmacists. For the adolescent girls (aged 12-19 years), the most common information sources were from neighbors (31%) and teachers (27%) (Table 20).

Table 20- Source of Knowledge on family planning methods

Background Characteristics	N	Source						
		Health worker home visit	Health professional	Pharmacist	Family members	Neighbor	Women Friendly Center	Teacher
Age								
12-19	225	23.6	23.6	8.9	14.2	30.7	7.6	27.1
20-49	911	23.9	60.6	6.0	11.2	19.3	6.0	5.5
Province								
Kasaï	246	31.7	46.3	13.0	13.0	23.6	4.1	9.8
Kasaï Central	433	18.5	64.7	2.3	9.9	10.8	8.6	9.5
Kasaï Oriental	457	24.7	46.2	7.2	12.9	30.6	5.5	10.1
Total	1,136	23.9	53.3	6.6	11.8	21.6	6.3	9.8

3.2 Use of contraceptive methods

Overall, only 17% of the women in survey reported current use of any family planning method. Traditional family planning methods use (period abstinence and withdraw) was reported by 7% of participants, the prevalence of modern contraception was estimated at 10%.

Prevalence of contraception method (modern and traditional) ranged from as low as 9% among adolescent girls to as high as 21% among adult women. Current family planning use was lowest in Kasai at 7% and highest in Kasai Oriental at 24%. The most common methods used included: (1) condom (6%); (2) injectables (4%); (3) pills (3.5%); and (4) implants (3%). (See Table 21 for distribution of family planning use by age and province). Findings suggest that some women were combining at least two contraceptive methods (E.g: 44% of family planning users were combining condom with another contraceptive methods).

The prevalence of modern contraceptive use from this study was higher compared to the 2013 indicators, while prevalence of traditional method was lower compared to 2013 except in Kasai oriental (See Table 1 and Table 21).

Table 21-Prevalence of contraceptive use

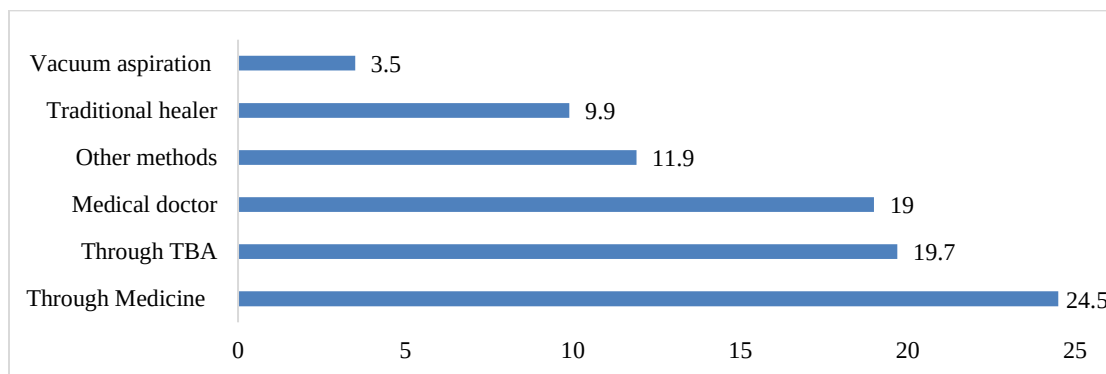
Background Characteristics	N	Overall	Using contraceptive methods							
			Traditional methods	Modern	Pills	Injectable	Condom	IUD	Implants	Sterilization
Age										
12-19	686	8.9	4.8	4.1	1.2	0.9	3.4	0.2	0.2	-
20-49	1,390	20.9	7.8	13.1	4.7	5.5	8.0	2.1	4.3	0.9
Province										
Kasaï	583	6.9	1.4	5.5	2.1	1.6	2.9	0.3	1.2	0.2
Kasaï Central	737	17.4	4.6	12.8	5.4	6.9	8.0	3.1	4.6	1.1
Kasaï Oriental	756	23.7	12.6	11.1	2.8	2.2	7.7	0.7	2.6	0.4
Total	2,076	16.7	6.6	10.1	3.5	3.9	6.4	1.4	2.9	0.6

Note: () Number <30

3.3 Service Provision for Menstrual Regulation

The different MR methods used, as reported by women in this survey, included: an MR service provided by health professionals, mainly: traditional birth attendants (20%) and medical doctors (19%), followed by self-intake of medications (25%) and traditional healers (10%). Other non-specified methods (12%) and the used of vacuum aspiration (4%) to perform menstrual regulation were also mentioned.

Figure 14 – Menstruation regulation methods used

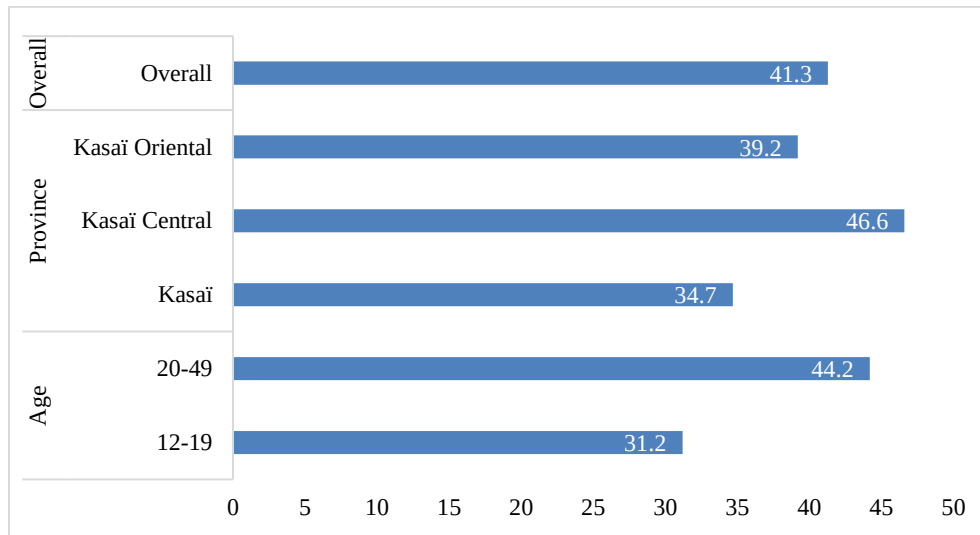


Overall, 64% of the women reported to have received MR services at health facilities compared to 22% at home (See Figure 14 for service provision for MR).

3.4 Healthcare seeking behavior for STI symptoms

41% of 753 women who reported ever experiencing STIs- related symptoms, sought care, of whom 77% sought care at health facilities for care (See Figure 15 for distribution of women seeking care for STIs by age and by province).

Figure 15 – Proportion of women with STIs symptoms who sought aids



Considering HIV/AIDS pandemic, table 22 shows the proportion of women who received an HIV test and those who collected the results of their HIV test. 114 women representing 6% of sexually active women reported to have ever been tested for HIV/AIDs since their displacement into the Kasai regions among whom the large majority (85%) received the results of the test. The prevalence of HIV testing was lowest among adolescent girls in general and also among displaced women living in Kasai.

Table 22- Proportion of women who got HIV test and know their status

	Ever heard about HIV		Got HIV test		Know HIV status	
	%	N	%	N	%	N
Age						
12-19	81.3	775	2.0	686	(64.3)	14
20-49	94.2	1392	7.2	1,390	88.8	100
Province						
Kasai	85.4	582	1.9	583	(81.8)	11
Kasai Central	89.8	773	4.2	737	71.0	31
Kasai Oriental	92.5	812	9.5	756	91.7	72
Overall	89.6	2,167	5.5	2,076	85.1	114

Proportion of women who ever heard about HIV/AIDS was higher and close to indicators reported in 2013 (Kasai: 86%; Kasai central: 93% and Kasai oriental: 94%), see Table 1 for more details.

4. AVAILABILITY OF RESOURCES (MANPOWER, KITS, MEDICATIONS AND SUPPLIES)

This section explores availability of resources (manpower and essential kits, drugs and supplies), measures gaps and estimates gross cost of resources for the different SRH service packages including human resources and Infrastructures.

4.1 Human resources

4.1.1 Available staff

According to the DRC health system policy, referral hospital is led by medical doctor director (“Médecin Directeur”) while Nursing Supervisor (“Infirmier Titulaire”) manage health center (Ministere de la Santé, 2006). Health center should include five staff among whom two nurses, one laboratory technician, one receptionist and one logistician. In parallel, referral hospital should have 25 health professionals and 17 supporting staff including among others: Three medical doctors, one pharmacist, one Anesthesiologist, one nursing supervisor, 16 nurses, two laboratory technicians, one Radiologist, one Physiotherapist and one nutritionist (Ministere de la Santé, 2006).

