



Situation Analysis for Delivering Integrated Comprehensive Reproductive Health Services for Adolescent Girls and Women in the Three Selected Districts: Al Sheikh Othman in Aden, Lawdar in Abian, and AlMaafer in Taiz - Yemen



AlSheikh Othman



Lawdar



AlMaafer

Final Report

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ABBREVIATIONS

AIDS - Acquired immunodeficiency syndrome	NCD – Non-Communicable Disease
ANC - Antenatal Care	NGO - Non-Governmental Organization
APH – Antepartum Haemorrhage	NHDS - National Health Demographic Survey
BEmOC - Basic Emergency Obstetric Care	NYMA – National Yemeni Midwives Association
CEmOC - Comprehensive Emergency Obstetric Care	OPD - Outpatient Department
CMR – Clinical Management of Rape	Obst&Gyn – Obstetrician & Gynecologist
CPR - Contraceptive Prevalence Rate	PAC - Post Abortion Care
CS - Caesarean Section	PMTCT - Prevention of the maternal-to-child Transmission
CSO - Civil Society Organization	PNC - Postnatal Care
CSSW - The Civil Society of Social Welfare	RH - Reproductive Health
DG - Director General	RHIAWG - Reproductive Health Inter-Agency Working Group
FGD - Focus Group discussion	RTI - Reproductive Tract Infection
FMF – Field Medical Foundation	SBA - Skilled Birth Attendant
FP - Family Planning	SDGs - Sustainable Development Goals
GBV - Gender Based Violence	SRHR - Sexual and Reproductive Health Rights
Hb - Hemoglobin	STD - Sexually Transmitted Disease
HC - Health Center	STI - Sexually transmitted Infection
HO – Health Office	TBA - Traditional Birth Attendant
HRR – Human Resource Reproduction	YARH – Yemen for Reproductive Health
IDI - In-depth Interview	UHC - Universal Health Coverage
IDP - Internal Displacement Person	UN - United Nation
INGO - International Non-governmental Organization	UNFPA - United Nations Population Fund
IPPF – International Planned Parenthood Federation	UNHCR - United Nations High Commissioner for Refugees
IOM - International Organization for Migration	UNDP – United Nations Development Programme
IPV - Intimate Partner Violence	UN OCHA - United Nations Office for the Coordination of Humanitarian Affairs
ISCG - Inter Sector Coordination Group	WB – World Bank
IUD - Intrauterine Device	WHO – World Health Organization
KII - Key informant Interview	
MCOC - Maternal Continuum of Care	
MOPHP - Ministry of Public Health and Population	
MVA - Manual Vacuum Aspiration	

EXECUTIVE SUMMARY

Introduction

WHO and the Global Health Cluster is undertaking a three-country project, including Yemen, to deliver integrated and comprehensive Reproductive Health (RH) services in emergencies through the Health Cluster to meet the immediate RH needs of extremely vulnerable women and adolescent girls in acute and protracted humanitarian crises. The goal of the project is to enhance health cluster partners' delivery of integrated RH services in humanitarian crisis to significantly help more women and girls to access good quality reproductive health services during humanitarian crises as compared with the situational analysis results served as a baseline.

This situational analysis was conducted in three districts of three governorates: AlSheikh Othman district in Aden governorate (urban), Lawdar district in Abian governorate, and AlMaafer district in Taiz governorate (both are semi-urban/rural). These three districts are at the highest score level (4-5) of humanitarian crisis.

The overall objective of this study was to carry out a situation analysis in order to assess the extent of RH services provision from both demand and supply angles. The specific objectives were to determine: the RH needs of adolescent girls (aged 10-19 years) and women aged 20-49 years, the utilization of RH services and seeking behaviour of RH care, and barriers confronting adolescent girls and women aged 10-49 years from accessing RH services (demand angle). This study also assessed the readiness of health facilities (supply angle) in terms of RH services' availability, infrastructure, medical supplies, and human resources including the training of the health staff. This assessment also explored the impacts of the of COVID-19 pandemic in Yemen on the provision of public RH services.

Methodology

This situation analysis employed a mixed-methods study design using quantitative and qualitative methods. The quantitative assessment included a household-based survey, health facility assessments, and a rapid overview on provision of RH services in the context of COVID-19 pandemic.

The household survey was carried out in each of the three districts. It targeted a randomly sample of Yemeni females, ever-married women aged 20-49 year, and married adolescent girls aged 10-19 years irrespective of marital status. The health facilities assessments included one CEmOC hospital and 3-4 BEmOC selected health centers in each of the three districts. The rapid overview used data collectors and supervisors in each selected district as key informants.

The qualitative component combined in-depth interviews with key informants and focus group discussions. These were conducted with a broad range of stakeholders who were either providing RH services or served as community leaders. In addition, they also included FGDs with internal displaced persons (IDPs) of women and girls, in each of the selected districts. In particular, the key informant interviews included a broad range of interviewees from: International/National organizations' representatives and formal providers contributing to RH services; influential leaders; Yemeni males; and internal displaced persons (IDPs) representing women and adolescent girls residing in the areas of the study in each selected

district. Three different questionnaires were used in this study: one for the qualitative, one for the health facility assessment, and one for households' survey.

Key Findings

This assessment interviewed 190 Adolescent girls aged 10-19 years and 342 women aged 20-49 years as part of the household survey. It also carried out a total of 44 Key Informants' Interviews (KIIs) and 15 Focus Group Discussions (FGDs), in addition to the rapid overview to understand the impacts of COVID-19 on provision of public RH services in all three districts, where it interviewed and additional 53 Key informants on COVID-19 effects.

Characteristics of study Respondents:

The mean age in the household survey was 31 years. 80% of respondents were literate and 28% of them had already completed secondary level of schooling and above. Out of 190 girls, 80% were already menstruating at the time of the survey. 14% of girls were married. Almost, 40% of respondents indicated early age at marriage. A substantial proportion of respondents (91%) were not working or had a paid job at the time of the study.

One-third of the respondents were living in extended families. 9% of the married females indicated that their husbands were not living at home due to either working in other governorates or outside the country, and men were the sole decision makers in three out of four families. 45.5% of respondents were depending on either daily wages or humanitarian relief assistance.

63.7% of participants who participated in Key Informants interviews (KIIs) were between 34-54 years of age. The female:male ratio was 1:1. KIIs covered a broad range of stakeholders including: Governorates' health general directors and RH directors; districts health directors and RH leaders; districts' local authority; RH health facilities leaders; and international as well as national NGOs.

Several FGDs were carried out with men, reaching a total sample of 28 men. All the participating men were married and 57% of them were within the age of 35-50 years. Most of them had completed secondary educational levels or above and were employed. A total of 30 IDPs women were also selected for the FGDs. 73% of them were relatively at mean age of 30 years; more than half were illiterate; none of them were employed; and few (20%) of them were newly displaced (i.e., for less than a year). A total of 30 IDP adolescent girls were also selected for the FGDs. 63% were older than 14 years, half were illiterate, and 30% were students.

Several FGDs were as well conducted with a total sample of 29 community midwives, 50% of were aged between 35-49 years, 93% had secondary level education, and 70% had more than 5 years of providing maternal health services in their communities. One third (34.5%) of the 29 selected community volunteers in the FGDs were young (aged between 20-24 years). Almost all of them were highly educated, and one-third have been engaged in providing volunteer community services for more than three years.

Reproductive Health Needs

80.8% of the total sample (87% of girls and 78% of women) used sanitary pads only during menstruation. The overall prevalence of severe dysmenorrhea was 51%. 73.1% (19 out of 26) of married girls and 93.6% (320 out of 342) of women indicated to have ever been pregnant

and 87.3% had at least two pregnancies. Both girls and women reported at least one severe pregnancy outcome.

21.8% were pregnant at the time of the study, with 40% of these pregnancies were reported to be unplanned. 21.3% of the girls and women who were currently pregnancies reported co-existing life-threatening morbidities, such as bleeding, fever, headache/blurred vision, Edema, less/no movement of the foetus, anaemia, and pregnancy associated with diseases (high-risk pregnancy).

In the last five years since the war started, 95.3% reported to have ever been pregnant and had given birth. 27.6% of these pregnancies were reported to be unplanned. 33.6% had experienced life-threatening conditions during pregnancy and/or delivery, such as bleeding, fever, preeclampsia/eclampsia, anaemia, and pregnancy associated with non-communicable diseases. During childbirth, 26% of the respondents had experienced complications, where bleeding and prolonged labour were the most common. All girls had normal deliveries and 10% of women had surgical c-section deliveries. However, the rates of preterm deliveries and stillbirths were higher among girls (21.4% and 7.1%) compared to women (2.5% and 3.5%). Nearly 1 in 4 respondents had experienced abortion during the last five years prior to this assessment. Among whom, 7.8% have had repeated abortions during the specified period. 77.6% of them reported complications during abortion.

Only 50% of all girls and 80% of women in this study indicated that they have heard about STDs. Similarly, 53.7% of girls and 83% of women have heard about HIV/AIDs. 52.6% of all respondents self-reported to have experienced at least one RTIs-related symptom in the past six months prior to this assessment.

31% of all girls and 1.5% of women were absolutely unaware of any contraceptive methods. 12% of all girls and 38% of women reported public health facilities, as their main source of information on family planning.

15% of all respondents (21.6% of girls and 11.4% of women) were illiterate about Gender-Based Violence (GBV). 8.3% of all respondents reported to have been exposed to Intimate Partner Violence (IPV) during the last five years. 92% of whom requested GBV support services in public health facilities.

These results indicate the tremendous need for comprehensive RH services for both girls and women, as reported by all participants in this assessment.

Summary of Adolescent girls' RH needs:

Provision of free of charge comprehensive RH health services for adolescents in health facilities. The adolescence RH services have to be with complete confidentiality, run by qualified health team with respectful care, and within safe spaces. The comprehensive RH packages should be focused on strengthening RH awareness, adequate counselling and treatments, and pertain to different RH issues from menstrual hygiene, RTIs/HIV, family planning, GBV, and maternal health as well as safe abortion care. This packages also to include combatting child marriage and raising awareness on the harmful effects among all community, including revisiting the marriage law.

Summary of Women's RH needs:

24-hour delivery care services in health centers, EmOC services and post abortion services, particularly in AlMaafer and Lawdar districts should be provided by qualified female personnel.

Raising awareness on all RH issues, with male involvement in the awareness, especially on family planning including regular supplies of contraceptives methods were perceived of great necessity. Other needs include RTIs awareness and treatment, respectful RH services that also include treatment of anaemia and non-communicable diseases, screening for breast cancer to promote early detection and management, GBV supportive services and provision of social and legal protection for GBV victims and ways that could be explored for accessing free of charge RH services in this poor socioeconomic situation.

Reproductive health seeking behaviour

Menstrual Health: Almost one-third (33.6%) of all respondents reported pain during menstruation and the majority 62.3% took medications for the pain while 14.3% reported the need to consult with health professionals.

Pregnancy & childbearing experience: 77% reported receiving ANC follow-ups with health professionals during their current pregnancy and mostly (52%) they received ANC at the private health facilities. 80.6% of respondents with pregnancy-related complications sought care, more predominantly, from private health facilities (51.6%) compared to 29.0% who used public health facilities. During the recent completed pregnancies within the last five years, only 20.4% of respondents completed the full maternal continuum of care pathway (i.e., at least 1 ANC visit by health professional, SBA at childbirth, and 2 PNC visits by skilled health providers) and 14.2% of respondents did not receive any maternal services along the pathway. 57% of girls, as well as women, had their childbirth at home. 19% of all respondents did not seek care for pregnancy-related complications. However, the rate dropped to 5.9% during childbirth complications. Girls were less likely to seek care for complications during pregnancy and childbirth compared to women.

Abortion Care: Two-thirds of the women in the sample who pursued abortion care have as well sought care for abortion-related complications, with the majority (over 60%) obtaining their care from health facilities.

Reproductive Tract Infections (RTIs): 60.7% of all respondents sought care at health facilities to manage their RTIs' related symptoms. Women were more likely to seek care to manage their RTIs-related symptoms compared to girls.

Family Planning: 52.5% of the respondents reported current use of family planning i.e. at the time of this assessment. The three most common contraceptive methods used among women were oral pills (53.8%), injectables (23.4%), and IUD (9%). Pills were the main contraceptive method among girls. Public health facilities were the main source of attaining the contraceptive methods for 58.9% of respondents. The pharmacy was the second source (24.8%), followed by private health facilities (12.1%), and the last source was community midwives (4.3%). Most current users (87.2%) reported using family planning to delay pregnancy. The main two reasons stated by respondents for selecting a specific family planning method included: "choice of the provider" (32.9%), and "suitable for my body" (31.5%). 11.5% of girls and 52% of women have ever used family planning methods.

It is found that the use of private health facilities was more among respondents in AlMafer district compared to respondents in AlSheikh Othman and Lawdar districts for all RH issues, except for family planning services, where their use of the public health facilities was more.

Public Health Facilities Assessment:

13 public health facilities from the three districts were assessed for the provision of RH services. These health facilities included 3 hospitals: one at a governorate level and 2 at a district levels, in addition to 10 health centres. All health facilities were operated by the government, but most of them were financially supported combined with provision of resources by different international organizations, either directly or through national non-governmental organizations. The operational running costs in all assessed facilities depended mainly on cost-sharing, where bearing the beneficiaries the biggest cost proportion the because the running costs from the government is not sufficient. All the three hospitals in the three districts operated 24/7, contrary to the health centres that operated only half a day.

Availability of Resources

Infrastructure: 92% of the health facilities had a family planning room and 85% had patient waiting spaces. ANC/PNC room was available in 61.5% of the health facilities, while labour room was only available in 38.5% (3 hospitals and 2 health centers). All the three hospitals had an operation room to conduct surgical deliveries. Separate rooms for GBV, post abortion care, and Prevention of Maternal to Child Transmission PMTCT/HIV were only available in one hospital.

Human resources: Sufficient specialized health professionals were available only at one hospital. In one hospital, there were no obstetricians & gynaecologists. Female general physicians were found in only 30.8% of the health facilities (2 hospitals and 2 health centers). All health facilities had, at least, one midwife and a female nurse or medical assistant.

RH services availability: 92.3% of the respondents indicated availability of ANC. Only two hospitals (15.4% of all health facilities) had the ability to test for HIV. Management of pregnancy-related complications was provided in few health facilities depending on the type of complications. The different RH services provided in the selected health facilities, included management of: severe anaemia provided in 46.2% of the facilities; pregnancy associated with communicable diseases in 38.5%; pregnancy associated with non-communicable diseases in 23.1%; antepartum haemorrhage in 30.8%; and Pre-Eclampsia/eclampsia in 15.4% which is only 2 out of 13 health facilities.

Almost two-thirds of the 13 selected health facilities offered normal vaginal deliveries, and 61.5% offered manual removal of placenta. The availability of services for PNC follow-up was less than 50% (46.2%), while services to manage abortion and its complications was available in 23.1% of health facilities. All health facilities were providing family planning services, but 7 out of 13 health facilities (53.5%) were providing different family planning services, mainly: pills, injectables, IUDs, implants, and male condoms. The beneficiaries had to pay for the family planning services.

RTIs treatment services were offered in 30.4% of the health facilities (all hospitals and one health centre). There was lack of both a systematic referral mechanism as well as recording system of referred cases. There was lack of ambulance services, even to transfer emergency cases from a health facility to a higher qualified health facility. 15% of health facilities (2 hospitals) were providing adolescent health services for only HIV and FP counselling.

Utilization of RH services

Less than 10% of all girls and 75% of women reported ever using RH services. 69% of these respondents used public health facilities and 26% used the private health facilities. Physical accessibility to the health facility was the most common reason for choosing to have RH

services at health facilities. 30 minutes was the mean waiting time to get the RH services in the public health facilities.

All girls and 82.6% of women reported that they felt comfortable interacting with the providers to explain and clarify their RH health problems. However, 17.4% of women felt uncomfortable with three issues: the providers' negative behaviour, and the impatience and unfriendly care towards them (11.2%); lack of privacy (0.8%); and the third was on the process of service (5.4%), such as long waiting time and only morning working hours.

General satisfaction of respondents on attaining the needed RH services in public health facilities was as follows: 71.4% of girls were completely satisfied, and 28.6% were partially satisfied. Among women, 61.1% were completely satisfied, 34.4% were partially satisfied, and 4.5% were unsatisfied with RH services. 45% of respondents paid the demanded costs for the RH care received in public health facilities.

RH services in the context of COVID-19 pandemic

As of March 2020, the COVID-19 cases started being identified in Yemen. Consequently, this assessment was amended by an additional rapid assessment that aimed to explore the impacts of COVID-19 on the provision of RH services. The COVID-19 pandemic interrupted the RH services at all levels of public health system: hospitals, health centers, primary health care units, and community-based services. The disruption was more prominent in Aden governorate and AlMaafer district compared to Lawdar district. Some of the main reasons attributed to the disruption of RH services were: lack of personal protective equipment, which spread fear and confusion among healthcare professionals and resulted in them refusing to work; RH staff redeployment to provide COVID-19 relief; supply-chain difficulties; and fear of contracting COVID-19 among women and health care providers at community level. Lockdowns also interrupted movement among governorates and resulted in increasing transportation costs, making it unaffordable for the majority of people, which in turn led to reductions in seeking outpatient care. So, the diversion of health resources in public health facilities to respond to COVID-19 pandemic restricted women's already limited access to health services, including family planning, and therefore put girls and women at higher risk of unintended pregnancies, maternal health risks, and reproductive tract illnesses (RTIs).

Barriers and challenges in using RH services

Generally, three major barriers impeded adolescent girls and women in all districts from seeking the needed RH services. These were as follows:

1. the economic (financial) barrier that respondents took into consideration, which was amplified given their poverty situation and the increased costs of transportation;
2. lack of awareness of seeking timely RH services; and
3. the limited quality of RH services in public health facilities.

In the sections below, a summary of the specific barriers reported to impact the different aspects of RH care is provided:

- *Barriers to use Antenatal Care:* The economic barrier was the main barrier (38.8%). This was followed by the limited quality of provided RH services (17.8%), and the lack of awareness of ANC benefits and services among 15.5% of all respondents.

- *Barriers to care seeking for pregnancy related complications:* The two main barriers cited were: the economic barrier (39.5%) and the limited quality of provided RH services (29.1%).

- *Barriers to seeking health facilities-based normal deliveries:* The three main barriers were cited: economic (30.9%), the limited quality of provided services in health facilities (22.9%), and culture misconceptions & beliefs (18.4%).

- *Barriers to seeking care for childbirth related complications:* The two main barriers cited were Lack of awareness of RH benefits and services was among 60% of respondents followed by economic due to lack of money among 40% of the respondents.

- *Barriers affecting the uptake of postnatal care services:* The two main barriers cited were lack of awareness of the PNC benefits and services by 71.8% of respondents followed by the economic (unaffordability), among 14.3% of respondents.

- *Barriers to utilization of post-abortion health services:* The two main barriers that prevented them from accessing health facilities for treating their abortion related complications were: the economic barrier (50%) and the lack of knowledge of the benefits and existent services of post abortion care (26.9%).

- *Barriers to seeking care for treatment of RTIs:* The two main barriers cited were Lack of information on benefits of RTIs treatment and services (50.3%) followed by economic unaffordability as cited by 32.1% of the respondents.

- *Barriers to current non-use of family planning:* Most non-users (62.2% of respondents) wanted to have children. Fear of contraceptive use could impact health was cited by 17.9% of respondents, followed by husband refusal to use contraception cited by 16.3%.

- *Barriers to utilization of RH services in any health facility:* The commonest barriers were lack of awareness on RH benefits and services (69.7%), followed by unqualified RH health services (13.3%), which was the main barrier (85.2%) to accessing public health facilities, and the economic barrier (12.0%). Covid-19 pandemic had further exacerbated the accessibility to public health facilities due to lack of PPE and infection prevention for health cadre and fear of contracting COVID-19.

Conclusion

The armed conflict, displacement, and political unrest of the past five years in Yemen have exacerbated an existing pressing situation of health services. This respectively increased the vulnerability of girls and women. The current conflict situation created a lot of challenges to accessing reproductive health services. This situational analysis identified several challenges that are specific to both demand and supply factors. The demand challenges included poverty, combined with high out-of-pocket costs of services, limited reproductive health awareness, care providers disrespectful attitude, lack of family support, in addition to cultural beliefs. On the other hand, the supply challenges included poor quality of RH services attributed to human resources' shortages especially that of female specialized doctors and qualified midwives in all the three districts and the insufficient in-service training that impacted the quality of service delivery. Other challenges included: poor infrastructure and availability of essential RH services coupled with inadequate supply of medicines, contraceptive methods, and medical equipment. In addition, the absence of referral systems, weak community-based RH services, and lack of integration and coordination among the different organizations providing RH services equally impacted the availability and the quality of RH services. The effects of COVID-19 pandemic led to further exacerbation of available RH services.

Based in our findings, effective collaboration between the Ministry of Public Health & Population and the various donors with INGOs (International Non-Governmental

Organization) and local CSOs (civil society organisations) is crucial in order to implement a quality improvement approach and enact an exemption of free-fee for services programs in close coordination with governorate and district health directorate for RH services at public health facilities level, as well as community-based services. Advocacy with local decision-makers and policymakers pertaining to the importance and benefits of essential-good quality-RH health interventions, is equally important for sustainability.

This should also be coupled with institutionalizing responsive adolescent RH services in health facilities that promote awareness of the RH benefits in a culturally appropriate and sensitive manner and ensure services' confidentiality. Awareness should include decision makers on importance of adolescent services. Moreover, this study found that strengthening RH coupled with community mobilization activities is needed to improve the knowledge of females and males of the benefits of RH services and its availability. At last, adapting policies that maintain the availability of essential RH services during the COVID-19 pandemic and emphasize the availability of essential supplies coupled adequate infection prevention and control capacities is crucial.