Table 23 describes the professional background distribution of the human resources providing SRH services at the selected health facilities. Overall, one particular finding, among all 41 health facilities surveyed, none of these health facilities had an Obstetrician/ Gynecologist.

All referral general hospital and three out of five reference health centers were led by a Medical Doctor – Health facility Manager, while all other health facilities (health centers) were led by Nursing supervisors (“Infirmier Titulaire”). Among the 41 surveyed health facilities, a total of 13 facilities had at least one full time Medical Doctor, over all, across the sample this ranged between as high as to 2.3 Medical doctor to as low as 1.2 full time medical doctor per health facility.

Table 23- Human resources at the health facilities

Staff	Type of health facility							
	Total health facilities (N=41)		Reference Hospital (N=6)		Health Center (N=30)		Other facilities (N=5)	
	Number	Average	Number	Average	Number	Average	Number	Average
Gynecologists	0	0	0	0	0	0	0	0
Anesthesiologist	2 [2]	0.05 [0.05]	2 [2]	0.3 [0.3]	0	0	0	0
Medical Doctor/ Hospital Manager	4 [3]	0.10 [0.07]	4 [3]	0.5[0.5]	0	0	0	0
Medical doctor	24 [12]	0.6 [0.3]	14 [7]	2.3 [1.2]	9 [4]	0.3 [0.1]	1 [1]	0.2 [0.2]
Nursing supervisor	42[26]	1.07[0.7]	8[7]	1.3[1.2]	31 [17]	1.0 [0.6]	5 [4]	1 [0.8]
Nurse	138 [122]	3.4 [3.0]	22[16]	3.8 [2.7]	107 [98]	3.6 [3.3]	8 [8]	1.6[1.6]
Midwife	15 [15]	0.4 [0.4]	5[5]	0.8[0.8]	8[8]	0.3[0.3]	2[2]	0.4 [0.4]
Trained birth attendants (TBAs)	34 [33]	0.8[0.8]	7[7]	1.2[1.2]	23[22]	0.8 [0.7]	4[4]	0.8[0.8]
Laboratory technicians	23[18]	0.6[0.4]	13[8]	2.2[1.3]	8[8]	0.3[0.3]	2[2]	0.4[0.4]
Ward boy/ Cleaner	65[57]	1.6[1.4]	17[13]	3.2[2.2]	40[38]	1.3[1.3]	6[6]	1.2[1.2]
Driver	3[3]	0.07[0.07]	1[1]	0.2[0.2]	2[2]	0.07[0.07]	0	0

Note: [] Full time staff

All reference hospital and reference health center had at least one full time medical doctor. In total, these facilities had nine medical doctors among whom four were full time staff. On average, there was 0.3 medical doctor per health center among, which 0.1 full staff.

A total of 138 Nurses were working in the 41 health facilities surveyed during data collection, among whom 122 were full time staff. On average, there were three nurses per health facilities. This number ranged from as low as 1.6 nurse per health center to 3.8 nurses per referral hospital/ Reference Health Center.

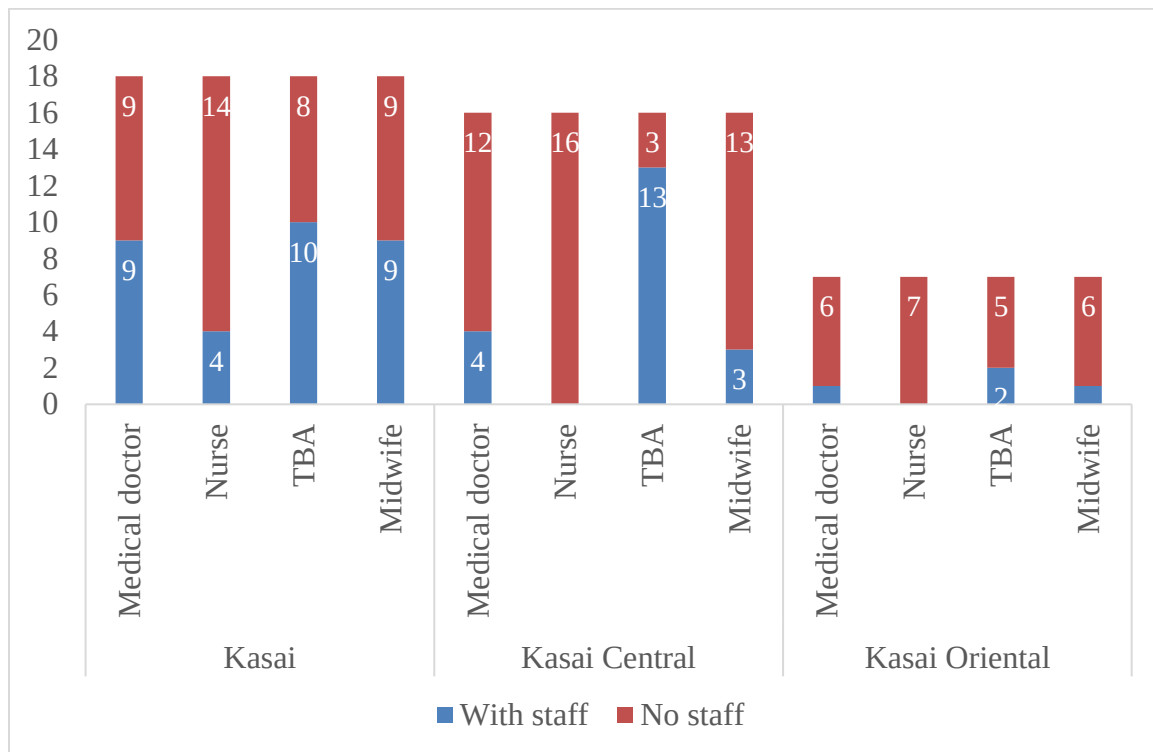
A total of 34 trained birth attendants (TBAs) and 15 midwives were working in the 41 health facilities, during data collection. Among these 41 facilities, 13 facilities had 15 midwives working full time, while, 25 health facilities had at least one TBA. Out of the 34 TBAs, 33 were full time staff.

The assessment of these health facilities also showed that 16 out of 41 had at least a one laboratory technician. In total, 23 laboratory technicians were working in the 16 health facilities, among whom 18 were full staff. On average, there was 0.8 laboratory technician per health facility. This number varied from as low as 0.3 laboratory technician per health center to as high as 2.2 in the referral hospital/Centers.

Overall analysis per province (Figure 16) shows that half of surveyed facilities in Kasai, one out of four in Kasai Central and 1 out of 7 in Kasai Oriental had a medical doctor.

All surveyed health centers in Kasai Central and Kasai Oriental had a full-time nursing Supervisor (“Infirmier Titulaire”). In Kasai and Kasai Oriental only four out of 18 surveyed facilities had additional nurse. The national policy (Ministere de la Santé, 2006) recommends two nurses per health center among whom the nursing supervisor (“Infirmier Titulaire”). Number of health facilities with at least one midwife varied from 1 out of 7 in Kasai Oriental to 9 out of 18 in Kasai. Kasai Central had the highest numbers of health facilities with TBAs (13 out of 16) compared to 10 out of 18 in Kasai and 2 out of 5 in Kasai Oriental.

Figure 16 - Number of Health facility with selected key staff per province



In summary, number of staffs was below the national standard (Ministere de la Santé, 2006). Staff may have left the region during the conflict and / or the region may be less attractive to new staffs.

4.1.2 Training of health human resources

Findings indicated that the different health providers in the surveyed health facilities receive different training workshops on a range of SRH topics that aimed to strengthen their capacities to provide additional SRH services and better care to their clients. Table 24 outlines the health facility manager's reports of trainings received by SRMH topical area. Findings showed that the trainings received focused on six main SRMH topical areas, these were: Helping Babies Breathe, Helping Mothers Survive, Clinical Management of Rape (CMR), Domestic violence, and Emergency Response. 14/41 facilities had their health providers receive training on Helping Babies Breathe; five facilities had their health providers receive training on "Helping Mothers Survive" and on "Clinical Management of Rape (CMR)"; while, 4/41 health facilities had their health providers receive training on "Domestic violence". Only three health facilities had their staff their health providers receive training on "Psychological First Aid or Psychosocial Support" after rape, and two

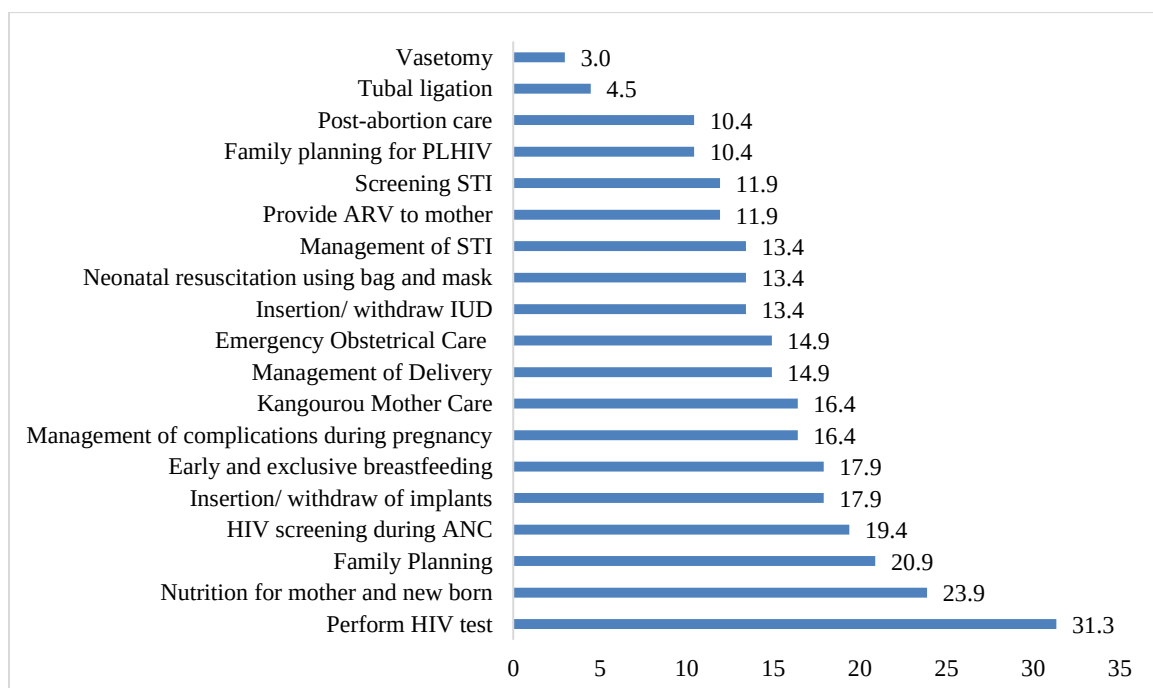
health facilities had their health providers receive training on emergency response. Nursing supervisors and Nurses received all these different training workshops; while, the medical doctors received most of these them.

Table 24- Training of health workers

Types of training	Number of facilities had trained staff				Staff who received training
	Kasaï	Kasaï Central	Kasaï Oriental	Total	
Helping Babies Breathe	11	0	3	14	Medical Doctor, Nursing supervisor and Nurses
Emergency Response	0	0	2	2	Nursing supervisor and Nurses
Helping Mothers Survive	4	0	1	5	Medical Doctor, Nursing supervisor and Nurses
Domestic violence	2	0	2	4	Medical Doctor, Nursing supervisor and Nurses
Clinical Management of Rape (CMR)	3	0	2	5	Nursing supervisor, Nurses and midwives
Psychological First Aid or Psychosocial Support	1	0	2	3	Nursing supervisor and Nurses

Figure 17 summarizes the proportion of health providers who received training on selected specific SRH topics within the last 24 months preceding the survey. The most common training reported was on how to perform HIV/AIDs testing (31%) followed by nutrition for mother and newborn (24%), counselling on family planning (20%) and HIV screening during ANC (19%).

Figure 17- Providers' reports of training by SRMH Topical Area



About 18% of the health providers were trained on how to insert or withdraw implants. Less than 5% of surveyed health services providers reported training on male and female sterilization (vasectomy and tubal ligation).

4.2 Infrastructure

This study assessed the availability of the needed infrastructure at the health facilities to understand existing health facilities' capacities as well as readiness for providing SRH services to the displaced population in the Kasai region. Table 25 describes availability of selected services by type of facilities and province.

The large majority of health facilities (88%) had separate spaces allocated for medicine dispensing, Consultant's room (93%), labor room (90%) and Maternity OPD (90%). A total of 24/41 (58%) facilities reported that the availability of patients' waiting rooms, 44% had an ANC/PNC room and 42% had a Laboratory for tests. However, none of the facilities had an ambulance. Table 25 shows also that 13 (32%) out of 41 health facilities had a female ward.

Only 1 reference hospital out of six surveyed and 2 health centers out of 30 studied had separate emergency rooms to manage emergency patient care. Likewise, five referral hospitals out of six and 3 health centers out of 30 had General Operating room. Table 25 shows also that 2 referral hospitals (out of six) and one health centers out of 30 had blood transfusion room and two health facilities surveyed (1 reference hospital and 1 health center) had ultra-sonogram (USG) rooms. On average, few health facilities had a post-abortion Care room (10%) and breastfeeding room (5%). None of the six referral hospitals and 30 health centers had a breastfeeding room.

Overall, the referral hospital/ Centers were relatively more equipped (patients' waiting space, laboratory, General operation room) than health centers and other types of health facilities. This is consistent with the organization of health systems in DRC (Ecole de Santé Publique de l'Université de Kinshasa (ESPK) [République Démocratique du Congo] et ICF., 2019; Ministère de la Santé, 2006) Also, the health facilities in Kasai were relatively more equipped than those in Kasai Central and Kasai Oriental.

Table 25- Distribution of Infrastructure and waste disposal system of the health facilities by type of facilities and province

Number of Facilities	Total Number (%)	Type of health facilities			Province		
		Reference Hospital	Health Center	Other facilities	Kasaï	Kasaï Central	Kasaï Oriental
	41	6	30	5	18	16	7
Infrastructure							
Emergency room	3 (7.3)	1	2	0	1	2	0
Consultant's room	38 (92.7)	6	27	5	17	15	6
Patient's waiting place	24 (58.5)	5	14	5	13	5	6
ANC/PNC room	18 (43.9)	5	11	2	12	2	4
Labor room	37 (90.2)	6	28	3	17	15	5
Female ward	13(31.7)	4	7	2	9	1	2
VIA/PAC room	4(9.8)	2	1	1	3	0	1
USG room	2(4.9)	1	1	0	2	0	0
Laboratory for tests	17(41.5)	5	9	3	8	8	1
Blood transfusion room	3(7.3)	2	1	0	2	0	1
Maternity OPD	37(90.2)	6	28	3	17	15	5
Breast feeding corner in OPD	2(4.9)	0	0	2	1	0	1
General operation room	8(19.5)	5	3	0	7	1	0
Dispensary within facility	36(87.8)	5	26	5	18	16	7
Waste disposal system							
Appropriate storage of sharp object wastes	33(80.5)	6	24	3	13	15	5
Appropriate storage of infectious wastes	29(70.7)	6	20	3	10	14	5
Safe final disposal of sharp objects	29(70.7)	4	22	3	11	15	3
Safe final disposal of infectious wastes	29(70.7)	4	22	3	11	15	3

As for medical waste disposal systems, most of the facilities (more than 71%) had waste management systems within their capacity (Table 25). 80% of the health facilities (33/41) had separate containers for storing sharp wastes and waste receptacles with lids for infectious wastes. This number was observed to be highest in the referral hospitals/

5. AVAILABILITY OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES

The facility audits also included assessment of the different SRH services available. In this section we will summarize the assessment results as they pertain to: (1) Availability of the different SRH services by the different categories of health facilities and (2) Availability of Reproductive Health (RH) Kits.

5.1 Availability of Sexual and reproductive health services

5.1.1 Availability of Antenatal care

The availability of routine prenatal care, including prenatal screening and diagnosis, has played a significant role in reducing the frequency of maternal death, miscarriages, birth defects, low birth weight, neonatal infections and other preventable health problems across the globe (Lassi et al., 2014; World Health Organization, 2007; World Health Organization, 2003). Table 26 describes the availability of Antenatal Care by the different types of health facilities and by the three provinces.

Thought all (100% of 41) health facilities assessed provided Antenatal Care (ANC) services, variations in physical examinations performed have been observed.