Introduction

Reproductive Health and Rights (RHR) are integral to achieving the Sustainable Development Goals (SDGs), especially SDG 3.7, which calls for ensuring universal access to SRH care services by 2030.¹ The realities are that armed conflicts will impede the realization of this target as a result of displacement and forced migration, which affect the lives of all individuals, especially women and girls. Forced displacement and migration result in interruption of social networks and infrastructure; thus, creating substantial barriers to accessing basic services that further intensify the existing patterns of inequalities.² In such emergency settings, reproductive health services have been recognized as a key factor for the survival of the population, but often still remain under-prioritized. According to WHO, the essential RH interventions in emergencies include: Family planning (all methods – including long-term and permanent, as well as emergency contraception), post-abortion care, pregnancy care, childbirth care (including emergency obstetric care), and postnatal care (mother and newborn). Other emergency interventions are the prevention and management of sexually transmitted infections and HIV, including mother-to-child transmission of HIV and syphilis, and prevention and management of gender-based violence.³

Yemen is one of the poorest countries in the Middle East region, even before the current crisis. According to the 2019 Human Development Index, Yemen ranked 177 out of 189 countries in human development.⁴ It has a total estimated population of 29,400,000, of which 34.8% are urban.⁵ Yemen has experienced multiple conflicts that intensified around 2010, with massive protests erupting in 2011. Following which, a series of internal fighting took place in 2012–2014, that culminated in the recent war on the 26th March 2015. This war continues to date, with significant escalations and fighting across multiple frontlines around the country. As a result of this war, and specifically since 2014 to date, poverty in Yemen has increased from 47% of the population to an estimated rise up of 75% of the population in 2019. A significant proportion of the Yemenis have become dependent on humanitarian assistance and remittances.⁶ As a result, an estimated total of 24 million people in Yemen, i.e., over 80 per cent of the population are in need of some kind of assistance, including 14.3 million who are in acute need.⁷

The last five years of the conflict led to the collapse of the economy and social services as well as health care system that was already poorly functional. The urban-rural huge gap in all availability of health services and particularly maternal health services due to maldistribution of health manpower and other resources has significantly widened. According to a 2008 study that collected in rural areas showed a direct and significant association between maternal health services utilization and high socioeconomic characteristics (wealthier and higher educational attainment).⁸

Currently, the health system in Yemen has become severely fragile, where it was either deeply disrupted or totally destroyed in some areas of the country. In parallel, all related basic services pertaining to water supply, sanitation, irrigation and agriculture are destroyed. These current realities of Yemen are further worsening the health of the population, especially that of women and children. It is estimated that nearly half of the health facilities are not functioning or only partially functioning. Only one-third (37%) of the functioning health facilities provide reproductive health services⁹ due to staff shortages, lack of supplies, inability to meet operational costs or damages due to conflict with equipment and medical supplies are inadequate or obsolete. Health workers have either not been paid or are only paid irregularly for over two years. This resulted in severe shortages in the health care force in Yemen, as

many consequently left the country. The collapse of the local currency, lack of public sector salaries in some areas (northern part of Yemen), unemployment and high food prices, fuel and basic social services shortages continue to further worsen poverty among the Yemeni population, pushing even more of Yemen's vulnerable residents deeper into poverty and unemployment. Although the extended family structure is very traditionally pervasive in Yemen, especially in rural areas, these family structures expanded during the last six years of the conflict because of the economic hardship. Yemen has become a failed state with a total collapse of basic public services and institutions.

Given the above-described fragmented governance structure, all relief and response efforts to the crisis are solely being undertaken by the humanitarian community. The two governments in both the northern and southern parts are no longer able to deliver basic services to people in need, including basic health care, RH and nutrition services, water and electricity supply, and social safety net services. Although, the existing Health Cluster coordination mechanism for health humanitarian interventions include RHIAWG as an RH specific coordination group in both parts of the country (southern and northern), the implementation of the needed RH activities needs more efforts for planning, supervision, monitoring and evaluation.

Consequently, and not surprisingly, the conditions for women and girls are severely exacerbated. An estimated 4 million people are currently displaced in Yemen, about half of these displaced are women and 27 per cent are women below age 18 years.¹⁰ According to UNFPA in 2019, "An estimated six million women and girls of childbearing age (15 to 49 years) are in need of support. Rising food shortages have left more than one million pregnant and lactating women severely malnourished." A total of 1,200,000 new pregnancies were estimated in 2019, these rates were compounded with 180,000 women likely to develop childbirth complications and 9,000 (5%) of them in need of surgical deliveries.¹¹ In a country with one of the highest maternal mortality ratios in the world (385 per 100,000 Live births¹² in the Arab region), the lack of food and poor nutrition, combined with poverty and eroding healthcare, have worsened health conditions further, giving rise to many epidemics and predominantly cholera. Together with the COVID-19, this is expected to lead to poorer RH outcomes and significant increases in maternal morbidity and mortality.

In crisis situations, one in five women of childbearing age is likely to become pregnant. Without access to Reproductive Health services, women face an increased risk of life-threatening complications. Many women also lose access to family planning, exposing them to unwanted pregnancies in hazardous conditions. Hence, a further estimated 75,000 pregnant Yemeni women are at risk of developing complications due to the dire state of health services in the country. A systematic review of studies from 8 countries, including Yemen - with different conflict-affected crises explained the impacts of humanitarian crises on maternal health services from both the supply and demand angles. The (community) demand included severe impacts on: transportation access, female education, autonomy, health awareness, and ability to pay. From supply (health services) angle in terms of service availability and quality, existence of community health workers, costs, and informal payment in health facilities.¹³ In addition, more than three million Yemeni women and girls are estimated to be at risk of gender-based violence, and 60,000 women are at risk of sexual violence, including rape.¹⁰ Many cases of gender-based violence remain unreported, adding to an incomplete picture of the scale of violence against women. A 36 percent rise in access to gender-based violence services was reported in 2017. This percentage is extremely telling, given the existent social norms, which often discourage reporting.¹⁴

Compounded with the above-cited impacts, women are further challenged to step into roles that are traditionally filled by men. Conflict-related losses of male breadwinners among Yemeni families adds to the economic burdens' women face. Women and girls are often and suddenly finding themselves responsible for providing for their families, when they themselves have been deprived of basic education or vocational training that would equip them for the labor market. In the absence of adequate empowerment and support, it is not surprising that women and girls will become readily even most vulnerable to negative coping strategies such as child marriage, violence, etc.

In light of the above, it can be adequately assumed that Yemeni women and girls are paying the highest tolls in the current and long staggering war in Yemen.

Currently no data exists to comprehensively assess the effects of the ongoing war in Yemen on Reproductive health. The last nationwide health survey, the Health Demographic Survey (HDS), was conducted in 2013. Amid this context and given the lack and need for data, we sought to implement a situation analysis to describe the current RH situation among Yemeni adolescent girls and women as well as to describe facilitators/enablers, barriers, and challenges, at both, the demand and supply sides in three districts (AlSheikh Othman, AlMaafer, and Lawdar) within three governorates (Aden, Taiz, and Abian) in Yemen. This project was timely and needed. It was also aligned with the current ongoing WHO efforts to deliver Integrated Comprehensive Reproductive Health services in emergencies through the Health Cluster to meet the immediate RH needs of women and adolescent girls, as well as to enhance health cluster partners' delivery of integrated RH services. It is hoped that the results of this situation analysis would help inform the different humanitarian partners to cater to a better coordinated and needs-driven planning, programs that respond to the urgent RH needs, as well as properly allocated resources. In this paper, we seek to describe the overall research protocol of the conducted situation analysis, which was funded by World Health Organization/Global Health Cluster.

Research Aims

This situation analysis aimed to assess the RH needs (demand and supply sides) impacting access to RH services among women and adolescent girls aged 10-49 years in three districts of three governorates in Yemen: AlSheikh Othman district in Aden governorate, AlMaafer district in Taiz governorate, and Lawdar district in Abian governorate. This assessment also serves as baseline for measuring progress.

Specific objectives:

The specific objectives of this situation analysis were:

1. to assess access, use and perceived need for RH services among women and adolescent girls (aged 10-49 years old) in Yemen;
2. to assess facility readiness focused on exploring availability of resources (manpower and essential kits, drugs, and supplies) and systems management (Data, referral, providers training and cost-sharing) for providing comprehensive RH services;
3. to explore challenges at both demand and supply sides in the provision and use of RH services;
4. to explore the impacts of COVID-19 on the continuation and availability of public RH services; and

Methods and Analysis

Study Design and Population

This situation analysis employed a mixed-methods study design using quantitative and qualitative methods. The quantitative assessment included a household-based survey and health facility assessments. The household survey targeted Yemeni women and adolescent girls aged 10–49 years living in each of the three selected districts. The health facilities assessments included one CEmOC hospital and 3–4 BEmOC selected health centers in each of the three districts. The qualitative component combined in-depth interviews with key informants and focus group discussions (FGDs). The key informant interviews (KIIs) were conducted with broad range of stakeholders providing RH services, these included: health care providers, community leaders, as well as representatives from International/National organizations' formal providers contributing to RH services in each of the selected district. The FGDs included: Yemeni males; community midwives; community volunteers and internal displaced persons (IDPs) representing women and adolescent girls residing in the areas of the study in each selected district.

Study sites

As already indicated, this situation analysis was conducted in three of the districts of the three governorates in Yemen: AlSheikh Othman district in Aden governorate, AIMaafer district in Taiz governorate, and Lawdar district in Abian governorate. These three sites were purposively selected based on the following criteria: all three districts fall under 4–5 vulnerability matrix scoring according to the Health Cluster severity analysis, are geographically accessible without active fighting, have at least one functional CEmOC and three–four BEmOC facilities, the IDPs population is available, and have a sizeable population with women at reproductive age reaching up to at least 8,000 women. The three districts are illustrated in Figure 1 and described below.

Figure 1: Location of the three selected districts in Yemen



a) **AlSheikh Othman District** is one of the 8 districts in Aden governorate. It is the largest populated district, with 177,151 inhabitants as estimated in 2019 (adjusted in July 2020, HNO). It has a high concentration of IDPs (especially from AlHudeida, Taiz, and Abian) and marginalized groups (AlMuhamasheen), who largely reside in slums and experience high rates of unemployment. These groups lack access to basic services due to social marginalisation and mostly to being confined to menial jobs). The health facilities in Al Sheikh Othman are considered to be in relatively good physical condition and there is no shortage of

health manpower in this district. According to 2019 Humanitarian Needs Overview, this district is characterised by a health emergency need severity index of major level (i.e., a score of 3).

b) **Lawdar District** is one of the 12 districts of Abian governorate. It was occupied and controlled by terrorists (al-Qaeda in the Arabian Peninsula) in 2012 and is characterized with instability. Lawdar is a mountainous area; however, its population prefer live in the valleys. It borders Albeidha city (north Yemen). The population of Lawdar is estimated at 119,074 in 2019 (adjusted in July 2020, HNO), among which 5,569 are IDPs, mostly displaced from Abian and Albeidha districts. The district has four health centres (3 of them provide RH services), 24 primary health care units lack RH services, and one district hospital located in Lawdar city. Lawdar suffers from shortages in health manpower, particularly females. In the Lawdar hospital, there exists only one obstetrician (Russian nationality), 14 midwives (3 of them are working without salary), and four 4 female nurses (one of them is working without salary). The hospital completely lacks any female GPs. According to the 2019 Humanitarian Needs Overview, this district is characterised by a health emergency need severity index of critical level (i.e., score 5).

c) **AlMaafer District** is one of the 23 districts of Taiz governorate. This district is mountainous, and its population are scattered all over the different mountains whose roads are unpaved and inter-disconnected. It has an estimated total of 151,729 inhabitants in 2019 (adjusted in July 2020, HNO), among which 37,0000 IDPs who were displaced from other districts: Taiz, Ibb, Amran, and Saada. These IDPs are living with host families in mostly the rural areas of AlMaafer district, in rented places and scattered shelters of very bad living conditions. This district has only one hospital. The hospital provides CEmOC services. It has one male surgeon for surgical deliveries, three midwives, but no female GP. The district has, in addition, six health centres (5 of which provide RH services) and 11 primary health care units which lack RH services. There are 21 midwives (9 of which are contracted) and 61 female nurses (51 of which are contracted) and 1 female GP working in distributed across the health centre. According to the 2019 Humanitarian Needs Overview, this district is characterised by a health emergency need severity index of critical level (score 5).

Data collection methods and tools

Data collection triangulated both quantitative and qualitative data from the different data collections sources: face to face household interviews, key informant interviews, focus group discussions, and facility assessments. Each is described below and outlined in figure 2.

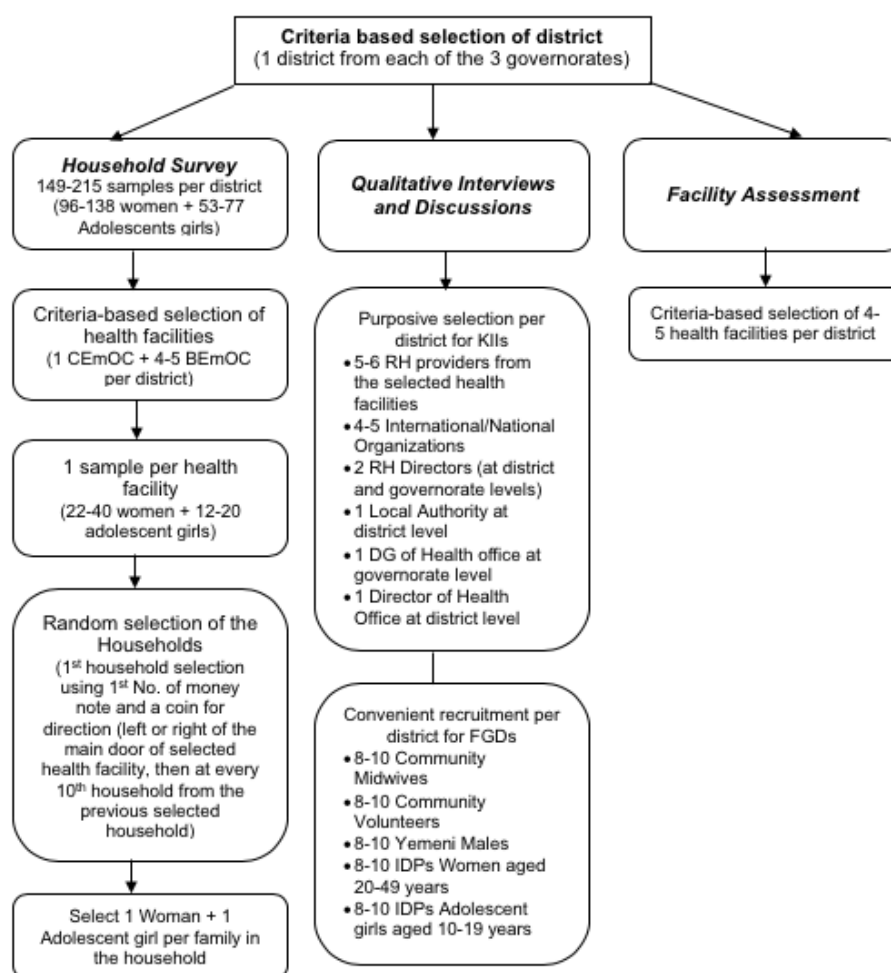


Figure 2: Sampling techniques to conduct situation analysis. DG, director general; FGDs, focus group discussions; KIIs, key informant interviews; IDPs, and internal displacement persons.

A. Household survey

A household survey was conducted among adolescent girls and women (aged 10–49 years). The survey aimed to understand adolescent girls and women’s RH needs, health care seeking behaviours, accessibility to services, cost of services and barriers impacting provision of services. Specifically, it collected information around 1- various reproductive health issues pertaining to menstrual health, pregnancy and delivery care, postnatal care, family planning services use, post abortion, sexually transmitted diseases, and gender-based violence. In addition, the survey aimed to understand 2- RH services use, as well as 3- satisfaction, barriers, and challenges related to accessing RH services. All of these assessments helped identify gaps impacting availability, barriers, and utilisation of RH services.

Sample size and sampling techniques

Sample size: considering the available data from Populationnet internet site, the age breakdown of Yemeni females for 2019 shows that adolescent girls and women of reproductive age (aged 10-49 years old) constitute 31.3% of the total Yemeni females’ population. Among which, women aged 20-49 years constitute 20.1% and adolescent girls aged 10-19 years constitute 11.2%. Using the dataset of the United Office for Coordination of Humanitarian Affairs (UN OCHA), Yemen Demographic information is based on the general population for each district.¹⁵ The total number of Yemeni adolescent girls and women (aged

10–49 years) in the three districts is estimated at 135,298, of which 48,437 are adolescent girls aged 10–19 years and 86,861 are women aged 20–49 years. According to the Yemen Demographic Health Survey 2013,¹⁶ 30% of pregnant women of reproductive aged 15-49 years gave birth deliveries at health facilities. Considering this as the overall prevalence rate with 95% confidence interval (CI), 5% margin of error and 1.5 design effect, the estimated sample size needed for this household survey was estimated at a minimum of 484. Allowing for a 10% non-response rate, the total sample size was set at 532 adolescent girls and women aged (10-49 years). This was guided by the below formula used for sample size calculation:

$$n = \frac{z^2 p(1-p)}{d^2} \times def f$$

Among 135,298 study population, where 35.8% (48,437) were estimated to be adolescent girls aged 10–19 years and 64.2% (86,861) were women aged 20–49 years. The sample size distribution across the three districts and proportionally among the two groups of study population is illustrated in Table 1.

Table 1: Distribution of sample size for household survey by study population

Study population	Total number of individuals	Percentage (%)	Sample size
Adolescent girls aged 10–19 years	48,437	35.8	190
Women aged 20–49 years	86,861	64.2	342
Total number of women and adolescent girls aged 12–59 years	135,298	100	532

Sampling techniques: A stratified systematic sampling was used to select the study population: adolescent girls and women aged 10-49 years. The sampling design followed a three-stage design:

Stage I: The sample size in each district was divided nearly equally among the catchment area of each selected health facility in each of the three selected districts as illustrated in in Table 2.

Table 2: Distribution of sample size by districts and selected Health facilities areas

District / governorate	Health Facility Name	Selected Study population	
		Adolescent girls aged 10-19 years	Women aged 20-49 years
Al Sheik Othman / Aden	Al-Sadaqa hospital	14	24
	Al-Mahareeq HC	13	24
	Mujama AlSheikh Othman HC	13	24
	Al-Memdarah HC	13	24
Total 149			
(53 girls + 96 women)			
AlMaafer / Taiz	AlNashama Hospital	17	30
	22 May HC	15	27
	AlKhiami HC	15	27
	AlHiab HC	15	27
Total 215			
(77 girls + 138 women)			
Lawdar / Abian	AlSina HC	15	27
	Mahnaf Lawdar Hospital	15	27
	AlHadhen HC	15	27
	Amagel HC	15	27
Total 168			
(60 girls + 108 women)	Amsera HC	15	27

Stage II: The interview of the targeted population was conducted in their households. The first house was selected randomly, provided that it is near the health facility. The direction of selection of consecutive households was determined randomly, either from the left or the right-

hand side by tossing a coin. These sampling strategies were employed due to the lack of numbering of households in the area. Following the first household, the sampling interval was every 10th household, until the desired number of respondents were interviewed.

Stage III: One woman aged 20 – 49 years, who has been married, and / or one adolescent girl aged 10 – 19 years, irrespective of her marital and pregnancy history status, were selected from each family in the household. If more than one woman lived in the family, only one was randomly selected based on her availability and consent to be interviewed. The same also applied if more than one adolescent girl lived in the family. It was ensured, to the maximum extent possible, that the interview in the household was conducted privately and confidentially, keeping in mind that households in Yemen, especially in rural areas, usually consist of more than one family.

Data Collection method and tools

A structured quantitative questionnaire was used. This questionnaire was adapted and pretested during the data collection training workshop, prior to actual data collection. Data was collected using a structured pre-coded questionnaire, which combined a mix of open-ended and close-ended questions. The questionnaire was translated to Arabic from English. Local dialects were used in the questions for clarity of our study objective-related topics (local Arabic language). 12 local data collectors from the same district who know the community Arabic dialect were recruited for data collection and were divided into four 3-member teams. Each team consisted of two female interviewers and one supervisor. They were extensively trained on the study objective, sample selection, and study tools prior to data collection. The interviewers were monitored by two supervisors at different levels. A team supervisor in each area checked the completeness of the household questionnaires on a daily basis. This was followed by data checks made by the district supervisors ensure adequate completion of collected questionnaires in each. Each area team supervisor submitted daily reports on the fieldwork to the district supervisor. Monitoring visits were also carried out by the main research supervisor for each district to ensure quality control. SPSS (the Statistical Package for Social sciences Software V.25) was used for data entry, management, cleaning, and analysis.

Data analysis

Data analysis revolved around univariate, bivariate and multivariate analysis. Univariate descriptive analysis revolved around: describing the socio-economic and demographic characteristics of the sample; understanding the needs as well as the types of and availability of the different RH services including gender-based violence (GBV); RH care seeking behaviour, utilisation, cost and barriers to access RH services; challenges faced on the basis of distance and waiting time at health facilities; and suggestions to improve the RH services. Statistical analysis was performed per each district as well as combined, similarly for the adolescent girls and women. Using Chi square (χ^2) test, bivariate analysis was performed to determine the difference between three districts with the variable. In addition, the analysis was carried out to measure the association between sociodemographic characteristics and their impact on various RH issues, such as menstrual health, pregnancy, delivery care, family planning use, post abortion, sexual transmitted diseases, gender-based violence, and pattern of health seeking behaviour for RH healthcare. Multivariable regression analysis will be used in case significant associations are found at the bivariate analysis levels.