Table 26- Availability of Antenatal Care services by types of health facilities and province

	Total Number (%)	Type of health facilities			Kasai	Province	
		Referral hospitals	Health Center	Other facilities		Kasai Central	Kasai Oriental
Number of Facilities	41	6	30	5	18	16	7
Antenatal Care							
Maternal weight	37 (90.2)	6	28	3	16	16	5
Blood pressure measurement	40(97.6)	6	29	5	17	16	7
Edema	39 (95.1)	6	30	3	18	16	5
Fundal height	41 (100)	6	30	5	18	16	7
Foetal heartbeat	40(97.6)	6	29	5	17	16	7
Urinalysis	19 (46.3)	5	12	2	10	7	2
Hemoglobin estimation	25 (61.0)	6	17	2	16	6	3
Blood grouping and RH typing	14 (34.2)	5	7	2	8	5	1
Testing for HIV, syphilis	16 (39.0)	5	7	4	5	5	6
Blood sugar measurement	12 (29.3)	4	7	1	7	5	0
Ultrasonogram	4 (9.8)	2	2	0	3	0	1
Identify and manage Ante-partum	17 (41.5)	6	9	2	9	4	4
Identify and manage abdominal pain	25 (61.0)	6	15	4	10	8	7
Identify and manage premature rupture of membrane	14 (34.2)	6	6	2	9	2	3
Counselling on nutrition, complications of pregnancy	32 (78.1)	6	22	4	15	10	7
Counselling on danger sign & rest	29 (70.7)	6	19	4	15	8	6
Counselling on a birth plan	23 (56.1)	6	14	3	10	6	7
Counselling on emergency plan	18 (43.9)	3	11	4	4	8	6

Almost all (more than 90%) of the different health facilities providing ANC were performing most of the required physical examinations for ANC, these included: maternal

weight (90.2%), blood pressure (98%), edema (95%) fundal height (100%), fetal heartbeat (98%).

Almost all referral hospitals/centers (minimum 5 out of 6) were providing all antenatal care services except for ultrasounds services (2 out of 6 referral hospitals/ centers), Counselling on emergency plan (3 out of referral hospitals/ centers) and Blood sugar measurement (4 out of 6 referral hospitals/ centers).

Considering other 35 health facilities, including 30 health centers, table 26 shows that:

- More than half of these facilities (19-26) depending on the services were providing counselling on nutrition-complication during pregnancy, counselling on Counselling on danger sign during pregnancy and performing and Identify and manage abdominal pain;
- About half of health centers and other health facilities were providing Counselling on a birth plan;
- Less than 17 health centers out of 35 were providing emergency plan (15), identifying and managing premature rupture of membrane (8), identifying and managing ante-partum (11), Urinalysis (14), Blood grouping and RH typing (9), test for HIV and syphilis (11), Blood sugar measurement (8) and ultrasonogram (2).

Table 26 also shows the types of facilities health and regional differences in examinations performed. Only seven health facilities out of 18 surveyed in Kasai and five health facilities out of 16 in Kasai Central were performing blood sugar measurement.

5.1.2 Availability of Obstetrical and postnatal care

Also, 95% of the surveyed health facilities reported that they were providing post-natal care (See Table 27). Analysis by type of PNC provided showed that almost all health facilities surveyed were providing counselling on breastfeeding (95%), maternal Immunization (90%), essential new born care (92%) and post-natal clinical history for fever (90%). Analysis by type of health facilities shows that:

- The large majority of referral hospitals/ centers (4-6 out of 6) were providing all the needed obstetrical and postnatal care compared to other facilities. C-section and Deliveries that require vacuum extraction assistance (4 referral hospitals/ centers)

were the less available Obstetrical and postnatal Care services in referral hospitals/ centers.

- Among 35 other health facilities, including 30 health centers, the most common Obstetrical and postnatal Care services comprised maternal immunization, normal vaginal delivery, essential, new born care, postnatal care, counselling on breastfeeding.
- Less than health centers were providing Eclampsia Management, C-section, Deliveries that require vacuum extraction assistance, blood transfusion and to identify and manage of puerperal psychosis.

Analysis by province shows that health facilities located in Kasai were better equipped than those located in the two other provinces. None of the health facilities surveyed in Miabi Kasai oriental (Miabi) were performing caesarean sections, managing deliveries requiring vacuum extraction assistance or performing blood transfusion.

Table 27- Availability of Obstetrical and postnatal Care services by type of facility and province

	Total Number (%)	Type of health facilities			Province		
		Reference Hospital	Health Center	Other facilities	Kasaï	Kasaï Central	Kasaï Oriental
Number of Facilities	41	6	30	5	18	16	7
Obstetrical and postnatal care							
Eclampsia Management	15 (36.6)	6	7	2	10	2	3
Postpartum Hemorrhage Management	21 (51.2)	6	13	2	9	8	4
Maternal Immunization	37 (90.2)	6	28	3	17	15	5
Normal vaginal delivery	38(92.7)	6	29	3	17	16	5
C-section	11 (26.8)	4	6	1	7	4	0
Deliveries that require vacuum extraction assistance	10 (24.4)	4	4	2	6	4	0
Initial stabilization of obstetric emergency before referral	26 (63.4)	6	18	2	15	6	5
Blood transfusion	7 (17.1)	5	2	0	6	1	0
Essential new born care	36 (92.3)	6	27	3	17	15	4
Post natal care	37 (94.9)	6	28	3	17	16	4
Counselling on breastfeeding	39 (95.1)	6	30	3	18	16	5
Counselling on postnatal pain	30(73.2)	6	21	3	12	13	5
Post-natal clinical history for fever	37(90.2)	6	28	3	16	16	5
Post-natal clinical history for hemorrhage	25 (61.0)	6	17	2	10	11	4
Identification and management of anemia	20 (48.9)	6	14	0	14	4	2
Identification and management of pureperal psychosis	13 (31.7)	5	8	0	8	3	2
Supply of iron and folic acid tablet	32 (78.0)	6	24	2	15	14	3

5.2.4 Availability of family planning and other SRH services

Table 28 summarizes the numbers and proportions of surveyed health facilities that were providing Family planning services, managing STIs, providing adolescent friendly SRHS and managing gender-based violence. Majority (more than 70%) of health facilities were providing modern contraceptive methods, i.e. male and female condoms, implants, injectable and pills. However, less than 10% of surveyed facilities were providing vasectomy (5%) and tubectomy (9.8%). The distribution of health facilities providing family planning methods did not significantly differ either by type of facility (referral hospital, health centers or others) or by province.

Almost all referral hospitals were managing the treatment STIs, including HIV/AIDS. However, only two out of five health post (other centers) were able to manage the treatment STIs and HIV cases.

Few (6) health facilities (15%) were performing menstrual regulation among which 2 referral hospitals/ centers and 4 other health facilities, including two health centers. However, 51% of the surveyed health facilities were providing post-abortion care and managing miscarriage cases (68%). All referral (6) hospitals/ centers were providing post-abortion care and 5 were performing the management of miscarriage cases.

Few health facilities (3 referral hospitals/centers and 3 other health facilities) were equipped to provide post-rape cases. Only eight health facilities ((3 referral hospitals/ centers and 5 other health (Facilities) out of 41 surveyed (19%) had written protocol/ SOPs for provision of clinical management of rape.

Table 28- Availability of Family Planning and other SRH services by type of facility and province

Number of Facilities	Type of health facilities				Province		
	Total Number (%)	Reference Hospital	Health Center	Other facilities	Kasaï	Kasaï Central	Kasaï Oriental
	41	6	30	5	18	16	7
Family planning services							
Pill	31(75.6)	5	23	3	13	14	4
Male condoms	34(82.9)	6	25	3	15	14	5
Female condoms	32 (78.0)	5	24	3	13	14	5
Emergency contraception	28(68.3)	5	20	3	10	14	4
Injectable\u/Depo Provera	33(80.5)	5	25	3	15	14	4
Implant/Norplant	34 (82.9)	5	26	3	16	14	4
IUD	15(36.6)	4	10	1	10	1	4
Vasectomy	2 (4.9)	1	1	0	1	0	1
Tubectomy	4(9.8)	2	2	0	3	0	1
Sexually Transmitted Infections/HIV							
STD/RTI Management	28 (68.3)	6	20	2	16	7	5
HIV AIDS counselling	18 (43.9)	4	12	2	8	5	5
HIV AIDS Testing	13 (31.7)	4	7	2	4	5	4
Prevention of the maternal-to-child transmission of HIV (PMTCT)	24 (58.5)	5	17	2	13	6	5
Menstrual Regulation							
Menstrual Regulation (MR)	6(14.6)	2	2	2	2	2	2
Management of miscarriage	28 (68.3)	5	21	2	12	11	5
Management of post-abortion complications	21 (51.2)	6	14	1	12	7	2
Gender-based violence							
Clinical management of Rape (CMR)	11 (26.8)	3	7	1	6	2	3
Is there any written protocol/ SOP for provision of clinical management of rape available in your facility	8 (19.5)	3	5	0	5	0	3
Emergency contraception to survivors of sexual violence	18 (43.9)	5	11	2	7	7	4
Post rape care: HIV treatment	13 (31.7)	5	6	2	5	4	4
Post rape care: STI treatment	19 (46.3)	5	11	3	11	3	5
Post rape care: MR	8 (19.5)	2	4	2	2	3	3
Post rape care: Psychological support	15 (36.6)	4	10	1	11	0	4
Adolescent friendly health services							
Counseling on sexuality education	15 (36.6)	3	9	3	8	0	7
Counseling on sexual health care	12 (29.3)	1	8	3	6	0	6
Counseling on FP services	24(58.5)	5	15	4	15	2	7
Counseling on HIV services	23 (56.1)	5	14	4	14	2	7

More than 50% of health facilities had specific adolescent friendly health services available. Five referral hospitals/ centers out of 6 provided counseling on FP services and HIV services (Counselling and/or testing); while about 19 other health facilities out of 35

were providing counseling on FP services and HIV services. However, only 29% of the surveyed health facilities (1 referral hospital, 11 other health facilities) provided counseling on sexual health for adolescents and 37% (three referral hospitals, 12 other health facilities) provided sexuality education to adolescents. Counselling on FP services and HIV services were more frequent in the referral hospital (5 out of 6) compared to other health facilities.