B. Qualitative interviews and group discussions

The quantitative data was triangulated with the qualitative data from the key informant interviews (KIIs) and focus group discussions (FGDs). 14-15 Key Informant Interviews (KIIs) were conducted in each district, and total of 44 KIIs were collected for the three districts. The target population for these KIIs included: Governorate and district health directors, RH focal persons at both governorate and district levels, local authority, RH providers at selected health facilities, international partners, and national associations supporting any of the selected health facilities or any health issues in the district in order to achieve the complete picture of the RH issues. The KIIs aimed to provide a contextual understanding of the main and prevailing RH problems, as well as facilitators, challenges and barriers impacting service availability and utilization, access to RH services, and GBV services for adolescent girls and women. They also provided an overview of the existent RH service delivery and management challenges from the supply-side perspective. In addition to the KIIs, five FGDs in each district were also conducted by focusing on five main target populations, (with a total of 15 FGDs in the three selected districts): one for males, and two for IDPs (one for women aged 20-49 years and the other one for adolescent girls aged 10-19 years). Similarly, these FGDs aim to identify their RH problems, experiences, and challenges for utilizing services and their perspectives from the demanding side. The other two of the 5 FGDs in each district were: one for community midwives and the other one for community health volunteers to understand available services in the community, and their experience on communities' challenges for utilizing services from the supply-side perspective.

Sample size and sampling techniques

For the qualitative interviews, the areas, where household survey and facility assessment were conducted, from each district were selected. The sampling strategy for all interviews and discussions was purposive sampling. Key informants, who can give an insight regarding the service availability, utilization, barriers and facilitators to access the RH services for the community members, were identified. The total KIIs was 14 -15 interviews in each district with a total of 44 KIIs and were adequately saturated for all related issues. The study team leader and local supervisors communicated and discussed with General Director of Health at governorate and Director at district levels to get their cooperation and facilitation on all identified key informants. Then, all identified KIIs were contacted to set appropriate dates and places for interview through the study local supervisor. The selection process of FGDs participants was in accordance with defined specific characteristics.

Data collection methods and tools

Separate guideline tools with consent forms were developed for KIIs and the FGDs. All tools were translated to Arabic language and were finalised after pretesting in role-play during data collectors training. Qualitative interviews were conducted by a local team in each setting made up of two team members (a moderator and a note-taker). Training sessions were also conducted to orient and train the team members on study objectives and the qualitative tools prior to data collection. Similarly, a local supervisor was employed in each district. The supervisor led the access to communities and program leaders and facilitated study recruitment for each of the intended target populations for the FGDs and KIIs. During the FGDs and KIIs, careful attention was made to ensure respecting cultural appropriateness and prevailing social norms.

Data analysis

Prior to the KIIs interviews and FGDs, consent for recording along with notetaking was sought. Thematic analysis was conducted following transcription and coding. The notetaking report was incorporated for verification and used in case of denial recording. Brief direct quotations from the transcripts were also used to support the emerging patterns from the data.

C. Health Facility Assessment

The facility assessments aimed to assess facilities' readiness for RH services and to understand the facility challenges (from the supply side) on the basis of service provision, infrastructure, availability of human resources and their training, supply of equipment, kits and drugs for providing RH services, and availability of health systems including data collection.

Sample size and sampling techniques

The health facilities were selected, based on the following selection criteria: one functional CEmONC hospital and at least three - four BEmONC health centres or those that can easily be supported and renovated to be made functional. Hence, in total 13 health facilities were selected. These are illustrated in Table 2 above.

Data collection methods and tools

A structured coded questionnaire was used to carry out the health facility assessments. The questionnaire was conducted in Arabic, following translation and adaptation. Two local researchers were recruited from the nearby locality in each district. Additionally, retrospective data was incorporated for data collection. Two methods were employed during the facility assessments: objective direct observation and discussion combined with a facility walk-through to observe facility RH services infrastructure and interviews with the facility director to explore available services, staff, systems, and supplies, as well as reviewing records.

Data analysis

Descriptive analysis of health facilities assessment was performed to understand the facility readiness and challenges. The SPSS package v.25 was used for data entry, management, cleaning and analysis. Data consistency was checked using univariate analysis. The data was analysed for hospitals and health centres, separately, to capture the gaps at both levels on service provision and availability, service utilisation and cost-sharing, human resources and their training, infrastructure, supply of equipment and drugs, and management of referral system.

Training of study data collectors and supervisors

16 data collectors and two supervisors (governorate and district) were recruited for the study in each district. The training of data collectors took six days and was done at two times (see Figure 3 and 4). The first training took place in Aden governorate for AISheikh Othman district's data collectors during October-November 2019. Immediately after the training the data collection in the field occurred. In this training, the study team revised the questions on the tools, tested the tools in the field, and provided feedback that improved the questions in all tools. The second 6-day training course was done in Aden governorate for data collectors of both Lawdar and AlMaafer districts during February-March 2020 and concentrated on practicing with the tools and instructions in the training site. During both training courses, the

field teams had informed on understanding the aims of the assessment, content of all tools, proper communication, ethical requirement, selection of eligible respondents, and reporting procedures.

Figure 3: *The training of data collectors of AISheikh Othman district*



Figure 4: *The training of data collectors of Lawdar and AlMaafer districts*



The data collection in the field took almost three weeks in each district. AISheikh Othman district in Aden governorate was done in November 2019, while the other two districts (Lawdar in Abian governorate, and AlMaafer in Taiz governorate) were fulfilled by the end of March 2020 due to late selection of both districts. Hence, all the three districts accomplished the data collection in the field by the end of March 2020. Overall, the response rate was very high in all three studied districts; only 4 adolescent girls in AISheikh Othman refused to participate and were replaced.

D- COVID-19 effect on provision of RH services

In Yemen, the first case of coronavirus was identified and reported on April 10, 2020 in Hadramout Governorate. It was further followed by five cases identified in Aden. On April 20, a month after the field work of this assessment was completed ie end of March 2020, the MOPHP in Aden imposed lockdown measures to control the spread of the COVID-19 pandemic in the country. These lockdowns also restricted movement and transportation among governorates. Fears of COVID-19 transmission was spread among the population, including the health providers across the country. The capacity to provide routine health services in the majority of health facilities was severely impacted due to the lack of adequate PPEs among health care providers. With all these impacts in mind, a rapid assessment supplemented the initial situation analysis of this study in order to identify and document the impacts of the COVID-19 pandemic on RH services in the three districts.

Sample size and sampling techniques

The data collectors and the supervisors of the original situation analysis study in each district were selected as key informants for their districts, since all of them have close connection with health services. The majority of them (96.2%) were RH services providers. Prior to any data collection, the supervisors in the three districts of this study were approached to get their approvals to conduct the supplementary data collection among their teams of data collector in each in their districts. So, the data collected from the study interviewers and supervisors. The governorate supervisors (3) and the General Director of RH Department in MOPHP in Aden were also interviewed by responding to an email-based questionnaire. In total, 53 participants as the key informants took part in this assessment, which was completed during the first week of July 2020. The participants were presented in the table below:

Participants	Aden MOPHP	AlSheikh Othman	Lawdar	AlMaafer
DG of RH Department	1			
Data Collector		16	15	16
Supervisor		1	2	2
Total (53)	1	17	17	18

Data collection methods and tools

A structured questionnaire that combined both close and open-ended questions was used to explore the impacts of COVID-19 on the provision of RH services. The questionnaire was based on and adapted from the WHO Rapid Assessment Questionnaire for service delivery for Non-Communicable Diseases (NCDs) during COVID-19 pandemic to outfit the questions on RH services. The questionnaire was sent to districts' supervisors by email. They were approached by phone first to inform them about the assessment and the email questionnaire as well as to see their approval. They in turn circulated the questionnaire for data collection to their data collectors. In addition, as already indicated, the governorate supervisors (2) and the General Director of RH Department in MOPHP in Aden also participated in this assessment.

Data analysis

The SPSS package v.25 was used for data entry, management, cleaning and analysis. Data consistency was checked using univariate analysis. The data was analysed separately to assess the effects of COVID-19 on RH services provision and use.

Data triangulation

Given the multiple methodologies of data collection: the quantitative - using the household survey and facility assessments - and the qualitative - using FGDs and KIs, triangulation was employed in order to understand the overall RH needs, demands, challenges, barriers to access RH service provision to Yemeni adolescent girls and women and aged 10-49 years, separately, for each district and compiled by all three districts per each data collection method as well as triangulated.

Data quality

To ensure data quality, the research team employed various quality control measures throughout the study process. The following strategies were used to monitor and preserve data quality standards: (1) pre-testing of study instruments to ensure relevance and validity; (2) computer validation programs to allow for checking the logical consistency of data; (3) training and assessment of fieldworkers prior to actual data collection; (4) close supervision of fieldworkers (One supervisor oversaw five data collectors); (5) Organization of daily debriefing meeting for all field staff to share experiences, lessons learned, and challenges; (6) accuracy, consistency, and completion was conducted for both quantitative and qualitative data at the end of each day; and (7) analysis of the completeness of information as well as identification of outliers during data cleaning and data analysis. Qualitative data was transcribed and translated into Arabic and English prior to analysis.

Study involvement

The research questions and outcome measures of this study were chosen based on a standardized approach within a broader assessment project carried out by WHO in three countries facing different humanitarian crises, which in addition to Yemen, included

Bangladesh (among the Rohingya refugees) and DRC Kasai region (among the internally displaced).

Ethics

This study bears no more than minimal risk to subjects. All respondents in the household survey, KIs, FGDs, and health facility assessments, including approval for tape recording, were preceded by verbal consent prior to the interviews. The consent explained that participation in the interview is completely voluntary and that participants can withdraw from the interviews even after consent. All observations, interviews, and notes were stored with team leader in secure key locked facilities as well as password encrypted computers. All collected data was assigned a unique identification number, and all data was de-identified upon entry into the database. All other data forms were kept in locked storage with the team leader and then transferred to WHO after the completion of final report of the assessment. In reports, only aggregated information was presented, no individual information was reported.

RESULTS

Summary Section 1

- *The mean age of adolescent girls was 16 years, and of women was 31 years.*
- *80% of all respondents were literate and 28% of them had already completed secondary level of schooling and above.*
- *86.3% of girls were never married across the three districts. 5.5% of all women were either currently divorced or widowed at the time of the survey.*
- *73% of all married girls were married before the age of 18 years. Among women respondents, almost 40% indicated that they were married before 18 years of age.*
- *The majority of girls (96.7%) and women (88.3%) were not working or earning any income at the time of the study.*
- *32.1% of all respondents were living in extended families with the highest rate (46.0%) in AlMaafer district.*
- *9% of all currently married respondents indicated that their husbands lived outside their homes.*
- *Overall, for all the sample respondents, in three out of four families, men were the sole decision makers, this increased to four out of five families in the Lawdar district.*
- *43.6% of respondents reported living on monthly wages, and 45.5% of respondents were depending either on daily wages or relief with highest rate in AlMaafer district (73%).*
- *44 KIIs were interviewed. The female:male ratio was 1:1, 63.7% were between 35-54 years of age and 50% of the key informants had high educational levels.*
- *15 FGDs were conducted using specific criteria for each group. The FGDs covered the following different target populations: men, women internally displaced (IDPs), adolescent girls IDPs, community midwives, and female community volunteers.*
- *57% of the males who participated in the FGDs were between 35-50 years. 71.4% of them completed secondary educational levels or above and 89.3% were employed.*
- *73.3% of the IDP women were at mean age of 30 years; 58% were illiterate; none of them were employed; and 20% of them were displaced for less than one year.*
- *63.3% of the IDP adolescent girls were at age 15-19 years, 50% of the girls were illiterate, except for AlMaafer district, where all of them were enrolled in schools inside the camp.*
- *70% of the community midwives who took part in the FGDs had more than five years' experience in providing maternal health services in their communities.*
- *34.5% of the selected community volunteers in the FGDs were aged between 20-24 years. 93.3% were highly educated, and 38% have been engaged in providing volunteer community service for more than three years.*

Section 1: Characteristics of participants

This part describes the demographic and socio-economic profile of participants in each of the three districts and aims to identify differences among these districts, if any ($P < 0.05$ used to ascertain that there is a statistically significant difference between the districts on that variable).

1.1 Characteristics of women and girls

1.1.1 Age groups

Table 3 shows the age distribution by 5-years age groups among girls and generation groups among women. The majority of girls were in age groups 15-19 years and the mean age across all districts among adolescent girls was 16 years (± 3 , median 16). The sample in AlMaafer district had a higher proportion (33.8%) of girls aged 10-14 years compared to AlSheikh Othman (22.6%) and Lawdar districts (26.7%). The mean age among women was 31 years (± 8 , median 30). For the older adult women (35-49 years old), more samples from AlSheikh Othman district had more (51%) of women compared to those in Lawdar and AlMaafer (38% and 34% respectively). Overall, three quarters of all respondents were in groups of adolescence and young adults.

Table 3: Age groups of respondents by all districts and by each district (n=532)

Respondents	Age-group	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	10-14 years	28.4% (54)	22.6% (12)	26.7% (16)	33.8% (26)
	15-19 years	71.6% (136)	77.4% (41)	73.3% (44)	66.2% (51)
	Mean ($\pm$ SD), Median	16 (± 3), 16	16 (± 3), 16	16 (± 2), 17	16 (± 3), 16
	Total	190	53	60	77
Women	20-34 years	59.9% (205)	49.0% (47)	62.0% (67)	65.9% (91)
	35-49 years	40.1% (137)	51.0% (49)	38.0% (41)	34.1% (47)
	Mean ($\pm$ SD), Median	31 (± 8), 30	34 (± 8), 35	31 (± 8), 30	30 (± 8), 30
	Total	342	96	108	138
Overall	10-19 years	35.7% (190)	35.6% (53)	35.7% (60)	35.8% (77)
	20-34 years	38.5% (205)	31.5% (47)	39.3% (67)	42.3% (91)
	35-49 years	25.8% (137)	32.9% (49)	24.4% (41)	21.9% (47)
	Mean ($\pm$ SD), Median Total	31 (± 8), 30 532	34 (± 8), 35 149	31 (± 8), 30 168	30 (± 8), 30 215

1.1.2 Literacy and level of education

Table 4 presents illiteracy and educational levels distribution among the respondents. Few of all girls (5.3%) were illiterate and approximately 31.1% had completed secondary levels of education. These rates were similarly observed in AlSheikh Othman and AlMaafer districts. However, in the Lawdar district, only 25% of girls have completed their secondary educational level. The illiteracy rate among women was estimated at 29.8%. Illiteracy was higher in the Lawdar and AlMaafer districts (32% and 33%) compared to AlSheikh Othman district (24%). 44.2% of women had completed basic schooling (up to 9 years) and very few of them (7%) had university degree. Across the three districts, the highest proportion of women (27.0%) who completed secondary education was in AlSheikh Othman compared to 13.0% of women in Lawdar district and 17.4% of women in AlMaafer. Overall respondents, nearly 80% of respondents were literate and 28% of them had already completed secondary level of schooling and above. Respondents in Lawdar district significantly had the lowest educational levels (17.9%) compared to respondents in AlSheikh Othman and AlMaafer districts (37.6% and 28.8% respectively).

Table 4: Level of education completed among respondents by all districts and by each district (n=532)

Respondents	Level of education completed	Overall	AlSheikh Othman	Lawdar	AlMaafer
Girls	None	5.8% (11)	6.7% (3)	8.3% (5)	3.9% (3)
	Primary/basic	63.2% (120)	59.3% (32)	66.7% (40)	62.4% (48)
	Secondary	31.1% (59)	34.0% (18)	25.0% (15)	33.8% (26)
	Total	190	53	60	77
Women	None	29.8% (102)	24.0% (23)	31.5% (34)	32.6% (45)
	Primary/Basic	44.2% (151)	36.5% (35)	54.6% (59)	41.3% (57)
	Secondary	18.7% (64)	27.0% (26)	13.0% (14)	17.4% (24)
	University	7.3% (25)	12.5% (12)	0.9% (1)	8.7% (12)
	Total (P = 0.000)	342	96	108	138
Overall	None	21.2% (113)	17.4% (26)	23.2% (39)	22.3% (48)
	Primary/basic	50.9% (271)	45.0% (67)	58.9% (99)	48.8% (105)
	Secondary+	27.8% (148)	37.6% (56)	17.9% (30)	28.8% (62)
	Total (P = 0.000)	532	149	168	215

1.1.3 Marital status

Table 5 describes current marital status i.e., at the time of the survey among respondents. The majority of the girls (86.3%) were never married across the three districts. The highest proportion of single girls was in AlSheikh Othman district (90.6%). Among women, very few (5.5%) were either currently divorced or widowed at the time of the survey. Overall, nearly two thirds of respondents were currently married. Respondents from AlSheikh Othman had higher rates of being either unmarried (32.4%), divorced, or widowed (7.1%) compared to the two other districts. There is a statistical difference between the three districts on marital status among women and overall respondents.

Table 5: Marital status among respondents by all districts and by each district (n=532)

Respondents	Marital status	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Never being married	86.3% (164)	90.6% (48)	83.3% (50)	85.7% (66)
	Married	13.7% (26)	9.4% (5)	16.7% (10)	14.3% (11)
	Total	190	53	60	77
Women	Married	94.4% (323)	88.5% (85)	97.2% (105)	96.4% (133)
	Widowed/divorced	5.5% (19)	11.5% (11)	2.8% (3)	3.6% (5)
	Total (P=0.004)	342	96	108	138
Overall	Never being married	30.8% (164)	32.2% (48)	29.8% (50)	30.7% (66)
	Married	65.8% (349)	60.4% (90)	68.5% (115)	67.0% (144)
	Widowed/divorced	5.4% (19)	7.4% (11)	1.7% (3)	2.3% (5)
	Total (P=0.003)	532	149	168	215

Table 6 indicates the overall prevalence of child marriage (i.e., <18 years old) in the sample. 73% of married adolescent girls in three districts were married before the age of 18 years. The youngest median age of marriage was 16 years old and the oldest was 17 years old in AlSheikh Othman district. All currently married girls were in the age group 15-19 years. Anyhow, it is impossible to draw conclusion among girls on prevalence of child marriage since 67% of them did not reach the age of 18. Among women respondents, almost 40% indicated that they were married before 18 years of age. The mean age of marriage among women was 19 years old. Comparing the three districts, it is observed that Lawdar and AlMaafer districts had significantly higher rates (48% and 42%) of child marriage compared to AlSheikh Othman district (23%). Overall, almost 40% of respondents in the total sample indicated to have been married early, with the significantly highest rates were observed in Lawdar 50.8%.

Table 6: Age of marriage among respondents by all districts and by each district (n=532)

Respondents	Age of marriage	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	≤17 years old	73.1% (19)	60% (3)	80% (8)	72.7% (8)
	18 years old	26.9% (7)	40% (2)	20% (2)	27.3% (3)
	Median among ever been married (26)	16	17	16	16
	Total	26	5	10	11
Women	≤17 years old	38.6% (132)	22.9% (22)	48.1% (52)	42.0% (58)
	≥18 years old	61.4% (210)	77.1% (74)	51.9% (56)	58.0% (80)
	Median	19	20	18	18
	Total (<i>P</i> = 0.000)	342	96	108	138
Overall	≤17 years old	41.0% (151)	24.8% (25)	50.8% (60)	44.3% (66)
	≥18 years old	59.0% (217)	75.2% (76)	49.2% (58)	55.7% (83)
	Median	19	20	18	18
	Total (<i>P</i> = 0.000)	368	101	118	149

1.1.4 Occupation status

Findings indicate that the majority of girls (96.7%) and women (88.3%) were not working or earning any income at the time of the study, as summarized in Table 7. Among the women's group, 21.9% of the women in AlSheikh Othman district indicated working for earning money, compared to very few in Lawdar and AlMaafer districts.

Table 7: Occupation status for earning among respondents by all districts and by each district(n=532)

Respondents	Working status	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Not working	96.3% (183)	96.2% (51)	95.0% (57)	97.4% (75)
	Worker	1.1% (2)	3.8% (2)	0	0
	Employee	1.1% (2)	0	1.7% (1)	1.3% (1)
	*Entrepreneur	1.5% (3)	0	3.3% (2)	1.3% (1)
	Total	190	53	60	77
Women	Not working	88.3% (302)	71.8% (69)	93.5% (101)	95.7% (132)
	Worker	1.8% (6)	6.3% (6)	0	0
	Employee	4.7% (16)	14.6% (14)	0	1.4% (2)
	*Entrepreneur	5.2% (18)	7.3% (7)	6.5% (7)	2.9% (4)
	Total (<i>P</i> = 0.000)	342	96	108	138
Overall	Not working	91.2% (485)	80.5% (120)	94.0% (158)	96.3% (207)
	Worker	1.5% (8)	5.4% (8)	0	0
	Employee	3.4% (18)	9.4% (14)	0.6% (1)	1.4% (3)
	*Entrepreneur	3.9% (21)	4.7% (7)	5.4% (9)	2.3% (5)
	Total (<i>P</i> = 0.000)	532	149	168	215

*Entrepreneurs: Hand engraving, wool embroidery, sewing, ice cream seller/vendor, clothes seller, selling products from home, food seller from home, or hairdresser.

Entrepreneur work (i.e., self-employment) was reported in both Lawdar and AlMaafer and among both girls and women, while the formal employment (i.e., working with a contract either in a private or public institution) was more common among AlSheikh Othman respondents. Overall, in the total sample, a substantial proportion of respondents (91%) were not working for had any paid job. Rates were statistically different across the three districts among women and overall respondents on occupational status.