5.2.5 Availability of Reproductive Health (RH) kits

Reproductive Health Kits (RHK) are packages of essential drugs, supplies and equipment that have been designed to provide priority minimum initial reproductive health services for humanitarian settings (United Nations Population Fund Humanitarian Response Branch, 2011). Table 29 describes the availability of the different RH Kits ever received by province. The majority of health facilities reported to have ever received condoms kits (66%), Injectable (63%) and oral contraception kits (56%).

Table 29- RH Kits ever received by health facilities participate in the facility assessment

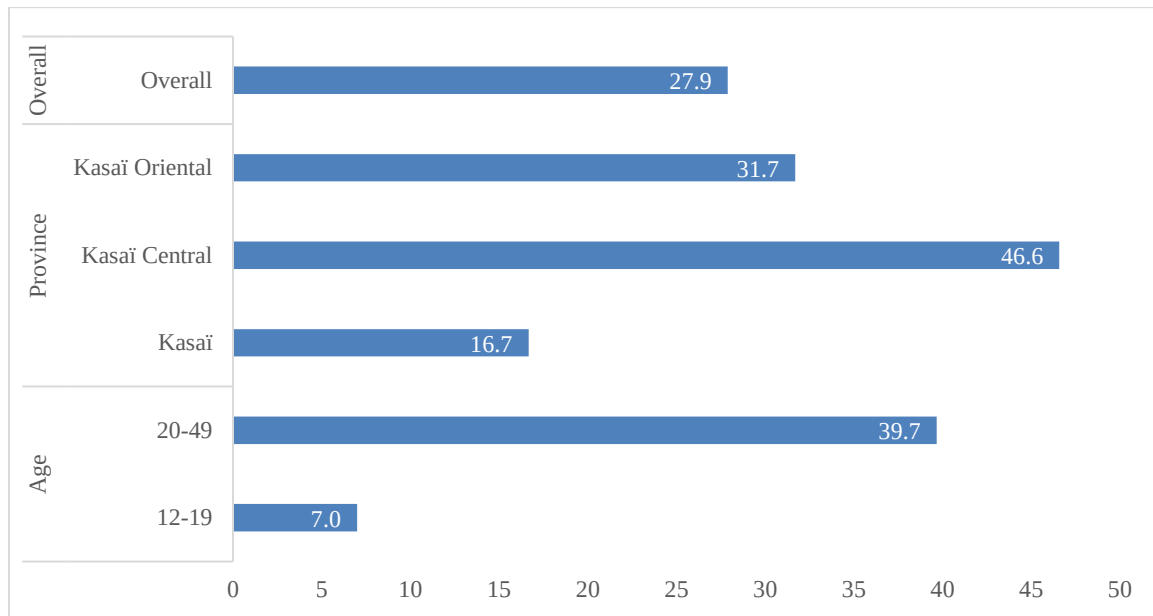
RH Kits	Number of health facilities received			
	Kasaï	Kasaï central	Kasaï Oriental	Total (%)
	18	16	7	41
RH Kit 1: Condoms	10	12	5	27 (65.9)
RH Kit 2: Clean delivery, individual	9	1	5	15 (36.6)
RH Kit 3: Post rape treatment	5	0	3	8 (19.5)
RH Kit 4: Oral contraception	8	12	3	23 (56.1)
RH Kit 5: Injectable contraception	8	14	4	26 (63.4)
RH Kit 6: Treatment of sexually transmitted infections	6	4	3	13 (31.7)
RH Kit 7: Clinical delivery assistance	8	6	4	18 (43.9)
RH Kit 8: Intrauterine device	4	4	3	11 (26.8)
RH Kit 9: Management of miscarriage	2	3	2	7 (17.1)
RH Kit 10: Management of complications of Abortion	2	2	2	6 (14.6)
RH Kit 11: Suture of Tears (cervical & vaginal examination)	0	0	0	0 (0.0)
RH Kit 12: Vacuum extraction delivery	2	0	0	2 (4.9)
RH Kit 13: Referral level kit for reproductive health	3	0	0	3 (7.3)
RH Kit 14: Blood transfusion	2	0	0	2 (4.9)

However, none of the surveyed facilities reported Suture of Tears (cervical & vaginal examination). Referral level kit for reproductive health and blood transfusion kits and vacuum extraction delivery kits were available in all referral hospitals/ centers.

5.3 Use of health facility services

This section looked at the overall experience of the respondents with SRH services and use. 28% of the women reported that they have ever used SRHS (See Figure 18). This proportion was highest in Kasai Central (47%) and lowest in Kasai (17%) and also lowest among adolescents (7%).

Figure 18 – Proportion of women who ever utilized SRHS



Among 2,357 women surveyed, 617 (26%) reported ever use of different SRH services. This sub-sample include essentially women who experienced SRH challenges since their displacement into the different Kasai provinces. Table 30 describes these women's experiences with SRH services in the Kasai region. Women reported they mainly used the health facilities for the following SRH services: Antenatal care (79%), delivery (68%) and postnatal care (55%). About one woman out of three (33%) visited a health facility to seek advice/counselling on FP. 27% of the adolescent girls and 17% of the adult women (20-49) used the different health facilities for post-abortion care. Likewise, adolescent girls were more likely (39%) to seek the health facilities for STIs related symptoms and care compared to adult women (23%). Displaced women in Kasai central were less likely to use FP services and seek post-abortion care compared to their counterparts living in Kasai and Kasai oriental.

Table 30- Overall experience at health facilities

	Age		Province			Overall
	12-19	20-49	Kasaï	Kasaï central	Kasaï Oriental	
<i>Service sought</i>						
Family planning	35.7	33.0	46.1	20.6	40.9	33.3
Antenatal Care	55.4	81.6	70.6	80.9	81.0	79.2
Delivery	44.6	70.2	67.6	59.9	76.0	67.9
Post-natal care	26.8	58.1	43.1	42.4	72.9	55.3
Post-abortion care	26.8	15.5	15.7	8.9	24.4	16.5
Sexually Transmitted Infection	39.3	23.2	22.6	20.6	29.5	24.6
<i>Mode of transportation to reach health facility</i>						
By walking	81.9	89.4	85.7	88.6	89.7	88.7
<i>Reason for choosing healthcare facility</i>						
Close to house	46.3	70.4	73.8	70.1	65.4	68.6
Suggested by husband	29.3	22.2	27.5	21.2	22.6	22.7
Suggested by other family members	19.5	9.4	13.8	7.4	11.5	10.2
Suggested by Neighbors	12.2	13.6	6.2	8.8	20.4	13.5
Recommended by health workers visited home	17.1	16.9	12.5	20.7	14.9	16.9
Doctor/ Nurse suggested	12.2	13.6	30.0	7.4	13.6	13.5
NGO suggested	2.4	5.7	7.5	4.2	6.0	5.5
<i>Time to reach health facility</i>						
<15 minutes	30.8	39.1	28.6	37.6	42.5	38.4
15-29 minutes	28.2	32.4	40.2	29.1	32.0	32.0
30-59 minutes	25.6	21.4	19.5	27.6	17.1	21.8
1 hour & +	15.4	7.1	11.7	5.7	8.3	7.8
<i>Environment</i>						
Clean Place	67.4	67.4	57.5	74.8	64.1	67.4
Good behavior of service providers	55.8	65.8	53.8	64.5	69.3	65.0
Close to home	46.5	53.5	45.0	51.9	56.7	53.0
Provided medicine	41.9	48.3	42.5	46.3	51.1	47.8
Easy to access	25.6	47.3	28.8	40.2	56.3	45.5
Providers understand my language	41.9	43.7	31.3	33.3	57.1	43.5
Female provider examined	34.9	39.6	33.8	36.3	43.7	39.2
Less waiting time	41.9	39.0	20.0	34.1	50.6	39.3
Maintain privacy	48.8	44.9	40.0	33.6	57.6	45.2
Good treatment	0.6	0.6	1.7	0.4	0.0	0.6
Service provider behaved badly	0.8	1.1	2.0	0.4	0.7	1.0
Service provider didn't ask about physical condition	2.6	1.1	1.4	0.9	1.3	1.7
N	56	560	102	257	258	617

For the majority of the women in the sample, accessibility to the health facility was not problematic, where by more than 80% walked to get to the health facility, irrespective of age and the province of residence. The main reasons for selecting a specific health facility included: its proximity as reported by 69% of the older women and 46% among the adolescents. Other important reasons were recommendations made by either their husbands and/or family members (23%) or by a health worker who visited their home (17%).

More than 60% of 617 of women who reported every using related SRH services were generally satisfied by their experience at the health facility. In particular, they were

satisfied by the cleanliness of the facility (67%) and the good behavior of service providers (65%). However, less than 1% of the respondents mentioned ability of health facility to provide good care as reason they liked the facility.

6. BARRIERS AND CHALLENGES IN THE FIELD OF SRH

Understanding barriers and challenges in the field of sexual and reproductive health is essential for guiding and informing service delivery preparedness as well as response. This is especially true in the context of humanitarian settings and, hence, merits careful attention as well as analysis, as it could aid in identifying bottlenecks that are more amenable to change. This section describes the main identified barriers and challenges for SRHS among women displaced in three Kasai provinces.

6.1 Barriers to use SRH services

Table 31 outlines the reasons behind why displaced women did not seek SRHS in Kasai. 42% of the women reported that they did not perceive the necessity to seek SRH care, while, 19% were not aware of the availability of the different SRH services.

Table 31- Overall barriers

	Age		Province			Overall
	12-19	20-49	Kasai	Kasai central	Kasai Oriental	
Did not feel the necessity	48.5	38.2	34.4	50.5	40.2	42.3
Did not know where/who to go	9.9	9.6	16.8	5.2	9.0	9.7
Did not know such care	18.9	18.5	29.0	7.0	22.1	18.7
Health center is far/Access to facility was/is difficult	1.9	2.5	5.8	1.3	0.7	2.2
Services were/are not available here	1.3	2.5	5.5	0.4	1.1	2.0
Did not like services provided in the facilities	0.9	1.0	1.7	0.9	0.6	1.0
Family/Husband did not allow	0.8	1.0	2.0	0.6	0.4	0.9
Did not have money	6.4	11.6	8.7	10.0	9.6	9.5
Nobody to accompany	1.7	0.6	1.6	0.5	1.3	1.3
Previous experience is not good	0.6	0.5	1.6	0.2	0.0	0.5
Concerned about being treated by a male doctor	0.8	1.2	2.2	0.2	0.9	1.0
Afraid to go health care center	2.7	1.2	1.6	0.8	3.1	1.9
Hadn't time	1.4	2.0	2.2	1.5	1.5	1.7
Neighbor forbade to go	0.6	0.2	0.3	0.0	0.7	0.3
Health care center was far away from home	0.6	1.1	1.9	0.2	0.7	0.9
N	517	651	314	399	455	1,168

Only 10% of displaced women reported lack of money as the main reason they did not seek SRH care from health facilities and less than 5% of the women indicated previous bad experience with the health facility or unavailability of the needed services.

6.2.2 Barriers to use Antenatal Care (ANC)

All 41 health facilities assessed were providing Antenatal Care (ANC) services (See Table 26). Furthermore, ANC was one of the main reasons why displaced women sought care at these health facilities (See Table 30). Table 32 highlights the main reasons behind why some of the displaced women did not attend to ANC. The lack of financial resources (22%) was the main barrier, followed by the lack of perceived ANC need (7%) and lack of knowledge of where to seek such services (5%).

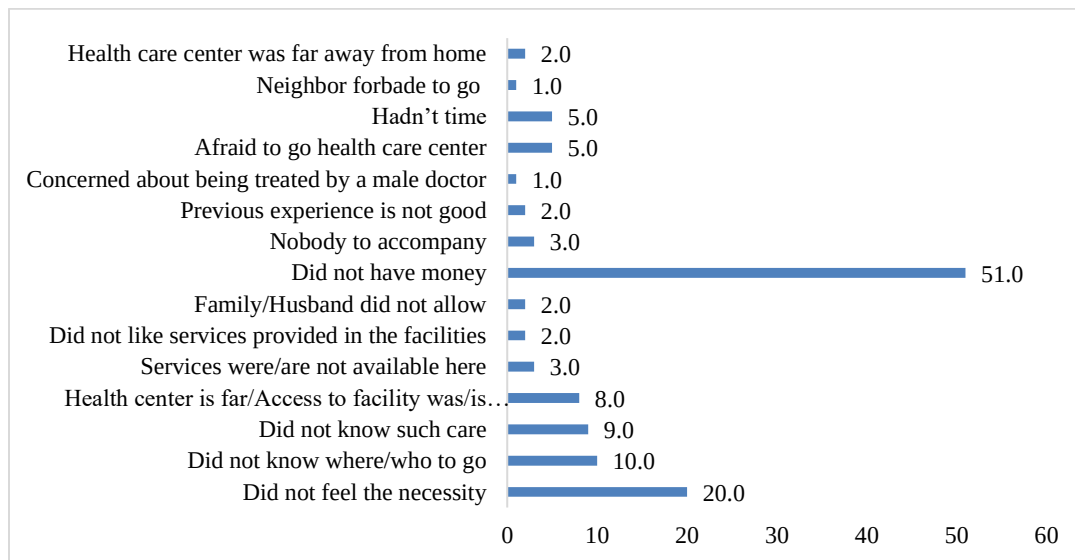
Table 32- Barriers to SRHS for ANC

	Age		Province			Overall
	12-19	20-49	Kasai	Kasai central	Kasai Oriental	
Did not feel the necessity	(6.9)	7.4	7.4	10.2	5.4	7.4
Did not know where/who to go	(10.3)	4.2	8.2	3.4	3.0	4.7
Did not know such care	(0.0)	1.1	2.5	0.8	0.0	1.0
Health center is far/Access to facility was/is difficult	(0.0)	3.7	2.5	4.2	3.6	3.4
Services were/are not available here	(6.9)	1.3	3.3	0.8	1.2	1.7
Did not like services provided in the facilities	(0.0)	1.9	0.8	2.5	1.8	1.7
Family/Husband did not allow	(0.0)	1.1	0.8	0.0	1.8	1.0
Did not have money	(27.6)	21.2	31.2	11.0	22.3	21.7
Nobody to accompany	(0.0)	1.1	1.6	0.8	0.6	1.0
Previous experience is not good	(0.0)	1.1	0.0	2.5	0.6	1.0
Concerned about being treated by a male doctor	(0.0)	1.1	0.0	1.6	1.7	1.0
Afraid to go health care center	(0.0)	0.8	0.8	1.7	0.0	0.7
Hadn't time	(0.0)	2.9	4.1	1.7	2.4	2.7
Health care center was far away from home	(0.0)	1.6	2.5	1.7	0.6	1.5
N	29	377	122	118	166	406

6.2.4 Barriers to using SRHS during pregnancy and for delivery

Figure 7 shows that 85% of the displaced women who ever had a pregnancy experienced one or more pregnancy-related complications. In parallel, 34% of the 403 women, who experienced pregnancy since their displacement to one of the three Kasai provinces, did not seek ANC (See Table 17). Figure 19 outlines the reasons why those women did not use any SRHS during pregnancy. Similarly, to those cited barriers hindering use of ANC, lack of financial resources was the principal barrier to seek SRHS and care during pregnancy (22%), followed by lack of perceived necessity to seek care despite their complications during pregnancy as reported by 20% of the women, lack of knowledge of where to seek such services (10%) or lack of knowledge of the needed SRH care (9%) as well as distance to health facility (8%).

Figure 19- Barriers to visit health facility for complications during pregnancy



The study also explored the reasons why some women chose not to deliver at the health facilities, did not attend to post-natal care and did not seek advices for menstrual regulation or STIs. Table 33 indicates that 58% of the women who delivered outside a health facility, they opted to do so because they did not have money. Other reported reasons included distance to get to the health facility (23%) and lack of knowledge of the location of the facility (17%).

Table 33- Barriers to seek SRHS

	Delivery	Postnatal	MR	STI
Did not feel the necessity	6.7	39.6	37.5	33.5
Did not know where/who to go	16.7	11.9	6.9	11.3
Did not know such care	5.0	11.9	5.6	11.9
Health center is far/Access to facility was/is difficult	23.3	7.5	5.6	2.5
Services were/are not available here	5.0	2.2	2.8	4.8
Did not like services provided in the facilities	3.3	1.5	4.2	0.7
Family/Husband did not allow	3.3	3.7	2.8	2.2
Did not have money	56.7	39.6	38.9	28.2
Nobody to accompany	13.3	4.5	6.9	3.3
Concerned about being treated by a male doctor	1.7	2.2	2.8	1.7
Afraid to go health care center	6.7	3.7	1.4	3.5
Hadn't time	5.0	4.5	15.3	4.7
Neighbor forbade to go	1.7	-	5.6	1.2
Health care center was far away from home	1.7	-	1.4	-
N	72	134	72	602

Lack of financial resources was also reported as the main reason why women did not attend to postnatal care (40%), seek menstrual regulation care (39%) or care for STIs (28%). About 40% of women did not perceive the necessity of attending postnatal care.