1.2 Characteristics of households

1.2.1 Family type and size

Table 8 summarizes the family type and size among girls and women respondents for all districts and by each district. Almost two-thirds of all girls were living in a nuclear family arrangement. Girls in AlSheikh were all from nuclear families, with an average family size of 6 members, while two-third of Lawdar girls and half of AlMaafer girls were in nuclear families,

with Lawdar girls having the highest family size. The same pattern was also observed among all women groups. Overall, one-third of the respondents were living in extended families with the highest rate in AlMaafer district. On this variable, there is a statistical difference between the three districts among girls as well as among women.

Table 8: Family type and size among respondents by all districts and by each district (n=532)

Respondents	Family type and mean size	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Nuclear family	69.5% (132)	100% (53)	65.0% (39)	51.9% (40)
	Extended family	30.5% (58)	0% (0)	35.0% (21)	48.1% (37)
	Mean ($\pm$ SD), Median	9.4 ($\pm$9), 8	6.4 ($\pm$ 3), 6	12.2 ($\pm$ 14), 7	9.3 ($\pm$ 4), 9
	Total (P=0.000)	190	53	60	77
Women	Nuclear family	66.7% (228)	91.7% (88)	60.2% (65)	55.1% (76)
	Extended family	33.3% (114)	8.3% (8)	39.8% (43)	44.9% (62)
	Mean ($\pm$ SD), Median	8.8 ($\pm$8), 7	6.7 ($\pm$ 4), 6	10.8 ($\pm$ 12), 8	8.8 ($\pm$ 4), 8
	Total (P=0.000)	342	96	108	138
Overall	Nuclear family	67.9% (361)	94.6% (141)	61.9% (104)	54.0% (116)
	Extended family	32.1% (171)	6.6% (8)	38.1% (64)	46.0% (62)
	Mean ($\pm$ SD), Median	9.0 ($\pm$8), 7	7 ($\pm$ 4), 6	11.3 ($\pm$ 12), 8	9 ($\pm$ 4), 8
	Total (P=0.000)	532	149	168	215

1.2.2 Husband's residence

The majority of currently married girls (80.7%) and women (91.6%) had their husbands living with at home as Table 9 illustrates. Girls in AlMaafer district had their husbands living with them at home, while 20% of girls from AlSheikh Othman and Lawdar districts have indicated that their husbands live outside Yemen.

Table 9: Husband's residence among currently married respondents by all districts and by each district (n=349)

Respondents	Husband residence	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Yes, at home	80.7% (21)	80.0% (4)	80.0% (8)	81.8% (9)
	No, but inside Yemen	7.7% (2)	0% (0)	0% (0)	18.2% (2)
	Outside Yemen	11.6% (3)	20.0% (1)	20.0% (2)	0% (0)
	Total	26	5	10	11
Women	Yes, at home	91.6% (296)	96.5% (82)	90.5% (95)	89.5% (119)
	No, but inside Yemen	3.4% (11)	1.2% (1)	2.8% (3)	5.3% (7)
	Outside Yemen	5.0% (16)	2.3% (2)	6.7% (7)	5.2% (7)
	Total	323	85	105	133
Overall	Yes, at home	90.8% (317)	95.6% (86)	89.6% (103)	88.9% (128)
	No, but inside Yemen	3.7% (13)	1.1% (1)	2.6% (3)	6.3% (9)
	Outside Yemen	5.4% (19)	3.3% (3)	7.8 (9)	4.9% (7)
	Total	349	90	115	144

Among women, 5% indicated that their husbands live outside Yemen. This percentage was highest, (6.7%) among women in Lawdar district. Overall, for the total sample, 9% of the currently married respondents indicated that their husbands lived outside their homes.

1.2.3 Decision maker in the family

Table 10 shows that fathers are the dominant decision makers in the family among unmarried girls in all districts. Mothers were reported to more likely influence decision making among girls in AlSheikh Othman district (24.5%) compared to Lawdar and AlMaafer districts (11.7% and 13.0% respectively). For married girls, the husband was reported to be the dominant decision maker, more so especially among girls in Lawdar and AlMaafer districts compared to among married girls from Sheikh Othman district who indicated the family decision making

was a joint process. Among the three women's groups, the husband was the sole decision maker for married women in all districts, with that percentage lowest in AlSheikh Othman district. One in five women reported that both couples shared decision making, with the highest percentage in AlSheikh Othman district (36.5%) and the lowest in Lawdar district (6.5%). Among women who reported to be the main decision maker in the family; 14 were married, 6 were widowed, and 2 were divorced.

Overall, for all the sample respondents, in three out of four families, men were the sole decision makers, this increased to four out of five families in the Lawdar district. There is a statistical difference between the three districts on the decision maker in the family for both groups of respondents.

Table 10: Decision maker in the family among respondents by all districts and by each district (n=532)

Respondents	Family decision maker	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Myself	0.5% (1)	1.9% (1)	0% (0)	0% (0)
	Husband	9.5% (18)	1.9% (1)	13.3% (8)	11.7% (9)
	Me and Husband	7.5% (4)	20.0 (4)	0% (0)	0% (0)
	Father	69.5% (132)	62.3% (33)	73.3% (44)	71.4% (55)
	Mother	15.8% (30)	24.5% (13)	11.7% (7)	13.0% (10)
	Husband's mother	0.5% (1)	0% (0)	1.7% (1)	0% (0)
	Brother	2.1% (4)	1.9% (1)	0% (0)	3.9% (3)
	Total (P = 0.005)	190	53	60	77
Women	Myself	6.4% (22)	11.5% (11)	4.6% (5)	4.3% (6)
	Husband	60.8% (208)	36.5% (35)	74.1% (80)	67.4% (93)
	Me and Husband	20.5% (70)	36.5% (35)	6.5% (7)	20.3% (28)
	Father	5.8% (20)	3.1% (3)	11.1% (12)	3.6% (5)
	Mother	1.5% (5)	4.2% (4)	0.9% (1)	0% (0)
	Mother-in-law	2.3% (8)	6.3% (6)	0% (0)	1.4% (2)
	Brother	2.6% (9)	2.1% (2)	2.8% (3)	2.9% (4)
	Total (P = 0.000)	342	96	108	138
Overall	Myself	4.3% (23)	8.1% (12)	3.0% (5)	2.8% (6)
	Husband	42.5% (226)	24.2% (36)	52.4% (88)	47.4% (102)
	Me and Husband	13.9% (74)	26.2% (39)	4.2% (7)	13.0% (28)
	Father	28.6% (152)	24.2% (36)	33.3% (56)	27.9% (60)
	Mother	6.6% (35)	11.4% (17)	4.8% (8)	4.7% (10)
	Mother-in-law	1.7% (9)	4.0% (6)	0.6% (1)	0.9% (2)
	Brother	2.4% (13)	2.0% (3)	1.8% (3)	3.3% (7)
	Total (P = 0.000)	532	149	168	215

1.2.4 Main source of family expenditure

Table 11 summarizes sources of financial revenues among respondents. Almost half of the girls (46.8%) indicated a monthly wage as their source of income. Comparing the three districts, it was observed that the majority of girls' families from Lawdar (72%) and AlSheikh Othman (67.9%) depended on monthly wages for living, in contrast to the majority (66.2%) of girls from AlMaafer who depended on a daily wage as the main financial source for family expenditures. Also, girls of AlMaafer tended to rely more on relief for expenditures compared to the other two districts. For women, monthly wages and daily wages were also cited to be the main sources of expenditures as reported by almost 42%. Comparing the three districts, the highest proportion of women reporting receipt of monthly wages was in Lawdar (63.9%) compared to 12.6% among women in AlMaafer (12.3%).

For the total sample, 43.6% of respondents reported living on monthly wages, other important revenue sources included: owning a personal business and relying on humanitarian relief

assistance. Overall, nearly 45.5% of respondents were depending either on daily wages or relief. These percentages were highest in AlMaafer (73%). The reported differences across the three districts were statistically significant.

Table 11: Main source of family expenditure among respondents by all districts and by each district (n=532)

Respondents	Main source	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Monthly wage	46.8% (89)	67.9% (36)	71.7% (43)	13.0% (10)
	Daily wage	38.9% (74)	22.6% (12)	18.3% (11)	66.2% (51)
	Own a business	7.9% (15)	0.0% (0)	8.3% (5)	13.0% (10)
	Relief	4.2% (8)	3.8% (2)	1.7% (1)	6.5% (5)
	Money transfer from abroad	2.1% (4)	5.7% (3)	0.0% (0)	1.3% (1)
	Total (P = 0.000)	190	53	60	77
Women	Monthly wage	41.5% (142)	58.3% (56)	63.9% (69)	12.3% (17)
	Daily wage	43.6% (149)	30.2% (29)	21.3% (23)	70.3% (97)
	Own a business	10.2% (35)	7.3% (7)	11.1% (12)	11.6% (16)
	Relief	3.2% (11)	3.1% (3)	3.7% (4)	2.9% (4)
	Money transfer from abroad	1.5% (5)	1.0% (1)	0.0% (0)	2.9% (4)
	Total (P = 0.000)	342	96	108	138
Overall	Monthly wage	43.4% (231)	61.7% (92)	66.7% (112)	12.6% (27)
	Daily wage	41.9% (223)	27.5% (41)	20.2% (34)	68.8% (148)
	Own a business	9.4% (50)	4.7% (7)	10.1% (17)	12.1% (26)
	Relief	3.6% (19)	3.4% (5)	3.0% (5)	4.2% (9)
	Money transfer from abroad	1.7% (9)	2.7% (4)	0.0% (0)	2.3% (5)
	Total (P = 0.000)	532	149	168	215

1.3 Characteristics of participants of the qualitative research arm (KIs and FGDs)

1.3.1 Key Informants Interviews (KIs) participants

Overall, 44 KIs were purposively selected for interviews. All interviews were conducted with the participants in their workplace. Table 12 summarizes their background characteristics.

Table 12: Characteristics of KIs participants by districts

Background Characteristics	AlSheikh Othman N=14	Lawdar N=15	AlMaafer N=15	Overall N=44
Gender				
Female	8	7	7	50% (22)
Male	6	8	8	50% (22)
Age				
25-34 years	0	0	6	13.6% (6)
35-44 years	1	9	6	36.4% (16)
45-54 years	5	5	2	27.3% (12)
>54 years	8	1	1	22.7% (10)
Education				
Secondary	0	1	1	4.5% (2)
Diploma	3	11	6	45.5% (20)
University	3	2	4	20.5% (9)
Post university	8	1	4	29.5% (13)
Position				
Governorate Health leader	1	1	1	6.8% (3)
Governorate RH leader	1	1	1	6.8% (3)
District Health leader	1	1	1	6.8% (3)
District RH leader	1	1	1	6.8% (3)
District Local Authority leader	1	1	1	6.8% (3)
RH Health facility leader	5	5	6	36.4% (16)

Background Characteristics	AlSheikh Othman N=14	Lawdar N=15	AlMaafer N=15	Overall N=44
National Non-governmental Organization	2	1	1	9.1% (4)
International Non-governmental Organization	1	0	2	6.8% (3)
International Organization	1	4	1	13.6% (6)

The female:male ratio was 1:1. The Majority (63.7%) were between 35-54 years of age. Nearly 50% of the key informants had high educational levels. This was especially true in AlSheikh Othman district and, to a lesser extent, in Lawdar and AlMaafer districts, where the staff had mainly a diploma qualification in nursing, or midwifery, etc. KIIs covered a broad range of international as well as national NGOs. The International NGOS included: Rescue International, World Bank, World Doctors, UNICEF, Qatar Red Crescent, IMO, and Save the Children. The national NGOs (who mainly received funding from the INGOs), included: FMF, NYMA, Soul and YARH.

1.3.2 Focus Group Discussions (FGDs) participants

A total of 15 FGDs were conducted, five in each of the three districts. The five FGDs covered the following different target populations: men, women internally displaced (IDPs), adolescent girls IDPs, community midwives, and female community volunteers. The participants for the different FGDs came from around the same surrounding areas of the selected health facilities. In AlSheikh Othman and Lawdar, all FGDs were conducted at the selected hospitals. In AlMaafer, the two FGDs were conducted with IDPs groups inside the camp and three were conducted at the district hospital. The characteristics of participants in each group are summarized in Tables 15-20.

1.3.2a Male FGDs: The inclusion criteria for this FGD included:

- have been married,
- living in the district, and
- 18 years of age or older.

As described in Table 13, 57% of the males who participated in the FGDs were between 35-50 years. The majority of them (in all three districts) completed secondary educational levels or above and were employed.

Table 13: Characteristics of males FGD participants by districts

Background Characteristics	AlSheikh Othman N=8	Lawdar N=10	AlMaafer N=10	Overall N=28
Age				
20-34 years	4	3	5	42.9% (12)
35-50 years	4	7	5	57.1% (16)
Education				
Basic	0	0	1	3.6% (1)
Secondary	3	3	1	25.0% (7)
Diploma	2	6	5	46.4% (13)
University	3	1	3	25.0% (7)
Occupation				
Employee	8	10	7	89.3% (25)
Daily wage	0	0	3	10.7% (3)

1.3.2b Women IDPs FGDs: The inclusion criteria for this FGD included:

- have been married,

- between 20-49 years of age, and
- IDPs living in arbitrary areas or camps within the district.

As presented in Table 14: three-quarters of the women were relatively at young adult age; more than half were illiterate; none of them were employed; and few (20%) of them were new IDPs (having been displaced for less than one year).

Table 14: Characteristics of women IDPs FGD participants by districts

Background Characteristics	AlSheikh Othman N=10	Lawdar N=10	AlMaafer N=10	Overall N=30
Age				
20-34 years	7	5	10	73.3% (22)
35-49 years	3	5	0	26.7% (8)
Education				
Illiterate	3	10	4	56.7% (17)
Basic	2	0	2	13.3% (4)
Secondary	5	0	4	30.0% (9)
Occupation				
None	10	10	10	100% (30)
Duration being IDPs				
<1 year	5	0	1	20.0% (6)
1-3 years	5	2	6	43.3% (13)
>3 years	0	8	3	36.7% (11)

1.3.2c Adolescent girls IDPs FGDs: The inclusion criteria for this FGD included:

- between 10-19 years of age, and
- IDPs living in arbitrary areas or camps within the district.

Table 15 shows that the majority of the IDP adolescent girls were older than 14 years, particularly the ones living in AlSheikh Othman and Lawdar districts. Half of the girls were illiterate, except for AlMaafer district, where all of them were enrolled in schools inside the camp.

Table 15: Characteristics of adolescent girls IDPs FGD participants by districts

Background Characteristics	AlSheikh Othman N=10	Lawdar N=10	AlMaafer N=10	Overall N=30
Age				
10-14 years	1	3	7	36.7% (11)
15-19 years	9	7	3	63.3% (19)
Education				
Illiterate	5	9	1	50.0% (15)
Basic	5	0	9	46.7% (14)
Secondary	0	1	0	3.3% (1)
Occupation				
None	10	10	1	70.0% (21)
Student	0	0	9	30.0% (9)
Duration being IDPs				
<1 year	5	1	0	20.0% (6)
1-3 years	5	4	0	43.3% (9)
>3 years	0	5	10	36.7% (15)

1.3.2d Community midwives FGDs:

The inclusion criteria for this FGD included:

- trained and registered in the governorate system, and
- provided RH rendering services at a community level.

Table 16 shows that the community midwives who took part in the FGD in AlSheikh Othman district were at younger age and less experienced compared to the other two districts. Overall,

the majority (70%) had more than five years' experience in providing maternal health services in their communities.

Table 16: *Characteristics of community midwives FGD participants by districts*

Background Characteristics	AlSheikh Othman N=9	Lawdar N=10	AlMaafer N=10	Overall N=29
Age				
20-34 years	9	2	4	50.0% (15)
35-49 years	0	8	6	50.0% (15)
Education				
Basic	0	0	2	6.9% (2)
Secondary	9	10	8	93.1% (27)
Years of experience				
<1 year	2	1	0	10.0% (3)
1-5 years	6	0	0	20.0% (6)
>5 years	1	9	10	70.0% (20)

1.3.2e Female community volunteers FGDs: The inclusion criteria for this FGD included:

- trained and registered in district system, and
- provided maternal health services in the community.

Table 17: *Characteristics of female community volunteers FGD participants by districts*

Background Characteristics	AlSheikh Othman N=10	Lawdar N=9	AlMaafer N=10	Overall N=29
Age				
20-24 years	4	5	1	34.5% (10)
25-29 years	3	4	5	41.4% (12)
30-39 years	3	0	4	24.1% (7)
Education				
Basic	0	0	1	3.4% (1)
Secondary & +	10	9	9	96.6% (28)
Background Characteristics				
Years of experience				
<2 years	6	3	0	31.0% (9)
2-3 years	3	2	4	31.0% (9)
>3 years	1	4	6	38.0% (11)

Table 17 shows that one third (34.5%) of the selected community volunteers were young in age (aged between 20-24 years). Almost all of them were highly educated, and one-third have been engaged in providing volunteer community service for more than three years.

Summary Section 2

- 81.1% were already menstruating at the time of the survey.
- 80.8% of all respondents were using hygienic absorbents during menstruation with the lowest rate in AlMaafer (72.9%).
- 51% of respondents were suffering from severe dysmenorrhea.
- Early pregnancy (during adolescence ages 15-19) was high due to child marriage (marriage <18 years old). 73% of married adolescent girls have indicated to be already been pregnant.
- 93.6% of women indicated ever pregnant during their marriage, as of the time of this survey.
- 63.2% of girls reported to have had only one pregnancy, except for girls in AlMaafer, where 62.5% with the average total number of pregnancies was 2-5 pregnancies.
- 29.7% of women indicated to have had more than five pregnancies.
- 40% of current pregnancies were unplanned. AlMaafer women had the largest rates (54.8%) of unplanned pregnancies.
- 21.3% of all respondents experienced life-threatening conditions (high-risk pregnancy) with their most current pregnancy.
- 27.6% of last completed pregnancies during the last five years were unplanned pregnancies.
- 33.6% of all respondents, who had last completed pregnancy during the last five years, were with life-threatening complications (high-risk pregnancies).
- 26% of childbirths during the last years were with life-threatened complications.
- 10.4% of childbirths ended with caesarean section with lowest among women in AlMaafer (5.6%) compared to women from Lawdar (11.9%) and women from AlSheikh Othman (15.7%).
- There was a high adverse pregnancy outcome (3.7% stillbirths and 2.5% preterm) among respondents. Preterm deliveries and stillbirths' rates were higher among girls (21.4% and 7.1%) compared to women (2.5% and 3.5%) in the recent childbirth.
- 40% of all respondents experienced at least one abortion. Among them, 17% had repeated abortions during their life. 22% of respondents had experienced abortion, including 7.8% with repeated abortions during the past 5 years.
- 77.6% of all respondents reported complications during the last abortion within the last five years. The most common reported complication was haemorrhage.
- 30.6% of all respondents were unaware of STIs and 27.4% on AIDs/HIV. Unawareness among adolescent girls was high on both, STIs (50%) and AIDs/HIV (46%).
- 52.6% of all respondents reported to have ever experienced at least one RTIs-related symptom: among them, 33.9% had experienced more than two symptoms during the last 6 months.
- 12.0% of all respondents did not have any knowledge of any contraceptive method, these was especially highest (34.2%) among AlSheikh Othman respondents.
- 31% of all girls versus 1.5% of women were absolutely unaware of any contraceptive method.
- 30.6% of all respondents (12.2% of girls and 37.7% of women) relied on public health facilities as the information source to obtain knowledge about family planning. 52.6% of girls and 65.8% of women agreed reported GBV in their districts, either rare or widespread. 15% of all respondents lacked information on GBV. 8.3% of them were Intimate Partner Violence (IPV) victims during the last five years.
- Over 90% of girls and women perceived that the availability of GBV services in public health facilities is needed.
- There is a tremendous need for a comprehensive RH services to both adolescent girls and women.

Section 2: Reproductive Health Needs

This section describes the RH needs of adolescent girls and women identified during this assessment, with a focus on: menstrual hygiene, pregnancy-related issues including safe abortion care, family planning knowledge, and gender-based violence.

2.1 Menstrual Health & Hygiene

2.1.1 Menarche age

Out of 190 girls' respondents from the three districts, 154 (81.1%) were already menstruating at the time of the survey, as shown in Table 18. Among menstruating girls, age of menarche ranged from 10 to 17 years, and 80.5% of the girls started menstruating between the ages of 12-14 (mean was 13.3 years old). Across the three districts, AlMaafer had less proportion (70.1%) of menstruating girls compared to the other two districts (84.9% and 91.7% respectively). Women's mean age of menarche was 13.6 years old within the range of 9-18 years. The majority of them (87.7%) were within the age of menarche between 12-15 years old. Across the three districts, the mean age of menarche 14.0 years AlMaafer women compared to 12.9 years among Lawdar women and 13.8 years among women in AlSheikh Othman. for the total sample, 93.2% of all respondents mean age of menarche was 13.6 The reported age differences across the three regions among women were statistically significant.

Table 18: Age of menarche among respondents by all districts and by each district (n=532)

Respondents	Menarche	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Not yet started	18.9% (36)	15.1% (8)	8.3% (5)	29.9% (23)
	Yes	81.1% (154)	84.9% (45)	91.7% (55)	70.1% (54)
	Mean age of menarche (SD), min-max	13.3 (±1) 10-17	13.3 (±1), 11-16	12.9 (±1), 10-16	13.6 (±1), 11-17
	Total	190	53	60	77
Women	Yes	100% (342)	100% (96)	100% (108)	100% (138)
	Mean age of menarche (SD), min-max (P = 0.000)	13.6 (±1) 9-18	13.8 (±1), 11-18	12.9 (±1), 9-16	14.0 (±1), 10-17
	Total	342	96	108	138
Overall	Not yet started	6.8% (36)	5.4% (8)	3.0% (5)	10.7% (23)
	Yes	93.2% (496)	94.5% (141)	97.0% (163)	89.3% (192)
	Mean age of menarche (SD), min-max	13.6 (±1) 9-18	13.8 (±1), 11-18	12.9 (±1), 9-16	14.0 (±1), 10-17
	Total	532	149	168	215

2.1.2 Menstruation hygiene

Table 19 summarizes the use of different absorbents during menstruation. Most (87.0%) of girls reported using sanitary pads during menstruation. Few (7.7%) of all the girls used cloths or cotton during menstruation, this was especially common among girls in AlSheikh Othman (8.9%). More than three quarters (78.1%) of women used sanitary pads during menstruation (ranging up to 85.2% among women in Lawdar district and the lowest of 69.6% among AlMaafer women). Use of only cloths as absorbents during menstruation was low among women. Overall, 9.1% of all women reported use, with rates highest (13.0%) among AlMaafer women and lowest (9.3%) in Lawdar. Use of both sanitary pads and cloths was reported among 8.8% of women, and rates were highest (16.7%) among women in AlMaafer district. None of the girls or women reported the use of toilet paper during menstruation. Overall, 80.8% of the total sample (i.e., both women and girls) were using sanitary pads only during the menstruation. Use of other materials, such as clothes or cotton or alternatively with sanitary pads, was more common among AlMaafer participants (27.0%) compared to participants from AlSheikh Othman (15.3%) and Lawdar (12.8%). Differences in observed

rates were statistically significant difference across the three districts among both groups: adolescent girls and women.

Table 19: Materials used during menstruation among respondents by all districts and by each district (n=496)

Respondents	Material usage	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Clothes only	3.2% (5)	6.7% (3)	0% (0)	3.7% (2)
	Cotton only	4.5% (3)	2.2% (1)	1.8% (1)	1.9% (1)
	Sanitary pads only	87.0% (134)	88.9% (40)	90.9% (50)	81.5% (44)
	Sanitary pads and cloths	5.2% (8)	2.2% (1)	0% (0)	13.0% (7)
	Sanitary pads and cotton	2.6% (4)	0% (0)	7.3% (4)	0% (0)
	Toilet paper	0% (0)	0% (0)	0% (0)	0% (0)
	Total (P=0.000)	154	45	55	54
Women	Clothes only	9.1% (31)	10.4% (10)	2.8% (3)	13.0% (18)
	Cotton only	2.0% (7)	3.1% (3)	9.3% (3)	0.7% (1)
	Sanitary pads only	78.1% (267)	82.3% (79)	85.2% (92)	69.6% (96)
	Sanitary pads and cloths	8.8% (30)	4.2% (4)	2.8% (3)	16.7% (23)
	Sanitary pads and cotton	2.0% (7)	0% (0)	6.5% (7)	0% (0)
	Toilet paper	0% (0)	0% (0)	0% (0)	0% (0)
	Total (P=0.000)	342	96	108	138
Overall	Clothes only	7.3% (36)	9.2% (13)	1.8% (3)	10.4% (20)
	Cotton only	2.0% (10)	2.8% (43)	2.5% (4)	1.0% (2)
	Sanitary pads only	80.8% (401)	84.7% (119)	87.1% (142)	72.9% (140)
	Sanitary pads and cloths	7.7% (38)	3.3% (5)	1.8% (3)	15.6% (30)
	Sanitary pads and cotton	2.2% (11)	0% (0)	6.7% (11)	0% (0)
	Toilet paper	0% (0)	0% (0)	0% (0)	0% (0)
	Total (P=0.000)	496	141	163	192
	Clothes only	7.3% (36)	9.2% (13)	1.8% (3)	10.4% (20)
	Total (P=0.000)	496	141	163	192

2.1.3 Severe dysmenorrhea prevalence

Table 20 describes the prevalence of severe dysmenorrhea among the girls' and women participants. 48% of menstruating girls reported experiencing severe dysmenorrhea, with the highest percentage reported among girls in AlSheikh Othman (64.4%) and the lowest (27.3%) among girls from Lawdar district.

Table 20: Prevalence of severe dysmenorrhea among respondents by all districts and by each district (n=496)

Respondents	Availability of severe dysmenorrhea	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Yes	48.1% (74)	64.4% (29)	27.3% (15)	55.6% (30)
	No	51.9% (80)	35.6% (16)	72.7% (40)	44.4% (24)
	Total (P=0.000)	154	45	56	54
Women	Yes	51.8% (178)	47.9% (46)	41.7% (45)	62.3% (87)
	No	48.2% (164)	52.1% (50)	58.3% (63)	37.7% (51)
	Total (P=0.002)	342	96	108	138
Overall	Yes	50.8% (252)	53.2% (75)	36.8% (60)	60.9% (117)
	No	49.2% (244)	46.8% (66)	63.2% (103)	39.1% (75)
	Total (P=0.000)	496	141	164	192

As for women, 51.8% reported experiencing severe dysmenorrhea and the highest proportion (62.3%) was among women from AlMaafer district. Overall, for the total sample, the prevalence of severe dysmenorrhea was 51%.

2.2 Pregnancy and Childbearing Experience

2.2.1 Pregnancies profile

73.1% (19 out of 26) of married girls and 93.6% (320 out of 342) of women indicated ever pregnant during their marriage, as of the time of this survey. Table 21 summarizes the number of pregnancies among respondents. 63.2% of girls reported to have had only one pregnancy, except for girls in AlMaafer, where 62.5% with the average total number of pregnancies was 2-5 pregnancies. Gravidity among women was high. 29.7% indicated to have had more than five pregnancies. Although, women in AlMaafer were younger compared to the rest of the sample, 33.6% of them indicated to have had more than five pregnancies. Generally, for the total sample, 87.3% of the girls and women in this assessment have had at least two pregnancies with the lowest proportion (81.5%) reported among AlSheikh Othman respondents.

Table 21: Number of pregnancies among respondents who have ever been pregnant by all districts and by each district (n=339)

Respondents	Number of pregnancies	All Districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	1	63.2% (12)	100.0% (4)	71.4% (5)	37.5% (3)
	2-3	26.3% (5)	0.0% (0)	28.6% (2)	37.5% (3)
	4-5	10.5% (2)	0.0% (0)	0.0% (0)	25.0% (2)
	Total	19	4	7	8
Women	1	9.7% (31)	14.8% (13)	8.7% (9)	7.0% (9)
	2-3	32.2% (103)	31.8% (28)	35.6% (37)	29.7% (38)
	4-5	28.4% (91)	28.4% (25)	26.9% (28)	29.7% (38)
	>5	29.7% (95)	25.0% (22)	28.8% (30)	33.6% (43)
	Total	320	88	104	128
Overall	1	12.7% (43)	18.5% (17)	12.6% (14)	8.8% (12)
	2-3	31.9% (108)	30.4% (28)	35.1% (39)	30.1% (41)
	4-5	27.4% (93)	27.2% (25)	25.2% (28)	29.4% (40)
	>5	28.0% (95)	23.9% (22)	27.0% (30)	31.6% (43)
	Total	339	92	111	136

2.2.2 Pregnancies outcome

Table 22 summarizes the outcome of pregnancies as described by girls and women. Girls and women in all three districts reported at least one severe pregnancy outcome. 11.7% experienced at least one stillbirth, with the highest proportion (15.9%) reported in AlSheikh Othman district. 40.8% of the respondents experienced at least one abortion with the highest proportion (48.5%) reported in AlMaafer respondents. 16.5% of respondents had repeated abortions. Preterm birth clustered more among girls compared to women (15.8% versus 5.3%).

Table 22: Pregnancies outcomes among respondents who have been pregnant during their life by all districts and by each district (n=339)

Respondents	Live births	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	0	31.6% (6)	75.0% (3)	14.3% (1)	25.0% (2)
	1	63.2% (12)	25.0% (1)	85.7% (6)	62.5% (5)
	2-3	5.35% (1)	0.0% (0)	0.0% (0)	12.5% (1)
	Total	19	4	7	8
Women	0	1.6% (5)	1.1% (1)	2.9% (3)	0.8% (1)
	1	15.9% (51)	20.5% (18)	15.4% (16)	13.3% (17)
	2-3	32.5% (104)	40.9% (36)	36.5% (38)	40.6% (52)
	4-5	24.7% (79)	22.7% (20)	26.9% (28)	24.2% (31)
	>5	18.4% (59)	14.8% (13)	18.3% (19)	21.1% (31)
	Total	320	88	104	128
Overall	0	3.2% (11)	4.3% (4)	3.6% (4)	2.2% (3)
	1	18.6% (63)	20.7% (19)	19.8% (22)	16.2% (22)
	2-3	37.5% (127)	39.1% (36)	34.2% (38)	39.0% (53)
	4-5	23.3% (79)	21.7% (20)	25.2% (28)	22.8% (31)
	>5	17.4% (59)	14.1% (13)	17.1% (19)	19.9% (27)
	Total	339	92	111	136
Respondents	Stillbirth				
Girls	0	94.7% (18)	100.0% (4)	100.0% (7)	87.5% (7)
	1	5.3% (1)	0.0% (0)	0.0% (0)	12.5% (1)
	Total	19	4	7	8
Women	0	87.8% (281)	84.4% (74)	90.4% (94)	88.3% (113)
	1	9.1% (29)	9.1% (8)	6.7% (7)	10.9% (14)
	>1	3.1% (10)	6.8% (6)	2.9% (3)	0.8% (1)
	Total	320	88	104	128
Overall	0	88.2% (299)	84.8% (78)	91.0% (101)	88.2% (120)
	1	8.8% (30)	8.7% (8)	6.3% (7)	11.0% (15)
	>1	2.9% (10)	6.5% (6)	2.7% (3)	0.7% (1)
	Total	339	92	111	136
Respondents	Preterm				
Girls	0	84.2% (16)	75.0% (3)	85.7% (6)	87.5% (7)
	1	15.8% (3)	25.0% (1)	14.3% (1)	25.0% (1)
	Total	19	4	7	8
Women	0	95.3% (305)	96.6% (85)	97.1% (101)	93.0% (119)
	1	3.8% (12)	3.4% (3)	1.9% (2)	5.5% (7)
	>1	0.9% (3)	0.0% (0)	1.0% (1)	1.6% (2)
	Total	320	88	104	128
Overall	0	94.7% (321)	95.7% (88)	96.4% (107)	92.6% (126)
	1	4.4% (15)	4.3% (4)	2.7% (3)	5.9% (8)
	>1	0.9% (3)	0.0% (0)	0.9% (1)	1.5% (2)
	Total	339	92	111	136
Respondents	Abortion				
Girls	0	73.7% (14)	100.0% (4)	85.7% (6)	50.0% (4)
	1	15.8% (3)	0.0% (0)	14.3% (1)	25.0% (3)
	2-3	10.5% (2)	0.0% (0)	0.0% (0)	25.5% (2)
	Total	19	4	7	8
Women	0	59.4% (190)	63.3% (56)	65.4% (68)	51.6% (66)
	1	23.8% (76)	17.0% (15)	20.2% (21)	31.3% (40)
	2-3	13.8% (44)	14.8% (13)	13.5% (13)	14.1% (18)
	>3	3.1% (10)	4.5% (4)	1.9% (2)	3.1% (4)
	Total	320	88	104	128
Overall	0	60.2% (204)	65.2% (60)	66.7% (74)	51.5% (70)
	1	23.3% (79)	16.3% (15)	19.8% (22)	30.9% (42)
	2-3	13.6% (46)	14.1% (13)	11.7% (13)	14.7% (20)
	>3	2.9% (10)	4.3% (4)	1.8% (2)	2.9% (4)
	Total	339	92	111	136

2.2.3 Current pregnancy

47.4% of the 19 girls and 17.5% of women were currently pregnant, at the time of this assessment. The overall and district specific distributions are summarized in Figure 5. For the total sample, 21.8% of all respondents were pregnant at the time of the study compared to 6.2% among Lawdar respondents.

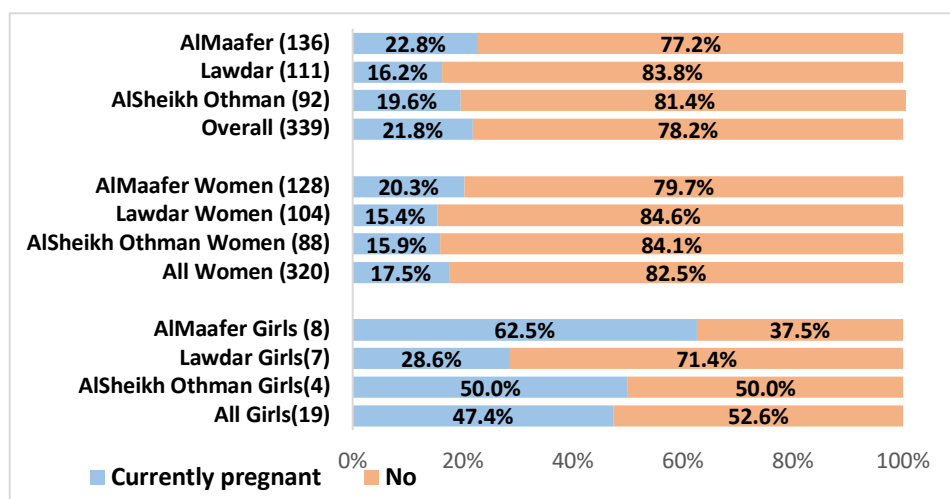


Figure 5: Current pregnant respondents by each district and all districts (n=339)

For current pregnancy, two-thirds of girls were in 2nd trimester of pregnancy at the time of the assessment. For currently pregnant women, 42.8% of women in AlSheikh were in their 3^d trimester, 38.5% of AlMaafer women were in their 2nd trimester, and 25% of Lawdar women were in their 2nd trimester. (See Table 23)

Table 23: Pregnancy trimester among currently pregnant respondents by all districts and by each district (n=65)

Respondents	Pregnancy trimester	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	1	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	2	66.7% (6)	50.0% (1)	50.0% (1)	80.0% (4)
	3	33.3% (3)	50.0% (1)	50.0% (1)	20.0% (1)
	Total	9	2	2	5
Women	1	32.1% (18)	28.6% (4)	37.5% (6)	30.8% (8)
	2	32.1% (18)	28.6% (4)	25.0% (4)	38.5% (10)
	3	35.8% (20)	42.8% (6)	37.5% (6)	30.7% (8)
	Total	56	14	16	26
Overall	1	32.1% (18)	28.6% (4)	37.5% (6)	30.8% (8)
	2	32.1% (24)	28.6% (5)	25.0% (5)	38.5% (14)
	3	35.8% (23)	42.8% (7)	37.5% (7)	30.7% (9)
	Total	65	16	18	31

2.2.3.1 Current pregnancy desire

Figure 6 summarizes the distribution of unintended pregnancies among girls and women in this assessment. 22% of all girls from the three districts, with none of the girls from AlSheikh Othman (see Table 18), were with postponing their current pregnancy. As shown in Figure 2, nearly 42.9% of women reported that the current pregnancy was unplanned and 35.7% preferred to postpone, while the remaining reported their preference to not have more children. Generally, 40% of current pregnancies were unplanned. Comparing rates across districts, AlMaafer women had the largest rates (54.8%) of unplanned pregnancies (Table 24).

Figure 6: Current pregnancy desire among respondents, who were pregnant by all districts

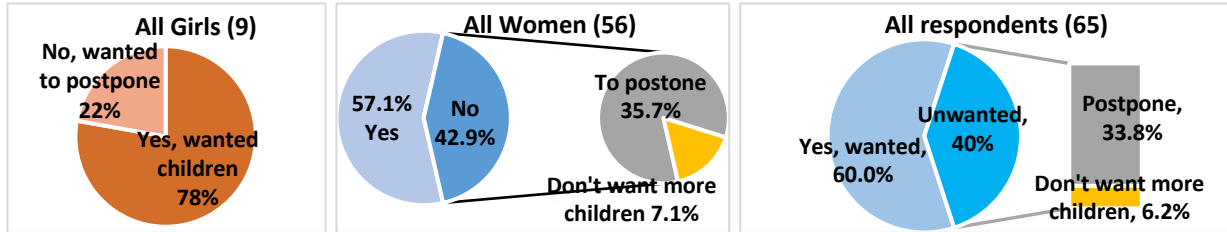


Table 24: Pregnancy desire among currently pregnant respondents by each selected district

Respondents	Pregnancy desire	AlSheikh Othman	Lawdar	AlMaafer
Girls	Wanted	100.0% (2)	50.0% (1)	80.0% (4)
	Wanted to postpone	0.0% (0)	50.0% (1)	20.0% (1)
	Total	2	2	5
Women	Wanted	71.4% (10)	75.0% (12)	38.5% (10)
	Wanted to postpone	21.4% (3)	12.5% (2)	57.7% (15)
	Did not want more children	7.1% (1)	12.5% (2)	3.8% (1)
	Total ($P=0.024$)	14	16	26
Overall	Wanted	75.0% (12)	72.2% (13)	45.2% (14)
	Wanted to postpone	18.8% (3)	16.7% (3)	51.6% (16)
	Did not want more children	6.3% (1)	11.1% (2)	3.2% (1)
	Total	16	18	51

2.2.3.2 Current pregnancy- related complications

Table 25 summarizes pregnancy-related complications experienced during the current pregnancy.

Table 25: Types of complications among currently pregnant respondents by all districts and by each district

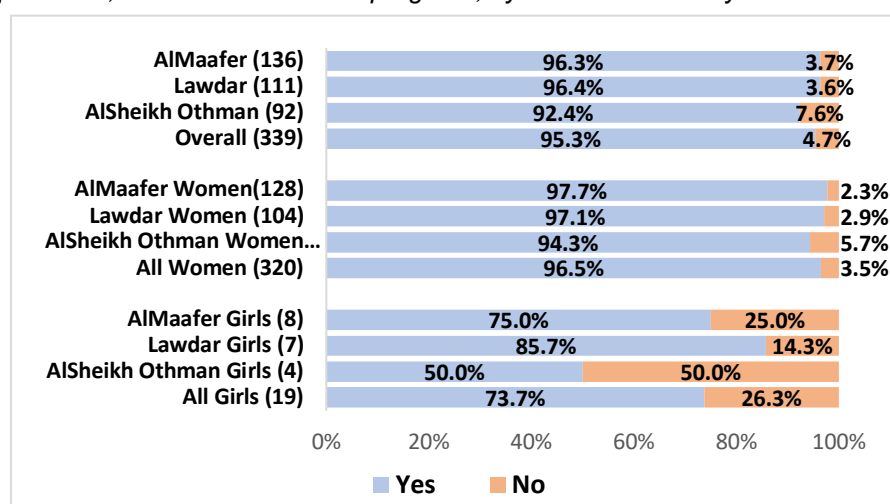
Respondents	Pregnancy-related Complication	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	No complications	55.6% (5)	50.0% (1)	100% (2)	40.0% (2)
	Had complications				
	Bleeding	11.1% (1)	50.0% (1)	0% (0)	0% (0)
	Fever	11.1% (1)	0% (0)	0% (0)	16.7% (1)
	Frequent vomiting	11.1% (1)	0% (0)	0% (0)	16.7% (1)
	Abdominal Pain	44.4% (4)	50.0% (1)	0% (0)	60.0% (3)
	Total	9	2	2	5
Women	No complications	51.8% (29)	50.0% (7)	43.6% (7)	57.7% (15)
	Had complications				
	Bleeding	1.8% (1)	0% (0)	6.3% (1)	0% (0)
	Fever	3.6% (2)	0% (0)	0% (0)	7.7% (2)
	Frequent vomiting	12.5% (7)	7.1% (1)	12.2% (2)	15.4% (4)
	Headache/ blurred vision	7.1% (4)	7.1% (1)	0% (0)	11.5% (3)
	Edema	3.6% (2)	0% (0)	12.5% (2)	0% (0)
	Abdominal Pain	30.4% (17)	28.6% (4)	31.3% (5)	30.8% (8)
	Less/no movement of the foetus	3.6% (2)	0% (0)	6.3% (1)	3.2% (1)
	Anaemia	5.4% (3)	21.4% (3)	0% (0)	0% (0)
	Other, heart problems	1.8% (1)	0% (0)	0% (0)	3.8% (1)
	Total	56	14	16	26
Overall	No complications	52.3% (34)	50.0% (8)	50.0% (9)	54.8% (17)
	Had complications				
	Bleeding	3.1% (2)	6.3% (1)	5.6% (1)	0% (0)
	Fever	4.6% (3)	0% (0)	0% (0)	9.7% (3)
	Frequent vomiting	12.3% (8)	6.3% (1)	12.2% (2)	15.4% (5)
	Headache/ blurred vision	6.2% (4)	6.3% (1)	0% (0)	9.7% (3)
	Edema	3.1% (2)	0% (0)	11.1% (2)	0% (0)
	Abdominal Pain	32.3% (21)	31.3% (5)	27.8% (5)	35.5% (11)
	Less/no movement of the foetus	3.1% (2)	0% (0)	5.6% (1)	3.2% (1)
	Anaemia	4.6% (3)	18.8% (3)	0% (0)	0% (0)
	Other, heart problems	1.5% (1)	0% (0)	0% (0)	3.2% (1)
	Total	65	16	18	31

Life-threatening conditions included bleeding, fever, headache/blurred vision, Edema, less/no movement of the foetus, anaemia, and pregnancy associated with diseases (high-risk pregnancies). Less than half (44.4%) of the girls reported that they had experienced complications during the pregnancy. Most frequent complication was abdominal pain, which was accompanied with other complications, such as frequent vomiting or bleeding. 22.2% of all girls reported as well high-risk conditions (bleeding and fever). Among women, almost half (51.8%) reported not experiencing any complications. 30.4% of women reported abdominal pain accompanied with frequent vomiting (12.5%) and bleeding (1.8%). 26.9% of women reported having high-risk conditions. Blurred vision was mentioned by few (7.1%) women, especially among AlMaafer women. 21.4% of women from AlSheikh Othman reported anaemia, while edema was reported by 12.5% of women in Lawdar district. Overall, for the total sample, over half (52.3%) of all respondents across all districts did not experience any complications during their most current pregnancy, 26.2% of respondents reported on high-risk conditions, with the highest among respondents of AlSheikh (31.4%) compared to respondents of Lawdar and AlMaafer districts (22.3% and 25.8% respectively). In general, 21.3% of all respondents experienced a high-risk pregnancy with their most current pregnancy.