This reason was also similarly justified by women who did not seek MR services (38%) or STIs- symptoms related services (34%).

6.2 Areas of improvement of the existent SRHR service delivery systems

This section outlines the areas in need of improvements for the existent SRHR service delivery systems including those relating to: management of health facilities, referral, training, and capacity building of health service providers in an aim to improve the quality and the delivery SRH services in Kasai. Findings from women questionnaires, key informant interviews and focus group discussions suggested two main areas for improvements, these are:

1. Use of services by the population, this requires:
 - Sensitization and community mobilization are needed to improve the use SRHS as it will allow for more outreach and leads to improved awareness around the important
 - The cost of health care to the living conditions of the population, as most of the HC services provided are expected to be paid out of pocket.
2. Quality of services, this requires:
 - Increasing the numbers of trained community health workers; providing continuous training to health service providers; increasing supervision and evaluation of staff; and improving the overall working conditions and salaries of health care providers.

For instance, one priest in Miabi said: *“Providers need to be trained on confidentiality and privacy because some providers do not keep secrets, they disclose all medical secrets when they are discussing with friends or members of their family. Such behavior prevents people to attend to the health facility”*.

- Increasing the numbers of health facilities (one health facility per village or one facility for two villages); equipping health facilities with required resources, infrastructure, supplies and trained staff to provide the appropriate SRH care at the most optimal quality.

One Key Informant in Tshikapa (Kasai) said: *“We have only one medical doctor and few nurses in this health area. People should walk long distance to reach health centers”*.

Furthermore, *“Health facilities should be supplied with drugs. Sometimes, health services providers said to patients that they do not have drugs or the facility is not equip to perform a test”* (Key Informant, Kananga (Kasai central)).

Last but not least, *“all providers must be trained in SRH. Often only nursing supervisors are trained on how to provide SRHS, whereas other staff, including nurses and TBA are involved in managing SRH issues in the community”*.

III. DISCUSSION

This study analysed the availability of SRHS in the displaced camps in the three Kasai provinces; Evaluated the SRHS needs among adolescent girls and women of reproductive (12-49) and their SRH seeking behaviour; identified barriers and challenges impacting SRH service provision and use; and described the current provider’s capacity to provide SRH services.

Analysis of key findings raises five important discussion points: sexual and reproductive health, SRH seeking behavior, availability of resources, availability of SRHS. For each theme, the discussion below aims to summarize the main findings from the current situation analysis, compare the relevance of the identified findings with results from other sources if possible and/or interpret findings based on triangulation between the collected quantitative data and qualitative information and/or existing literature.

Sexual and reproductive health needs

The main identified SRH problems among the displaced adolescent girls and women in Kasai (from the KIIs and FGDs’ data) included early and unintended pregnancies, which was often associated with complications during delivery (heavy bleeding and prolong labor), unsafe abortion care, menstrual problems, as well as family planning-related issues and STIs symptoms. These findings are shared elsewhere, for example, Chi, et al. (2015) identified the same SRHR problems in the armed conflict context in Uganda and Burundi,

which included: increased teenage pregnancy and clandestine abortion, maternal and newborn morbidity and mortality; HIV/AIDS prevalence and SGBV; increased levels of prostitution and high fertility levels.

However quantitative data revealed mixed findings:

- The proportion of adolescents who ever had sexual intercourse (32%) observed during the current situational analysis was lower than the 44% reported during the last Demographic and Health Survey (DHS) for the Kasai region (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014);
- The proportion of adolescents who used cloth as absorbents (75%) was similar to what was observed in the displaced camps of Nord Kivu (75%) and in Haut-Katanga (72.8%). By contrast, in Kinshasa, 80% of adolescents were using sanitary pads (République Démocratique du Congo. Ministère de l'Enseignement Primaire, Secondaire et Professionnel et Ministère de la Santé Publique, 2018). Inaccessibility to sanitary pads (unavailability, high cost of sanitary pads and knowledge of sanitary pads) in rural areas, particularly in humanitarian settings was the main reason attributed to the high use of clothing during menstruation among adolescents and women (United Nations Population Fund (UNFPA), 2019; Unicef, 2019). It is worth mentioning that piece of cloth used as absorbents during menstruation could be ineffective to retain blood, uncomfortable and unhygienic and can lead to dangerous infections.
- 39% of adolescents reported managing physical menstrual symptoms by resting, about one adolescent girl out of five (20%) used self-medication to treat related physical symptoms during menstruation. Furthermore, 30% of adolescent girls did not seek any consultation to manage their physical symptoms during menstruation, while, additional 30% preferred to consult with a family member, mainly their mothers and/or sisters. This situation

may not be specific to humanitarian context though the severity of symptoms and consequences of no use of health facility might be higher in this context. Existing literature suggests that the management of physical menstrual symptoms depends on the severity of the symptoms and might vary from individual to another (Rapkin, 2005). For some women, changes in lifestyle, taking rest can help relieve menstrual' symptoms, whereas other women consult health service providers for medication (Rapkin, 2005; Daugherty, 1998).

- 85% of the displaced women who reported ever and/or current pregnancy in the three sites, reported experiencing one or more related-complications, while 20% reported experiencing complications during delivery. The living conditions (probably nutrition during pregnancy), component of antenatal care (44% of women among whom 59% in Kasai, 47% in Kasai central and 57% in Kasai oriental) did not receive information about dangers during ANC. This proportion was estimated at 63% in Kasai, 50% in Kasai central and 43% in Kasai oriental in 2013 (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014). Furthermore, only 20% of women who gave birth received at least four ANC visits, as recommended by WHO; 11% of women received ultrasound, and 31% received blood test during ANC. Last, reported complications during pregnancy and during delivery were self-reported and could be biased. Statistics from health facilities might be more consistent, though they also could be affected by selection biases.
- The majority of women reported that they had ever heard about any STIs (74%) while (34%) reported ever had a history of STIs. This proportion is higher compared to the 2013 indicators on the prevalence of STIs in Kasai, Kasai central and Kasai oriental, which were estimated at around 6% in Kasai and Kasai central and 15% in Kasai oriental (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014). Furthermore, STIs were the major themes of concern raised by the boys and men during FGDs. Last, 88% of

participants reported to have ever heard about HIV/AIDS. This proportion is close to the national indicator, which was estimated at 94% observed in 2013. (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014).

- Overall, 6% of surveyed women reported to have ever practiced menstruation regulation (MR). In Komanda camp in Ituru, about 10 medical abortions (using a pill or other non-surgical options) were reported every month in 2019 (Kavuo, 2019). However, these statistics should be used with caution because menstrual regulation (as already indicated) is not familiar in the Democratic Republic of Congo medical language and could be confused with abortion.

Sexual and reproductive health seeking behaviours

Despite the fact that the large majority of women expressed sexual and reproductive healthcare needs, regarding pregnancy and delivery care, adolescent menstruation health, STIs most had not sought this kind of care in the three provinces (Kasaï, Kasaï central and Kasaï oriental). The main reported SRH reasons by women to seek SRH care at health facilities were for: Antenatal care (79%), delivery (68%) and postnatal care (55%). While the large majority of surveyed women knew of at least one family planning method, only 10% were currently using a modern FP method, and 33% visited the health facilities to seek advice on FP.

Condom was the most common contraceptive method used. The prevalence of modern contraception (10%) is higher compared to the low modern contraception prevalence (6%) observed in the three Kasaï (Kasaï, Kasaï central and Kasaï oriental) during the 2013 DHS (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014). While the large majority of the surveyed health facilities (95%) had the capacity to provide PNC, only 56% of women who gave birth received PNC.

Prevalence of ANC in the three provinces was lower compared to ANC coverage in 2013: Kasaï (55% versus 88% in 2013); Kasaï central (71% compared to 91% in 2013) and Kasaï oriental (69% versus 86% in 2013). Likewise, services received were lower compared to

data reported in 2013 except for proportion of pregnant women who received height measure during ANC (Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014). Ignorance-related reasons (did not feel necessity, did not know where to get the service and was not aware of the service) and lack of money were the major reasons why women did not attend ANC and other SRHS complications. Findings from KIIs and FGDs mentioned also poor quality of services in health facilities though this did not appear in the quantitative survey.