2.2.4 Recent completed pregnancy

When asked about previous pregnancies, i.e., within the last five years since the war, Figure 7 shows that 14 girls (73.7%) of 19 girls and 96.5% of 320 women completed at least one pregnancy. Comparing across the three districts, the girls of Lawdar district had the highest proportion (85.7%). Overall, 95.3% of all respondents had their pregnancies completed at least 7 months, and a recent childbirth during the last five years.

Figure 7: Distribution of having pregnancy that ended with childbirth since March 2015, among respondents, who have ever been pregnant, by all districts and by each district (n=339)



2.2.4.1 Last completed pregnancy desire

As shown in Figure 8, almost all girls (92.9%) desired to become pregnant during the five past years of this assessment. 28.4% of women indicated that they experienced an unplanned pregnancy, among 22.3% wanted to make spaces between pregnancies. Across the three districts, as shown in Table 26, AlMaafer women were more likely (42.4%) to experience an unplanned pregnancy compared to women from Lawdar (18.8%) or AlSheikh Othman (19.3%). Overall, 27.6% of the total sample reported to have had unplanned pregnancies.

Figure 8: Pregnancy desire among respondents who gave childbirth since March 2015, by all districts

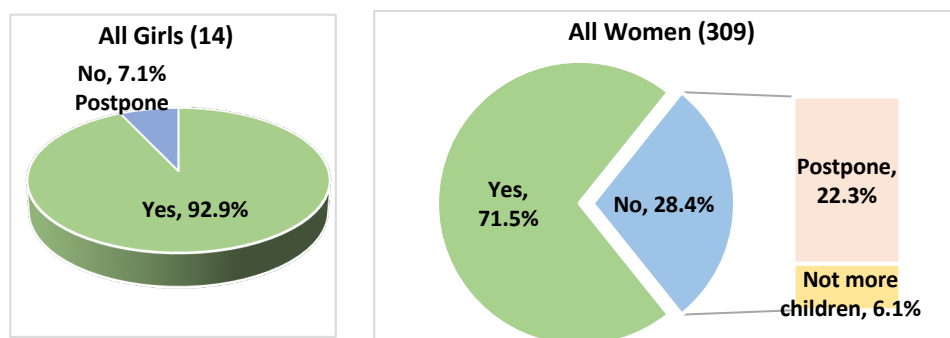


Table 26: Desire among respondents, who had deliveries since March 2015, by each district (n=323)

Respondents	Pregnancy desire	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Wanted		100.0% (2)	100.0% (6)	83.3% (5)
	Want to postpone		0.0% (0)	0.0% (0)	16.7% (1)
	Total		2	6	6
Women	Wanted		80.7% (67)	81.2% (82)	57.6% (72)
	Want to postpone		16.9% (14)	12.9% (13)	33.6% (42)
	Did not want more children		2.4% (2)	5.9% (6)	8.8% (11)
	Total (P=0.000)		83	101	125
Overall	Wanted	72.4% (234)	81.2% (69)	82.2% (88)	58.8% (77)
	Want to postpone	21.7% (70)	16.5% (14)	12.1% (13)	32.8% (43)
	Did not want more children	5.9% (19)	2.4% (2)	5.6% (6)	8.4% (11)
	Total (P=0.000)	323	85	107	131

2.2.4.2 Complications during last completed pregnancy

As shown in Table 27, more than 50% of girls reported not experiencing any complications during their latest successful pregnancy with the highest proportion among girls in AlMaafer district (66.7%). Only 21.4% of girls reported on a high-risk condition (fever) distributed among the three districts. Therefore, only 21% of all girls had high-risk pregnancy. Among women, 51.8% of them had their pregnancies without complications, with the lowest among women in AlSheikh Othman (44.6%). Of the 18.1% of women who reported the abdominal pain, 13.9% indicated that it was accompanied by frequent vomiting and 10.7% indicated that it was accompanied by bleeding. Others reported on high-risk conditions including: Bleeding experienced by 10.7%, edema experienced by 9.5%, headache/Blurred vision (as a proxy for preeclampsia) experienced by 7.1% of women, convulsion (a severe pregnancy-complication) experienced by 1.0% and fever by 8.9%. 6.0% of women also reported anaemia and Non-Communicable diseases, such as heart problems and diabetes. Therefore, 34.1% of women were with high-risk pregnancies.

Overall, frequent vomiting, bleeding, fever, oedema, and headache/blurred vision were the most common complications during pregnancies (with variation between districts) reported by both girls and women in this assessment. Generally, 33.6% of all respondents, who had last completed pregnancy during the last five years, were with high-risk pregnancy.

Table 27: Complications during pregnancy of the last delivery among respondents by type, by all districts and by each district (n=323)

Respondents	Complications	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	No complications	57.1% (8)	50.0% (1)	50.0% (3)	66.7% (4)
	Had complications:				
	Fever	21.4% (3)	50.0% (1)	16.7% (1)	16.7% (1)
	Frequent vomiting	14.3% (2)	0% (0)	16.7% (1)	16.7% (1)
	Abdominal Pain	14.3% (2)	(0)	16.7% (1)	16.7% (1)
	Total	14	2	6	6
Women	No complications	51.8% (160)	44.6% (37)	57.4% (58)	52.0% (65)
	Had complications:				
	Bleeding	10.7% (33)	10.8% (9)	10.9% (11)	10.4% (13)
	Fever	8.9% (27)	4.8% (4)	11.9% (12)	8.8% (11)
	Frequent vomiting	13.9% (43)	16.9% (14)	12.9 (13)	12.8% (16)
	Headache/ blurred vision	7.1% (22)	9.6% (8)	4.0% (4)	8.0% (10)
	Edema	9.5% (29)	13.0% (6)	18.6% (8)	25.0% (15)
	Convulsion	1.0% (3)	2.4% (2)	1.0% (1)	(0)
	Abdominal Pain	18.1% (56)	20.5% (17)	10.9% (11)	22.4% (28)
	Less/no movement of the foetus	2.3% (7)	2.4% (2)	2.0% (2)	2.4% (3)
	Other, Anaemia	2.6% (8)	4.8% (4)	1.0% (1)	2.4% (3)
	Other, NCDs,	3.4% (5)	2.4% (2)	2.0% (2)	0.8% (1)
	Total	309	83	101	125
Overall	No complications	52.0% (168)	44.7% (38)	57.0% (61)	52.7% (69)
	Had complications:				
	Bleeding	10.2% (33)	10.6% (9)	10.3% (11)	9.9% (13)
	Fever	9.3% (30)	5.9% (5)	12.1% (13)	9.2% (12)
	Frequent vomiting	13.9% (45)	16.5% (14)	13.1 (14)	13.0% (17)
	Headache/ blurred vision	6.8% (22)	9.4% (8)	3.7% (4)	7.6% (10)
	Edema	9.0% (29)	7.1% (6)	7.5% (8)	11.5% (15)
	Convulsion	0.9% (3)	2.4% (2)	0.9% (1)	(0)
	Abdominal Pain	18.0% (58)	20.0% (17)	11.2% (12)	22.1% (29)
	Less/no movement of the foetus	2.2% (7)	2.4% (2)	1.9% (2)	2.3% (3)
	Other, Anaemia	2.5% (8)	4.7% (4)	0.9% (1)	2.3% (3)
	Other, NCDs	1.5% (5)	2.4% (2)	1.9% (2)	0.8% (1)
	Total	323	85	107	131

2.2.4.3 Complications during childbirth

Bleeding during childbirth was the only complication reported among girls who were pregnant during the past five years since the start of the war in 2015. 29.6% of the girls reported only bleeding their last delivery as shown in Figure 9. 26% of the women have reported complications during childbirth within the last five years of the start of the war in 2015. Reported complications were highest among Lawdar women (32.7%) compared to women in the other two districts (21.6% in AlMaafer and 25.3% in AlSheikh Othman) (see Table 28). Bleeding was the most common (58.0%) reported complication, followed by prolonged labour (experienced by 30.9%), as well as fits, tear, and stopped contractions (uterine inertia) experienced by 11.1%. Bleeding was more commonly reported among women in AlMaafer district (81.5%), while prolonged labour was more commonly reported (47.6%) among women in AlSheikh Othman. Cessation in contractions was more commonly reported among women

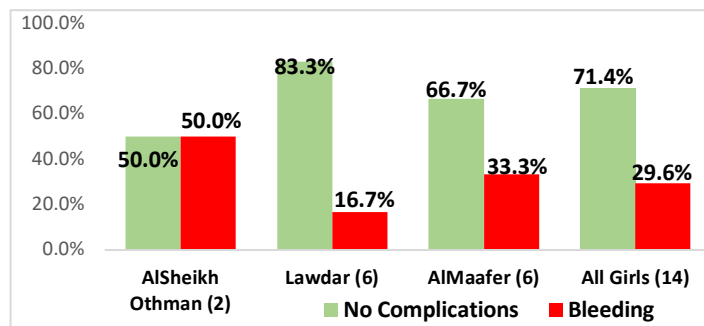


Figure 9: Complications during delivery among Girls (n=14)

in Lawdar (6.1%). A statistical difference across the three districts on type of complications among women group and overall respondents was observed.

Table 28: Complications during delivery among women and all respondents by all districts and by each district

Respondents	Complications	All districts (N=309)	AlSheikh Othman (N=83)	Lawdar (N=101)	AlMaafer (N=125)
Women	No complications	73.8% (228)	74.7% (62)	67.3% (68)	78.4% (98)
	Had complications				
	Bleeding	58.0% (47)	42.9% (9)	48.5% (16)	81.5% (22)
	Prolonged labour	30.9% (25)	47.6% (10)	39.4% (13)	7.4% (2)
	Fits	2.5% (2)	4.8% (1)	0.0% (0)	3.7% (1)
	Contractions stopped	3.7% (3)	0.0% (0)	6.1% (2)	3.7% (1)
	Tear	4.9% (4)	4.8% (1)	6.1% (2)	3.7% (1)
	Total ($P=0.022$)	81	21	33	27
Overall	No complications	73.7% (238)	74.1% (63)	68.2% (73)	77.9% (102)
	Had complications				
	Bleeding	60.0% (51)	45.5% (10)	50.0% (17)	82.8% (24)
	Prolonged labour	29.4% (25)	45.5% (10)	38.2% (13)	6.9% (2)
	Fits	2.4% (2)	4.5% (1)	0.0% (0)	3.4% (1)
	Contractions stopped (Rupture of uterus)	3.5% (3)	0.0% (0)	5.9% (2)	3.4% (1)
	Tear	4.7% (4)	4.5% (1)	5.9% (2)	3.4% (1)
	Total ($P=0.025$)	85	22	34	29

2.2.4.3a Mode of Delivery

Figure 10 summarizes delivery modes among all girls and all women. All girls in the sample had normal deliveries. Among women, the majority (89.6%) had normal deliveries, while 10.4% had a surgical delivery (Caesarean Section).

Comparing women across the three districts, C-section rates were lowest among women in AlMaafer (5.6%) compared to women from Lawdar (11.9%) and women from AlSheikh Othman (15.7%) as shown in Figure 11. Overall for the whole sample, 90% of all deliveries were normal and 10% were surgical deliveries.

Figure 10: Delivery mode among Girls and Women

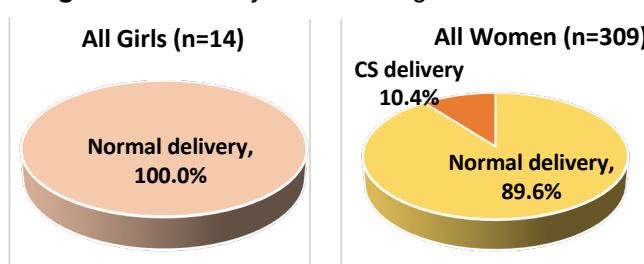


Figure 11: Mode of delivery among women by each district and Overall (n=323)

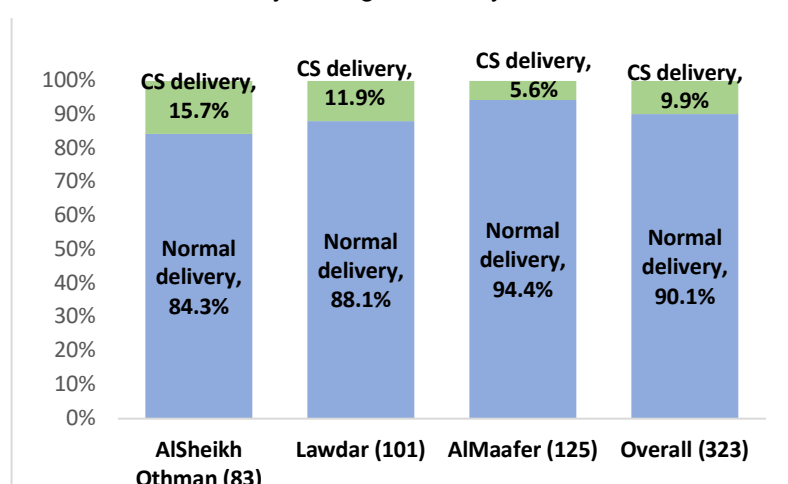
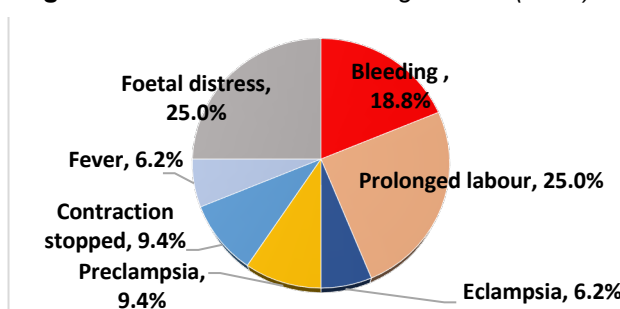


Figure 12 summarizes reported complications by women during surgical deliveries (C-sections). These included: Prolonged labour (25%), foetal distress (25%), and bleeding (18.8%).

Figure 11: CS indications among women (n=32)



2.2.4.3b Births' outcome of deliveries

As summarized in Table 29, preterm deliveries and stillbirths' rates were higher among girls (21.4% and 7.1%) compared to women (2.5% and 3.5%). Overall stillbirth rates were high (3.7%) and it was most common (8.3%) among respondents of AlSheikh Othman district.

Table 29: Births' outcome among respondents who delivered by all districts and by each district (n=323)

Respondents	Pregnancy duration at delivery	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Full-term	78.6% (11)	50.0% (1)	100.0% (6)	66.7% (4)
	Preterm	21.4% (3)	50.0% (1)	0.0% (0)	33.3% (2)
	Total	14	2	6	6
Women	Full-term	98.4% (304)	96.4% (80)	98.0% (99)	100.0% (125)
	Preterm	1.6% (5)	3.6% (3)	2.0% (2)	0% (0)
	Total	309	83	101	125
Overall	Full-term	97.5% (315)	92.8% (81)	98.1% (105)	98.5% (129)
	Preterm	2.5% (8)	4.7% (4)	1.9% (2)	1.5% (2)
	Total	323	85	107	131
Respondents	Outcome of pregnancy	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Alive	92.9% (13)	50.0% (1)	100.0% (6)	100.0% (6)
	Stillbirth	7.1% (1)	50.0% (1)	.0% (0)	0.0% (0)
	Total	14	2	6	6
Women	Alive	96.3% (298)	92.8% (77)	95.0% (98)	97.6% (122)
	Stillbirth	3.5% (11)	7.2% (4)	5.0% (5)	2.4% (3)
	Total	309	83	101	125
Overall	Alive	95.5% (311)	91.8% (78)	97.2% (104)	98.5% (129)
	Stillbirth	3.7% (12)	8.3% (7)	2.8% (3)	1.5% (2)
	Total	323	85	107	131

2.3 Abortion related Issues

2.3.1 Prevalence of abortion

10.5% the girls in this assessment who were pregnant in the past five years reported to ever had a history of repeated abortions, as shown in Table 30. 23.1% of women reported to have had an abortion, with 7.8% of women having repeated abortions. Most of the repeated abortion cases reported were predominantly among the women in AlMaafer. Overall, nearly 1 in 4 respondents had experienced abortion. Among them, 7.8% have had repeated abortions during the specified period.

Table 30: Abortion status among respondents who have had pregnancies since March 2015, by all districts and each selected district (n=339)

Respondents	Abortion status	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Yes, 2 abortions	10.5% (2)	0% (0)	0% (0)	25.0% (2)
	No abortions	89.5% (17)	100.0% (4)	100.0% (7)	75.0% (6)
	Total	19	4	7	8
Women	Yes, 1 abortion	15.3% (49)	11.4% (10)	19.2% (20)	14.8% (19)
	Yes, 2-4 abortions	7.8% (25)	7.9% (7)	5.8% (6)	9.4% (12)
	No abortions	76.9% (246)	80.7% (71)	75.0% (78)	75.8% (97)
	Total	320	88	104	128
Overall	Yes, 1 abortion	15.3% (49)	10.9% (10)	18.0% (20)	14.0% (19)
	Yes, repeated abortions	7.8% (27)	7.6% (7)	5.4% (6)	10.3% (14)
	No, abortions	77.6% (263)	81.5% (75)	76.6% (85)	75.7% (103)
	Total	339	92	111	136

2.3.2 Complications during last Abortion

Table 31 summarizes abortion-related complications among respondents. Overall, 77.6% of all respondents reported complications during abortion. The most common reported complication was haemorrhage. This was true for all girls and 59.5% of the women with a history of abortion. Other reported abortion-related complications among women included: in combination with haemorrhage weakness or abdominal pain and reproductive tract infections. Across the three districts, respondents in AlMaafer reported the highest rates for experiencing haemorrhage during abortion (84.8%). Abortion-related RTIs were highest among women in Lawdar (19.2%). Abdominal pain was highest among AlSheikh Othman women (35.3%).

Table 31: Availability and type of abortion complications among all respondents since March 2015, by all districts and by each selected district (n=76)

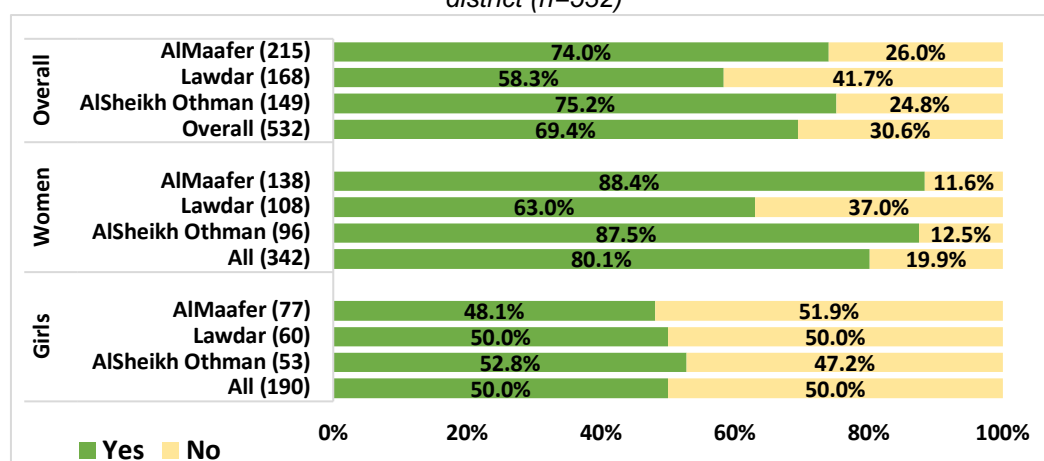
Respondents	Type of complication	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girl	No Complications	0% (0)	0	0	0
	Had complications:	100.0% (2)	0	0	100.0% (2)
	Haemorrhage	100.0% (2)	0	0	100.0% (2)
	Fever	50.0% (1)	0	0	50.0% (1)
	Abdominal pain	50.0% (1)	0	0	50.0% (1)
	Total	2	0	0	2
Women	No Complications	23.0% (17)	52.9% (9)	15.4% (4)	12.9% (4)
	Had complications:				
	Haemorrhage	59.5% (44)	29.4% (5)	50.0% (13)	83.9% (26)
	Incomplete abortion	4.1% (3)	5.9% (1)	3.8% (1)	3.2% (1)
	Infection	9.5% (7)	5.9% (1)	19.2% (5)	3.2% (1)
	Headache	10.8% (8)	17.6% (3)	7.7% (2)	9.7% (3)
	Weakness	14.9% (11)	29.4% (5)	11.5% (3)	9.7% (3)
	Fever	6.8% (5)	11.8% (2)	7.7% (2)	3.2% (1)
	Abdominal pain	26.3% (15)	35.3% (6)	23.1% (6)	9.7% (3)
	Irregular menses	3.5% (2)	0.0% (0)	7.7% (2)	0.0% (0)
	Total (P = 0.006)	74	17	26	31
Women	No, any Complication	22.4% (17)	52.9% (9)	15.4% (4)	12.9% (4)
	Had complications:				
	Haemorrhage	60.5% (46)	29.4% (5)	50.0% (13)	84.8% (28)
	Incomplete abortion	3.9% (3)	5.9% (1)	3.8% (1)	3.0% (1)
	Infection	9.2% (7)	5.9% (1)	19.2% (5)	3.0% (1)
	Headache	10.5% (8)	17.6% (3)	7.7% (2)	9.1 (3)
	Weakness	14.5% (11)	29.4% (5)	11.5% (3)	9.1% (3)
	Fever	7.9% (6)	11.8% (2)	7.7% (2)	6.1% (2)
	Abdominal pain	21.1% (16)	35.3% (6)	23.1% (6)	12.1% (4)
	Irregular menses	2.6% (2)	0.0% (0)	7.7% (2)	0.0% (0)
	Total (P = 0.006)	76	17	26	33

2.4 Reproductive Tract Infections (RTIs)

2.4.1 Heard about STIs

Only 50% of all girls in this study indicated that they have heard about STIs across the three districts. Women's knowledge about STIs was much better compared to girls. Four out five of the women in this assessment indicated that they have heard about STIs. Awareness was lowest (63%) among women in Lawdar as compared to the two other districts (See Figure 13). These rates' differences were statistically significant across the three districts among women and for the overall sample.

Figure 123: Heard about STIs among both groups (girls and women) by all districts and by each district (n=532)

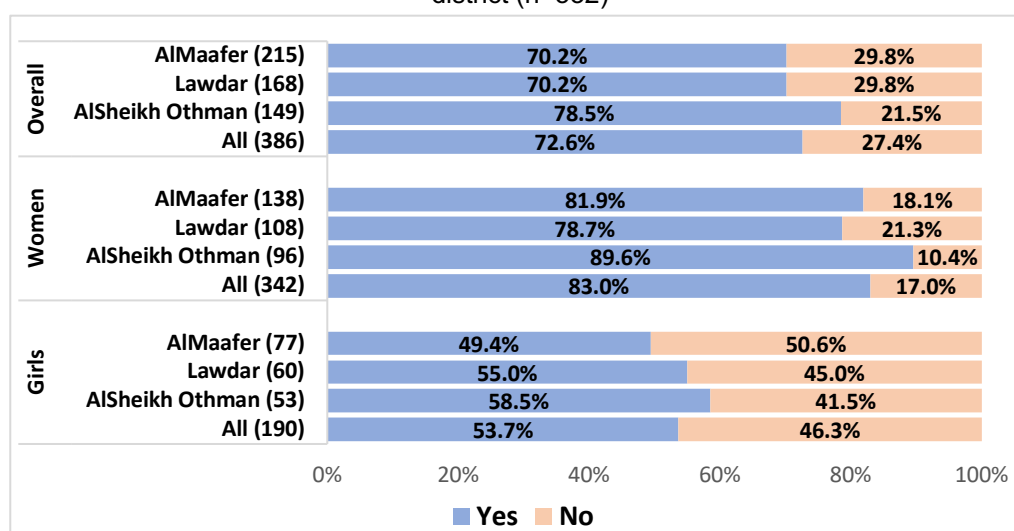


* among women ($P = 0.000$), among overall ($P = 0.001$)

2.4.2 Heard about HIV/AIDs

53.7% of the girls and 83% of women indicated to have heard about HIV/AIDs (See Figure 14). Comparing across the three districts, AlMaafer girls and Lawdar women had the least HIV/AIDs awareness (50.6% and 21.3% respectively), while awareness about HIV/AIDs was highest among both girls and women in AlSheikh Othman district. For the total sample, 72.6% have heard of HIV/AIDs.

Figure 14: Heard about AIDs among both groups (girls and women) by all districts and by each district (n=532)



2.4.3: RTIs prevalence during the last 6 months

Based on the syndromic management approach of RTIs related reported symptoms in the past six months prior to this assessment, Table 32 indicates that 1 out of 4 girls indicated to have had at least one RTIs-related symptom. A third of these girls were married at the time of this assessment. The rates of at least one RTIs-related symptom were higher among women compared to girls. Two out of three women reported to have experienced at least one RTIs-related symptom. This rate was higher among women in AISheikh Othman (75%) and in AIMaafer districts (73.9%). Overall, for the total sample, 52.6% reported to have ever experienced at least one RTIs-related symptom.

Table 32: RTIs prevalence in the last 6 months prior to the survey among respondents by all districts and by each selected district (n=532)

Respondents	Having any of RTIs symptoms	All districts	AISheikh Othman	Lawdar	AIMaafer
Girls	None	74.7% (142)	75.5% (40)	78.3% (47)	71.4% (55)
	Yes, at least one	25.3% (48)	24.5% (13)	21.7% (13)	28.6% (22)
	Total	190	53	60	77
Women	None	32.2% (110)	25.0% (24)	46.3% (50)	26.1% (36)
	Yes, at least one	67.8% (232)	75.0% (72)	53.7% (58)	73.9% (102)
	Total (P = 0.001)	342	83	102	125
Overall	None	47.4% (252)	43.0% (64)	57.7% (97)	42.3% (81)
	Yes, at least one	52.6% (280)	57.0% (85)	42.3% (71)	57.7% (124)
	Total (P = 0.001)	532	149	168	215

Table 33 summarizes the most common reported RTIs-related symptoms. Among girls, burning during urination (68.8%), pruritis (50%), pelvic pain (18.8%), and pain during intercourse (14.6%) were the most commonly reported symptoms. Definite STIs related signs, such as vaginal blisters or painless ulcer on the vaginal or genital area rash, were reported among 14.6% of girls in AIMaafer and AISheikh Othman. Similarly, for women, pruritis (74.1%), burning during urination (72.7%), pain during intercourse (33.3%), and Pelvic pain (26.4%) were the most commonly reported symptoms. Reported rates were higher among women compared to girls. Definite RTIs signs were reported by 23% of the women. For the total sample, pruritis and burning during urination were the most common RTIs related symptoms by 70% of the respondents. Genitals' rash, blisters, and ulcers were reported by 21.4% of respondents and pelvic pain by 25% of the respondents.

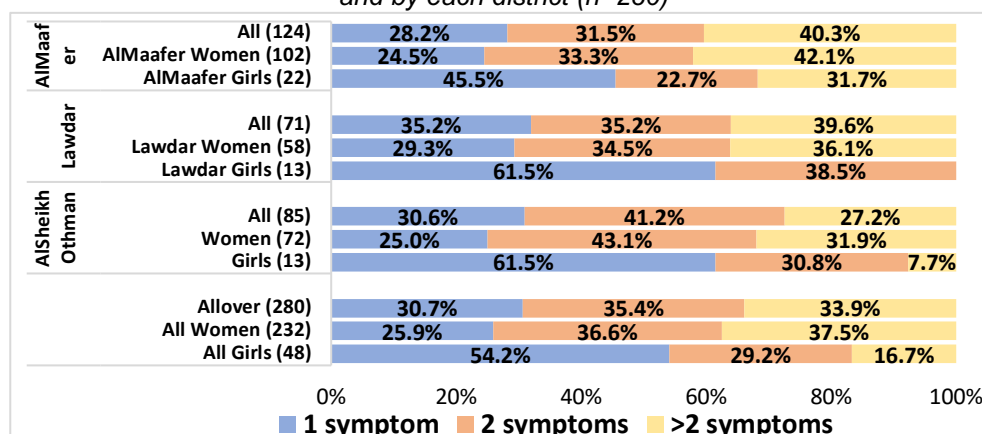
Table 33: RTIs symptoms experienced by respondents in the last 6 months prior to the survey by all districts and by each selected district (n=280)

Respondents	RTIs symptoms experienced	All districts	AISheikh Othman	Lawdar	AIMaafer
Girls	Pruritis	50.0% (24)	38.5% (5)	30.8% (4)	68.2% (15)
	Burning urination	68.8% (33)	92.3% (12)	69.2% (9)	54.4% (12)
	Vaginal blisters	2.1% (1)	0.0% (0)	0.0% (0)	4.5% (1)
	Genital area rash	8.3% (4)	0.0% (0)	0.0% (0)	18.2% (4)
	Painless ulcer on the vagina	4.2% (2)	15.4% (2)	0.0% (0)	0.0% (0)
	Pain during intercourse	14.6% (7)	0.0% (0)	30.8% (4)	13.6% (3)
	Bleeding or spotting between menses	4.2% (2)	0.0% (0)	7.7% (1)	4.5% (1)
	Pelvic pain	18.8% (9)	0.0% (0)	0.0% (0)	40.9% (9)
	Total	48	13	13	22
Women	Pruritis	74.1% (172)	72.2% (52)	63.8% (37)	81.4% (83)
	Burning urination	72.7% (168)	77.5% (55)	77.6% (45)	66.7% (68)
	Vaginal blisters	6.1% (14)	0.0% (0)	13.8% (8)	5.9% (6)
	Genital area rash	13.0% (30)	2.8% (2)	8.6% (5)	22.5% (23)
	Painless ulcer on the vagina	3.9% (9)	5.6% (4)	3.5% (2)	2.9% (3)
	Pain during intercourse	33.3% (77)	40.4% (29)	39.7% (23)	24.5% (25)
	Bleeding or spotting between menses	5.2% (12)	4.2% (3)	3.5% (2)	6.9% (7)
	Pelvic pain	26.4% (61)	18.3% (13)	17.2% (10)	37.3% (38)
	Total	232	72	58	102

Respondents	RTIs symptoms experienced	All districts	AlSheikh Othman	Lawdar	AlMaafer
Overall	Pruritis	70.0% (196)	67.1% (57)	57.7% (41)	79.0% (98)
	Burning urination	71.8% (201)	78.8% (67)	76.1% (54)	64.5% (80)
	Vaginal blisters	5.4% (15)	0% (0)	11.3% (8)	5.6% (7)
	Genital area rash	12.1% (34)	2.4% (2)	7.0% (5)	21.8% (27)
	Painless ulcer on the vagina	3.9% (11)	7.1% (6)	2.8% (2)	2.4% (3)
	Pain during intercourse	30.0% (84)	34.1% (29)	38.0% (27)	22.6% (28)
	Bleeding or spotting between menses	5.0% (14)	3.5% (3)	4.2% (3)	6.5% (8)
	Pelvic pain	25.0% (70)	15.3 (13)	14.1% (10)	37.9% (47)
	Total	280	85	71	124

This study also collected information on the number of RTIs symptoms that each respondent experience during the last 6 months prior to the survey. As summarized in Figure 15, 16.7% of the girls, who reported RTIs related symptoms, reported to have experienced more than two symptoms compared to 37.5% among women. Across the three districts, 31.7% of girls in AlMaafer district reported more than two RTIs-related symptoms compared to none of the girls in Lawdar and 7.7% of the girls in AlSheikh Othman. Overall, 33.9% of all respondents had experienced more than two symptoms.

Figure 135: Number of RTIs symptoms among respondents who were affected by RTIs by all districts and by each district (n=280)



2.5 Family Planning

2.5.1 Awareness on Family planning methods

Table 34 summarizes girls' and women's knowledge of the different family planning methods. The three main methods that girls reported knowledge of included: pills (66.8%), injectables (51.1%), and IUDs (38.4%). Knowledge about implants was higher (49.4%) among AlMaafer girls compared to both AlSheikh Othman girls (11.3%) and Lawdar girls (20.0%). Further, girls in AlSheikh Othman had the least family planning knowledge compared to girls from Lawdar and AlMaafer districts. Overall, 94% of the women indicated had some knowledge about family planning. The most commonly known modern family planning methods by women included: pills (94.4%), injectables (88.0%), IUDs (85.1%), and implants (73.7%). Knowledge/Awareness about permanent family planning methods (female and male sterilization) awareness was low (11%); this knowledge was highest among AlMaafer women (55.8%) compared to AlSheikh Othman (13.6%) and Lawdar (15.7%) women. Knowledge of traditional family planning methods (Rhythm and withdrawal methods) was 36.4%, with higher rates (59.2%) known among Lawdar women.

Table 34: *Distribution of all respondents who are aware of contraceptives by method and by all districts and by each selected district (n=532)*

Respondents	Contraceptive	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Female sterilization	8.4% (16)	(0)	3.3% (2)	18.2% (14)
	Male sterilization	0.5% (1)	(0)	1.7% (1)	(0)
	Oral pills	66.8% (127)	13.2% (7)	90.0% (54)	85.7% (66)
	IUDs	38.4% (73)	11.3% (6)	36.7 (22)	58.4% (45)
	Implant	29.5% (56)	11.3% (6)	20.0% (12)	49.4% (38)
	Injectables	51.1% (97)	11.3% (6)	68.3% (41)	64.9% (50)
	Male condom	4.2% (8)	1.9% (1)	6.7% (4)	3.9% (3)
	Lactational Amenorrhea method	8.9% (17)	1.9% (1)	10.0% (6)	13.0% (10)
	Rhythm method	3.7% (7)	1.9% (1)	6.7% (4)	2.6% (2)
	Withdrawal	1.7% (1)	0% (0)	1.7% (1)	0% (0)
	Total	190	53	60	77
Women	Female sterilization	1.1% (2)	7.3% (7)	11.1% (12)	39.1% (54)
	Male sterilization	9.9% (34)	6.3% (6)	4.6% (5)	16.7% (23)
	Oral pills	94.4% (323)	85.4% (82)	95.4% (103)	100% (138)
	IUDs	85.1% (291)	81.3% (78)	74.1% (80)	96.4% (133)
	Implant	73.7% (252)	76.0% (73)	53.7% (58)	87.7% (121)
	Injectables	88.0% (301)	79.2% (76)	88.0% (95)	94.2% (130)
	Male condom	38.6% (132)	53.1% (51)	32.4% (35)	33.3% (46)
	Lactational Amenorrhea method	41.8% (143)	43.6% (42)	38.0% (41)	43.5% (60)
	Rhythm method	31.6% (108)	28.1% (27)	37.0% (40)	29.7% (41)
	Withdrawal	4.8% (9)	14.6% (14)	22.2% (24)	5.8% (8)
	Total	342	96	108	138
Overall	Female sterilization	3.4% (18)	4.7% (7)	8.3% (14)	31.6% (68)
	Male sterilization	6.6% (35)	4.7% (7)	3.6% (6)	10.7% (23)
	Oral pills	84.6% (450)	59.7% (89)	93.5% (157)	94.9% (204)
	IUDs	68.4% (364)	56.4% (84)	60.7% (102)	82.8% (178)
	Implant	57.7(308)	53.0% (79)	41.7% (70)	74.0% (159)
	Injectables	74.8% (398)	55.0% (82)	81.0% (136)	83.7% (180)
	Male condom	26.3% (140)	34.9% (52)	23.2% (39)	22.8% (49)
	Lactational Amenorrhea method	30.1% (160)	28.9% (43)	28.0% (47)	32.6% (70)
	Rhythm method	21.6% (115)	18.8% (28)	26.2% (44)	20.0% (43)
	Withdrawal	2.1% (11)	9.4% (14)	14.9% (25)	3.7% (8)
	Total	532	149	168	215

Overall, for the total sample, more than two-thirds of the respondents had knowledge about pills, injectables, and IUDs. This was followed by knowledge about: implants (57.7%), lactational amenorrhea (30.1%), male condoms (26.3%), and permanent methods (10.0%). Generally, AlMaafer respondents had better awareness about the different modern family planning methods compared to respondents from AlSheikh Othman (28.2%) and Lawdar (41.1%).

Table 35 quantify the number of contraceptive methods known to the respondents. 31% of all girls were absolutely unaware of any contraceptive method, with such lack of knowledge observed to be highest (87%) among AlSheikh Othman girls compared to only 5% of Lawdar girls and 13% of AlMaafer girls who were unaware of any method. 12.1% of all girls had knowledge of four or more contraceptive methods with variation across districts, with AlMaafer girls reporting higher rates (19.5%). Among women, 1.5% were unawareness of any contraceptive methods and they were all from AlSheikh Othman. 53% of women were aware of more than 4 methods with the lowest proportion (40%) among Lawdar women. Overall, AlMaafer women had better knowledge of four more family planning methods (60.1%) compared to Lawdar women (39.8%). For the total sample, 12.0% of respondents did not have

any knowledge of any contraceptive method, these was especially highest (34.2%) among AISheikh Othman respondents. 38.3% of respondents knew more than four contraceptives with variation across the districts. AIMaafer respondents had better knowledge (45.6%) of four more contraceptive methods compared to respondents in both Lawdar (29.2%) and AISheikh Othman (38.3%).

Table 35: *Distribution of all respondents who aware of contraceptives by number of contraceptive methods and by all districts and each district (n=532)*

Respondents	No. of contraceptive methods known	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	0 (none)	31.1% (59)	86.8% (46)	5.0% (3)	13.0% (10)
	1	12.6% (24)	1.9% (1)	21.7% (13)	13.0% (10)
	2	15.3% (29)	0% (0)	36.7% (22)	9.1% (7)
	3	14.2% (27)	0% (0)	15.0% (9)	23.4% (18)
	4	14.7% (28)	7.5% (4)	11.7% (7)	22.1% (17)
	>4	12.1% (23)	3.8% (2)	10.0% (6)	19.5% (15)
	Total (P=.0000)	190	53	60	77
Women	0 (none)	1.5% (5)	5.2% (5)	0% (0)	0% (0)
	1	3.5% (12)	9.4% (9)	2.8% (3)	0% (0)
	2	6.1% (21)	2.1% (2)	13.0% (14)	3.6% (5)
	3	14.0% (48)	9.4% (9)	26.9% (29)	7.2% (10)
	4	21.9% (75)	16.7% (16)	17.6% (19)	29.0% (40)
	>4	52.9% (181)	57.3% (55)	39.8% (43)	60.1% (83)
	Total (P=.0000)	342	96	108	138
Overall	0 (none)	12.0% (64)	34.2% (51)	1.8% (3)	4.7% (10)
	1	6.8% (36)	6.7% (10)	9.5% (16)	4.7% (10)
	2	9.4% (50)	1.3% (2)	30.4% (51)	5.6% (12)
	3	14.1% (75)	6.0% (9)	16.7% (28)	13.0% (28)
	4	19.4% (103)	13.4% (20)	15.5% (26)	26.5% (57)
	>4	38.3% (204)	38.3% (57)	29.2% (49)	45.6% (98)
	Total (P=.0000)	532	149	168	215

2.5.2 Source of information

Figure 16 describes the information sources that girls relied to obtain knowledge about family planning. Family and neighbours were the main sources of information as reported by more than 50% of all girls, followed by friends (25%), public health facilities (12%), and teachers (8.4%). Other sources, such as pharmacies, private health facilities, and health workers were only reported by few girls (5.3%).

Figure 16: *Sources on family planning methods awareness among All Girls (n=131)*

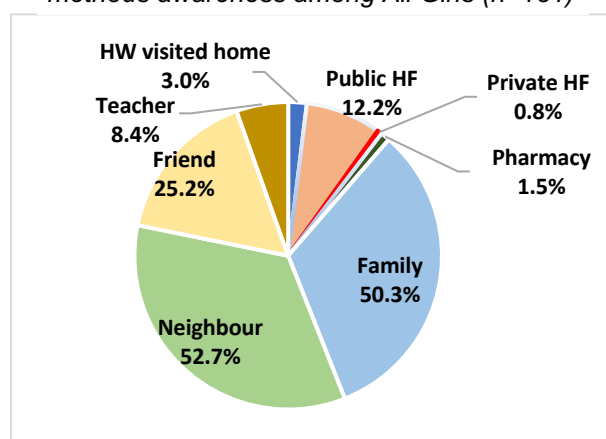


Figure 17: Sources on family planning methods awareness among All Women (n =337)

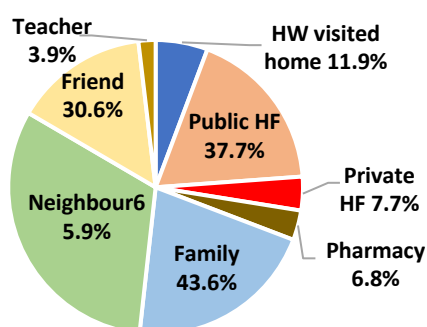


Figure 18: Sources on family planning methods awareness among Overall (n =468)

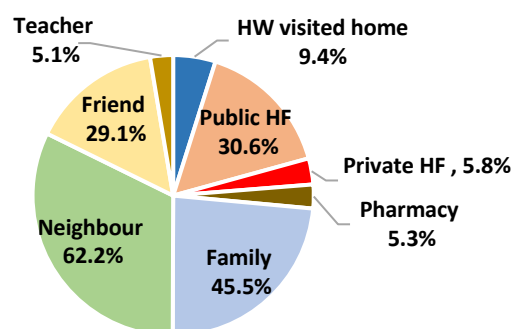


Figure 17 describes the sources that women relied on to obtain information on family planning, which included: neighbours (65.9%), family (43.6%), public health facilities (37.7%), and friends (30.6%). Female health volunteers and community midwives, who made home visits, were noted as the least relied on sources of information (11.9%) for family planning. Overall, for the total sample, neighbours were the most commonly reported source for information on family planning, followed by family members (45.5%) and public health facilities (30.6%) as shown in Figure 18.