Availability of Sexual and reproductive health services

Analysis of availability of SRH services shows that finding from the current situation analysis are consistent with the results from the DRC 2017/2018 assessment of Health Care Services (Ecole de Santé Publique de l'Université de Kinshasa (ESPK) [République Démocratique du Congo] et ICF., 2019) regarding availability of ANC services. The large majority (more than 90%) of health facilities in the three provinces had the capacity to provide ANC services.

The limited availability of SRH services and RH kits as well as the proportion of adequately trained staff (who received training within the last 24 months) is suggestive of the reasons behind the limited monitoring and management of pregnancy among women in the Kasai region. The results showed that only four referral hospitals/ Centers, representing 27% of all surveyed health facilities, were able to perform caesarean sections, to manage deliveries requiring vacuum extraction assistance (24%), to perform blood transfusion (17%) and to identify and manage of puerperal psychosis. Likewise, only 10% of the health facilities were able to perform ultrasound and 34% were able to identify Blood grouping and RH typing. This poor and limited provision of SRH services is consistent with results from the national evaluation of health facilities that was conducted in 2017/2018, which reported that almost all health facilities (FOSA) were offering ANC and normal delivery service (96%), while 39% had written directives on the conduct of childbirth, 26% of at least one provider recently trained in the integrated management of pregnancy and childbirth and 26% were performing caesarean sections (Ecole de Santé Publique de l'Université de Kinshasa (ESPK) [République Démocratique du Congo] et ICF., 2019). However, the majority of health facilities providing various ANC services contrasted with lower

utilization of some ANC services. For instance, while 71% of the health facilities were providing counselling on danger signs during pregnancy, only 44% of the women receiving ANC reported to have ever benefited from that service. Only two health facilities (1 referral hospital and 1 health center) had ultrasound. These findings present critical challenges that could impact maternal and newborn health outcomes among this displaced population.

Barriers and challenges in the field of SRH

Among the main reported barriers, limiting the women's use for SRH services included the lack of awareness (women either did not feel necessity, did not know where to get the service and/or were not aware of the service), followed by the limited financial resources, lack or limited availability of the needed equipment of health facilities as well as the limited quality of care. All these factors, as reported by women, prevented them from receiving the needed ANC as well as prevented them from managing other SRHS complications. This was further exacerbated by the limited knowledge of women of the obstetric danger signs as very few women received were instructed on that during ANC.

Other reasons, indicated during KIIs and FGDs, limiting SRH care were attributed to the limited geographical access to health facilities due to: bad roads, lack of vehicles, transportation costs, and distance from facilities. Analysis of staffing shows also that most of surveyed health facilities were understaffed. The numbers of human resources needed per health facility were below the recommended numbers. These observations were well noted by previous studies (Geleto, et al., 2018; Mukengeshayi, et al., 2017). While these barriers are common in most sub-Saharan countries, their intensity is believed to be higher and their impacts to be more detrimental in humanitarian contexts, where conflicts have destroyed the limited available infrastructure and populations are living in extreme poverty and famine.

Demographic and spatial differences in SRH

Findings from this study also indicated age and province differences in SRH indicators. It was observed that adolescent girls might be more vulnerable for some indicators cited above while adult women to different indicators or vice-versa. Likewise, depending on selected indicators, the prevalence is higher in one province compared to others. These age and spatial differences in the different SRH indicators are not specific to humanitarian

settings. Previous studies have found similar results in various settings (Westhoff, et al., 2007; Ministère de Plan et Suivi de la Revolution de la modernité; Ministère de la Santé Publique (MSP) et ICF International, 2014; Sommer & Sahin, 2013; Sommer, et al., 2013).

Therefore, sensitization, health awareness and community mobilization to promote the use of the needed SRHS was indicated as the most important area in need for prompt improvement by the majority of the interviewed stakeholders. Other areas of in need for improvements included: improving geographical access to SRHS and improving of the quality of SRH services provided (including the availability of adequately trained and professional staff).

IV. LIMITATIONS OF THE STUDY

Implementation of this assessment was challenged by four main factors. First, there were no specific camps or villages for the displaced people, as they were dispersed and lived among the local population in the non-affected villages, sometimes lodging with some family dwellings. We used local leaders to be able to appropriately identify the villages and households where the displaced people were living in Kasai, Kasai central and Kasai oriental. This situation might explain the similarity between some indicators and findings from previous studies and also can explain the worse quality of health care due to resultant additional demographic pressures from the displaced population.

The second challenge was linguistic. The protocol and the data collection tools were developed in English and then translated to French for administrative purposes, including Ethical review. On the other hand, data collection was conducted in Tshiluba (the local language spoken in the three provinces). We recruited fieldworkers who were fluent in both Tshiluba and French to conduct the quantitative data collection. We also recruited a team of five people who translated the qualitative materials from Tshiluba to French and transcribed it using Microsoft Word before analysis.

Third, some villages were not accessible due to both poor road infrastructure and the start of the rainy season during data collection. As a result, in Kasai oriental, the survey was conducted in only one health zone (Miabi), where the displaced population were identified and the villages were accessible. In Kasai and Kasai central, the study was conducted around the city capital of the provinces (Tshikapa for Kasai and Kananga for Kasai central).

Finally, we were not able to survey the total needed number of health facilities and health services providers. This was attributed to the fact that some villages did not have any health facility. In addition, except for referral hospitals, the large majority of health facilities had only one health care provider, who was commonly the nursing supervisor. None of the health facilities had additional TBAs and/or nurses.

V. RECOMMENDATIONS

This SRH situation analysis was conducted to review the SRH needs and seeking behaviors of displaced adolescent girls and young women of reproductive age (12-49) in Kasai, Kasai central and Kasai Oriental provinces, of the Democratic Republic of Congo. Analysis of findings suggest the following recommendations:

Due to the fact that unintended pregnancies and risk of STIs/ HIV/AIDS particularly among adolescents was listed as a major SRH problem for both KIIs and FGDs participants. We recommend:

- Adolescent and women empowerment on sexual and reproductive health (use of contraception methods, including condom), as well as the ability to report rape and other gender-based violence.
- Increase availability of contraceptive methods in the areas as well as the enforcement of the Maputo protocol, which recommends access to abortion in case of rape. The DRC considers adolescent sexual intercourse as rape, which is consistent with the Maputo protocol on human rights (African Union, 2003).

The large majority of adolescents (75%) were using cloth as absorbent during menstruation period which could be ineffective to retain blood, uncomfortable and unhygienic; and lead to dangerous infections. Therefore, we suggest the following recommendations:

- Increase in-school and out of school Education programmes related to Menstrual and Hygiene Management. Traditions often act as barriers to openly discuss hygienic management of menstrual between parents and their daughters. About 30% of girls reported ever discussed with mothers or family members on how to manage symptoms during menstruation (Table 10).
- Subsidizing sanitary pads to increase accessibility and use, which will promote menstrual health among this population.

About 34% of pregnant women did not receive antenatal care and 44% did not receive PNC, although, more than 90% of health facilities were providing ANC and PNC. Further, among women who ever received ANC, the number of ANC visits and services received

were below WHO and national guidelines recommendations. Only, 10% of the women were using modern contraception. limited awareness of the different FP methods, the lack financial resources, the limited availability and the poor equipment in the health facilities, the limited numbers of available of health facilities as well as the limited numbers of adequately trained and available human resources were all listed as well as main challenges in SRHRS in the three provinces. Against this background, and from a health system perspective and the whole of government approach, we recommend the:

- Construction of new health facilities to replace those destroyed during the war and/or rehabilitate the existing ones;
- Provision financial support to health facilities to improve the management of SRH cases and facilitate the use of women and girls of these services;
- Adequate equipment of all health facilities with drugs, and other commodities and supplies, as well as with adequately trained staff (less than 25% of the interviewed health care providers received trainings over the last 24 months);
- Increase in sensitization activities for raising SRH awareness, which is essential to promote modern contraceptive use, prevent unwanted pregnancies as well as to reduce maternal, child, infant and neonatal morbidity and mortality in the community;
- Enforcement of the provision of free maternal, child and adolescent health care, especially for the displaced, vulnerable and marginalized.

CONCLUSION

In conclusion, the findings from this situation analysis revealed that displaced adolescents and women living in Kasai, Kasai central and Kasai oriental face important SRH challenges, including unintended pregnancies, high prevalence of STIs low use of SRHS compared to indicators collected in 2013 (Demographic and Health Survey). The observed the vulnerability of adolescents and women in this study require both global and national informed actions that are specific for each province and health zone, where displaced girls and women are living.

The main contributing factors of the conflict leading to the poor identified SRH indicators among displaced adolescents and women in Kasai, Kasai central and Kasai oriental might be attributed to: destruction of health facilities; limited health facilities' infrastructure; understaffing and insufficient continuous staff training.

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