Table 36: Sources on contraceptive methods awareness by respondents who aware by each district (n=468)

Respondents	Source of information (N=468)	AlSheikh Othman	Lawdar	AlMaafer
Girls	HW visited home (4)	0.0% (0)	3.5% (2)	3.0% (2)
	Public HF (16)	14.3% (1)	15.8% (9)	9.0% (6)
	Private HF (1)	0.0% (0)	0.0% (0)	1.5% (1)
	Pharmacy (2)	14.3% (1)	0.0% (0)	1.5% (1)
	Family (66)	85.7% (6)	63.2% (36)	35.8% (24)
	Neighbour (69)	71.4% (5)	26.3% (15)	73.1% (49)
	Friend (33)	57.1% (4)	33.3% (19)	14.9% (10)
	Teacher (11)	0.0% (0)	17.5% (10)	1.5% (1)
	Total	7	57	67
Women	HW visited home (40)	15.4% (14)	12.0% (14)	9.4% (13)
	Public HF (127)	40.7% (37)	38.0% (41)	35.5% (49)
	Private HF (26)	8.8% (8)	9.3% (10)	5.8% (8)
	Pharmacy (23)	7.7% (7)	9.3% (10)	4.3% (6)
	Family (147)	59.3% (54)	53.7% (58)	25.4% (35)
	Neighbour (222)	51.6% (47)	52.8% (57)	85.5% (118)
	Friend (103)	27.5% (25)	39.8% (43)	25.4% (35)
	Teacher (13)	6.6% (6)	2.8% (3)	2.9% (4)
	Total	91	108	138
Overall	HW visited home (44)	14.3% (14)	9.7% (16)	7.3% (15)
	Public HF (143)	38.8% (38)	30.3% (50)	26.8% (55)
	Private HF (27)	8.2% (8)	6.1% (10)	4.4% (9)
	Pharmacy (25)	8.2% (8)	6.1% (10)	3.4% (7)
	Family (213)	61.2% (60)	57.0% (94)	28.8% (59)
	Neighbour (291)	53.1% (52)	43.6% (72)	81.5% (167)
	Friend (136)	29.6% (29)	37.6% (62)	22.0% (45)
	Teacher (24)	6.1% (6)	7.9% (13)	2.4% (5)
	Total	98	165	205

Comparing the different sources of awareness on contraceptive methods across districts for both girls as well as women is summarized in Table 36. A higher proportion of AlSheikh Othman and Lawdar girls (85.7% and 63.2% respectively) obtained their information from their

families, while for 73.1% AlMaafer girls, neighbour was the main source. Mostly, the teacher was the source of information (17.5%) among Lawdar girls. For women, the neighbour was the most common source of information in all districts, with the highest rate among 85.5% of AlMaafer women. The family, as the other major source, was among 59.3% of AISheikh Othman women and 53.7% of Lawdar women. Public health facilities, as source, were relied on by less than 39% of women in all three districts.

2.6 Gender-Based Violence (GBV)

2.6.1 Availability of GBV in the area

Table 37 shows that 52.6% of girls and 65.8% of women agreed reported GBV in their districts, either rare or widespread. 8.9% of girls and 12.9% of women stressed that GBV occur extensively in their districts. These reported rates varied across the three districts, 2.6% of girls and 5.1% of women 5.1% in AlMaafer district indicated that GBV is widespread in their district compared to AISheikh Othman and Lawdar girls (15.1% and 11.7% respectively, and women 27.1% and 10.2% respectively). Lack of knowledge about GBV was higher among girls (21.6%) compared to women (11.9%). Overall, 61.1% of all respondents reported GBV as an important problem in their areas, with 49.6% perceived it to be rare and 11.5% perceived to be widespread (11.5%). 15% of respondents lacked any knowledge of GBV, with the lowest proportion (3.4%) among respondents in AISheikh Othman.

Table 37: Distribution of all respondents on availability of GBV in their district by all districts and by each selected district (n=532)

Respondents	Availability of GBV	All districts	AISheikh Othman	Lawdar	AlMaafer
Girls	Yes, rare	43.7% (83)	37.7% (20)	40.0% (24)	50.6% (39)
	Yes, widespread	8.9% (17)	15.1% (8)	11.7% (7)	2.6% (2)
	No	25.8% (49)	43.4% (23)	16.7% (10)	20.8% (16)
	Do not know	21.6% (41)	3.8% (2)	31.7% (19)	26.0% (20)
	Total	190	53	60	77
Women	Yes, rare	52.9% (181)	41.7% (40)	57.4% (62)	57.2% (79)
	Yes, widespread	12.9% (44)	27.1% (26)	10.2% (11)	5.1% (7)
	No	22.8% (78)	28.1% (27)	18.5% (20)	22.5% (31)
	Do not know	11.4% (39)	3.1% (3)	13.9% (15)	15.2% (21)
	Total	342	96	108	138
Allover	Yes, rare	49.6% (264)	40.3% (60)	51.2% (86)	54.9% (118)
	Yes, widespread	11.5% (61)	22.8% (34)	10.7% (18)	4.2% (9)
	No	23.9% (127)	33.6% (50)	17.9% (30)	21.9% (47)
	Do not know	15.0% (80)	3.4% (5)	20.2% (34)	19.1% (41)
	Total	532	149	168	215

2.6.2 Knowledge of different Gender Based Violence (GBV) forms

Table 38 summarizes the respondents' knowledge about the different forms of GBV. 15% of respondents (21.6% of girls and 11.4% of women), who were unfamiliar with GBV, were excluded. More than half of the girls (55%) and two-thirds of the women mentioned stated physical violence. Whereas 44.3% of girls and 53.8% of women stated the occurrence of psychological and emotional abuse. Forced marriage was mentioned by 38.7% of girls and 42.9% of women as components of GBV. Rape/sexual assault was cited only by 22.8% of girls and 31.4% of women. The component on denial of resources or opportunities was known among only 27.5% of girls and 28.1% of women. Across the district, the girls and women in AISheikh Othman district were more knowledgeable on the components of GBV than other women in Lawdar and AlMaafer districts. Overall, knowledge on GBV components was inadequate among all respondents; physical violence was known by 64.2% of respondents,

psychological and emotional abuse was identified by 50.7%, forced marriage by 41.4%, rape/sexual assault by 28.5% and denial of resources and opportunities by only 27.9% of all respondents. 15% of respondents were illiterate on GBV, especially among respondents of Lawdar (20.0%) and AlMaafer (19.1%).

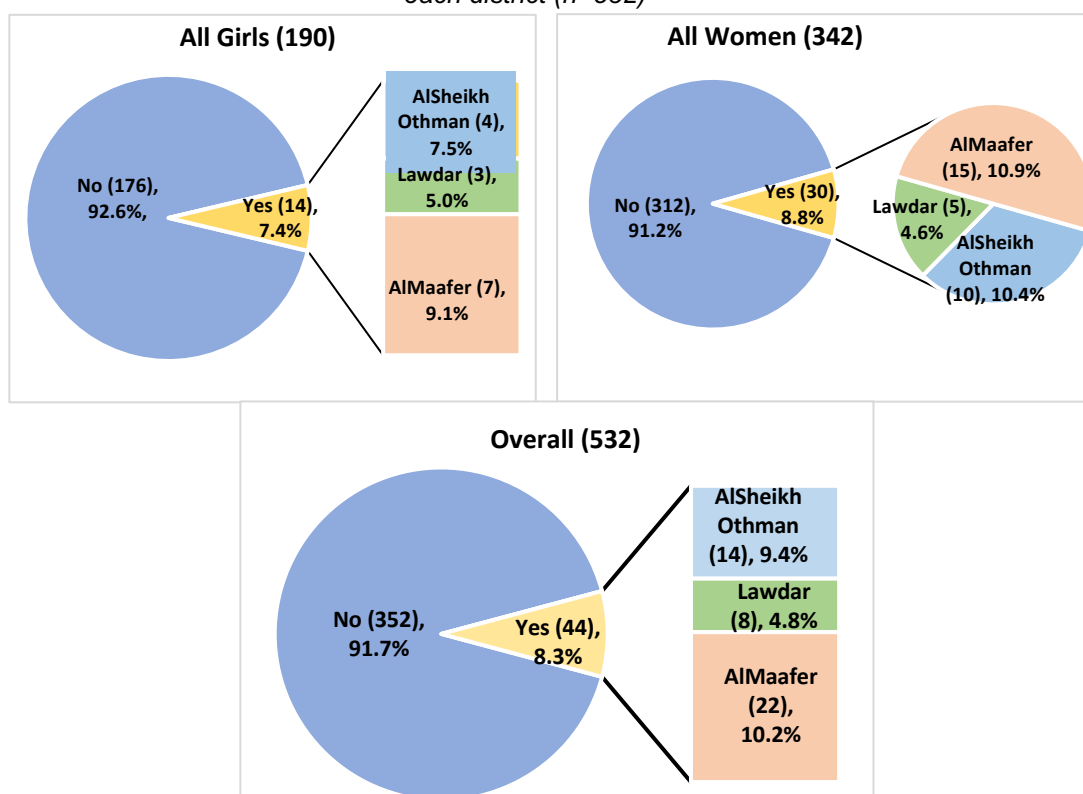
Table 38: *Distribution of all respondents, according to their understanding on each of GBV component, by all districts and by each selected district (n=452)*

Respondents	Components of GBV	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Physical violence	55.0% (82)	64.7% (33)	43.9% (18)	54.4% (31)
	Rape / sexual assault	22.8% (34)	37.3% (19)	14.6% (6)	15.8% (9)
	Psychological and emotional abuse	44.3% (66)	58.8% (30)	31.7% (13)	40.4% (23)
	Forced marriage	38.3% (57)	45.1% (23)	48.8% (20)	24.6% (14)
	Denial of resources or opportunities	27.5% (41)	31.4% (16)	39.0% (16)	15.8% (9)
	Total respondents reported on components	149	51	41	57
	Unaware of GBV	21.6% (41)	3.8% (2)	31.7% (19)	26.0% (20)
	Total	190	53	60	77
Women	Physical violence	68.6% (208)	74.0% (71)	50.9% (55)	59.4% (82)
	Rape / sexual assault	31.4% (95)	57.0% (53)	15.1% (14)	23.9% (28)
	Psychological and emotional abuse	53.8% (163)	79.6% (74)	33.3% (31)	49.6% (58)
	Forced marriage	42.9% (130)	53.6% (50)	49.5% (46)	29.1% (34)
	Denial of resources or opportunities	28.1% (85)	38.7% (36)	33.3% (31)	15.4% (18)
	Total respondents reported on components	303	93	93	117
	Unaware of GBV	11.4% (39)	3.1% (3)	13.9% (15)	15.2% (21)
	Total	342	96	108	138
Overall	Physical violence	64.2% (290)	72.2% (104)	54.5% (73)	64.9% (113)
	Rape / sexual assault	28.5% (129)	50.0% (72)	14.9% (20)	21.3% (37)
	Psychological and emotional abuse	50.7% (163)	72.2% (104)	32.8% (44)	46.6% (81)
	Forced marriage	41.4% (130)	50.7% (73)	49.3% (66)	27.6% (48)
	Denial of resources or opportunities	27.9% (85)	36.1% (52)	35.1% (47)	15.5% (27)
	Total respondents reported on components	452	144	134	174
	Unaware of GBV	15% (80)	4.4% (5)	20.0% (34)	19.1% (41)
	Total	532	149	168	215

2.6.3 Incidence of Intimate Partner Violence (IPV)

Figure 19 shows that 7.4% of girls in this assessment reported experiencing at least one incident of IPV, including: physical violence, such as beating and evictions; verbal insults, such as insults and shouting; home confinement, oppression, stopping them from going to school, as well as psychological abuse during the last five years prior to the study. Comparing the three districts, IPV incidents among girls in AlMaafer district were higher (9.1%) compared to girls in AlSheikh Othman (7.4%) and girls in Lawdar (5%). 8.8% of women reported having experienced IPV. They were exposed to a variety of violence including physical violence, such as beating or beating until fainting; deprivation from financial resources; stopping them from going to school for secondary education; home confinement; verbal abuse, such as insults; psychological abuse; and emotional abuse. Among the three districts, women in AlMaafer district, as reported, had the highest incidents of IPV (10.9%) compared to women in Lawdar (4.8%) and AlSheikh Othman (9.4%). Overall, 8.3% of all respondents were exposed to IPV.

Figure 14: The prevalence of intimate partner violence among respondents by all districts and by each district (n=532)



In this study, only one woman, from AlSheikh Othman, admitted being raped during the last five years prior to the study and she didn't report or seek help for the rape.

2.6.4 Support GBV services for women and girls' protection in Public health facilities

Table 39 summarises the respondents' views on the importance of making GBV supportive services available to protect women and girls in public health facilities. Over 90% of girls and women perceived that the availability of GBV supportive services in public health facilities is needed. Few girls from AlMaafer (2.6%) and Lawdar (10.6%) were not supportive for making these services available. Fewer (3.8%) of women were also not supportive to have these services made available. Overall, the majority of all respondents in the three districts supported the provision of GBV supportive services in public health facilities.

Table 39: Distribution of all respondents, according to their support and expectation on each of GBV components for protection services, by all districts and by each selected district

Respondents	Support for protection services in HFs	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Yes	90.0% (171)	100.0% (53)	83.3% (50)	88.3% (68)
	No	4.2% (8)	0.0% (0)	10.0% (6)	2.6% (2)
	Do not know	5.8% (11)	0.0% (0)	6.7% (4)	9.1% (7)
	Total (100%)	190	53	60	77
Women	Yes	94.4% (323)	99.0% (95)	89.9% (97)	94.9% (131)
	No	3.8% (13)	1.0.0% (1)	9.3% (10)	1.4% (2)
	Do not know	1.8% (6)	0.0% (0)	0.9% (1)	3.6% (5)
	Total	342	96	108	138
Overall	Yes	92.9% (494)	99.3% (148)	87.5% (147)	92.6% (199)
	No	3.9% (21)	0.07% (1)	9.5% (16)	1.9% (4)
	Do not know	3.2% (17)	0.0% (0)	3.0% (5)	5.6% (12)
	Total	532	149	168	215

Respondents	Components of GBV support services expected	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Education	72.5% (124)	75.5% (40)	68.0% (34)	73.5% (50)
	Counselling	24% (41)	32.1% (17)	26.0% (13)	16.2% (11)
	Prophylaxis and treatment	22.8% (39)	32.1% (17)	24.0% (12)	14.7% (10)
	Psychological support	42.7% (73)	62.3% (33)	46.0% (23)	25.0% (17)
	Total (P=0.000)	171	53	50	68
Women	Education	71.2% (230)	87.4% (83)	63.9% (62)	64.9% (85)
	Counselling	29.7% (96)	40.0% (38)	28.9% (28)	22.9% (30)
	Prophylaxis and treatment	31.0% (100)	43.2% (41)	32.0% (31)	21.4% (28)
	Psychological support	51.4% (166)	80.0% (76)	51.5% (50)	30.5% (40)
	Total (P=0.000)	323	95	97	131
Overall	Education	71.7% (354)	83.1% (123)	65.3% (96)	67.8% (135)
	Counselling	27.7% (137)	37.2% (55)	27.9% (41)	20.6% (41)
	Prophylaxis and treatment	28.1% (139)	39.2% (58)	29.3% (43)	19.1% (38)
	Psychological support	48.4% (239)	73.6% (109)	49.7% (73)	28.6% (57)
	Total (P=0.000)	494	148	147	199

The respondents declared the importance of the GBV supportive services availability. These services suggested to include: a- education, which was reported among three quarters of all girls and all women. b- psychological support, cited by 42.7% of girls and 51.4% of women. c- counselling and prophylaxis & treatment reported by less than 30% of all respondents. Across the three districts, girls and women in AlSheikh Othman reported the highest support of all four types of services compared to respondents of Lawdar and AlMaafer districts (See Table 39).

The Reproductive Health (RH) Needs

Based on the findings from the quantitative part triangulated with the qualitative interviews (KIs and FGDs), the needs for Adolescent girls and women are:

a) Adolescent girls' RH needs:

- Provision of adolescence-friendly comprehensive RH services: The services have to be located in a separate space in health facilities supported by complete confidentiality, qualified health team, and respectful care.
- The RH services package has to include RH awareness, adequate counselling, and treatment on RH issues: menstrual health, RTIs/HIV, family planning, GBV support, and maternal health incorporating EmOC and safe post-abortion care. An ADP girl in one FGD mentioned: *"We get RTIs and only consult our mothers and friends and they advise us to be treated with warm water and salt."*

A KI health provider noted: *"Adolescent girls lack RH knowledge and services due to the absence of relevant information, education, services, and support mechanisms. The sexually abused girl in our society is locked up by her parents and treated badly."*

- Empowerment and support of decision makers and community leaders to desensitize them with the importance of adolescence RH services, especially for unmarried girls, who do not have access to health facilities, due to cultural restrictions. As a KI community leader mentioned, *"Why would an adolescent girl go to a health facility if she is not married? According to the culture and norms in our society, adolescent girls should not go unless they are married."*
- Combatting child marriage and raising awareness on the harmful effects among all community members, including revisiting the marriage law. The FGD with community

midwives pointed out, *“With this war, early marriage increased, and this led to early pregnancy since our cultural conception expects pregnancy within a year of marriage.”*

b) Women’s RH needs:

- 24-hour delivery services in health centers,
- Provision of EmOC services by qualified female personnel, particularly in AlMaafer and Lawdar districts. A KI community leader said, *“Now obstetric services in health facilities are provided by males doctors. This makes women unable to utilize the services and forced to deliver at home under supervision of traditional birth attendants, which is harmful for both the mother and her baby.”*

A male in FGD added, *“The importance of adding obstetric services with clean facilities and respectful treatment will encourage mothers to visit these centers to receive the service.”*

- Post abortion services.
- Postnatal care that takes into consideration the cultural aspect/community-based.
- Raising awareness on all RH issues, with male involvement in awareness, especially on family planning. A woman from FGD said, *“We want you to group our husbands and aware them on birth spacing because we are already tired. Decision making is not in our hands and our husbands refuse to let us go to health facilities for family planning.”*

A male in FGD thought, *“Men should be educated on the importance of reproductive health because it is them who allow women to go to health centres and seek advice. Therefore, it is not enough to educate women only.”*

A community midwife in one FGD said, *“Many facilities lack space for counselling privacy. It is important to have a room for counselling to encourage utilization of RH services.”*

- Regular supply of wide range of family planning methods.
- RTIs awareness and treatment,
- RH services that include treatment of anaemia and non-communicable diseases.
- Access to affordable RH services.
- GBV supportive services including social and legal protection for GBV victims. A community volunteer in one FGD stated, *“Pregnancy-related problems increased significantly with this war. RTIs, abortions, IPV, and severe anaemia also increased dramatically.”* Also, A male in one FGD explained, *“Unemployment is directly associated with adverse health behaviours such as qat and drug use, increased of poverty, and stress, all of which result in dramatically increased of intimate partners violence.”*

Summary Section 3

- 58% of girls and 64% of women who reported severe dysmenorrhea were using medications to manage the pain.
- Girls were more likely (71.6%) compared to women (61.2%) to seek consultation for menstruation related symptoms.
- Current pregnant girls were more likely (88.9%) compared to current pregnant women (75%) to use ANC follow up.
- 19.4% of all respondents did not seek care for pregnancy-related complication. Girls were more reluctant (25%) than women (18.5%).
- 80.2% of all respondents had ANC follow-up in the completed pregnancy during the last five years.
- 18.1% of all respondents did not seek care for pregnancy-related complications during the last completed pregnancy.
- 57.3% of all respondents had their childbirth at home and only 41.1% of those home-childbirths were with skilled birth attendants (doctors and community midwives).
- Public health facilities for childbirth were used by only 27.2% of all respondents
- 88.8% of all respondents pursued care for treating childbirth-related complications they had through utilizing health facilities.
- 57.2% of girls and 27.8% of women had received skilled postnatal care (from doctors and community midwives).
- 20.4% of all respondents completed the full maternal continuum of care, while 14.2% of respondents were not practicing any maternal health during that pregnancy.
- 34.2% of all respondents did not seek abortion care.
- 65% of the respondents stressed the importance of managing abortion-related complications in health facilities, and they were more likely to seek care (47.5%) from private health facilities.
- Women were more likely to seek care to manage their RTIs-related symptoms compared to girls. 37.5% of girls and 54.2% of women who had reported any RTIs symptom had received care at health facilities compared to 54.2% of women.
- 23.5% of girls versus 54.3% of women were using FP at the time of the survey. Overall, for the total sample, the current FP use was 52.5%.
- 75% of girls and 55.2% women obtained their contraceptive methods from public health facilities.
- 87.2% of all respondents reported using family planning to delay pregnancy and 12.8% wanted to limit their family size and refrain from having more children.
- The main reasons for selecting a specific family planning method among all respondents included: "choice of the provider" (32.9%), "suitable for my body" (31.5%), "easy to use" (20.1%), and "gives me longer protection or longer use" (15.4%).
- Pills and injectables were the only contraceptive methods used among girls.
- The contraceptive methods used among women for modern contraceptives were 93.9%; oral pills (53.8%), injectables (23.4%) and IUD (9%), exclusive breastfeeding (1.4%), Implants (2.8%), and male condoms (2.1%). Permanent contraceptives method (female sterilization) was used only among 1.4% of women. Traditional methods were among 6.2% of women: rhythm method (3.4%), and withdrawal method (2.8%).
- 11.5% of girls and 52% of women have ever used family planning methods.
- Use of private health facilities was more common among respondents in AlMaafer district compared to respondents in AlSheikh Othman and Lawdar districts for all RH issues, except for family planning services, where their use from the public health facilities was more common.

Section 3: RH seeking behaviours

This section the health seeking behaviours of adolescent girls and women for RH care or treatment for any complication or health problem during menstruation, pregnancy, childbirth, postnatal, abortion, RTIs, and family planning.

3.1 Menstrual Health & Hygiene

3.1.1. Health seeking behaviour for severe dysmenorrhea

58% of girls and 64% of women who reported severe dysmenorrhea were using medications to manage the pain. 2.7% of the girls and 4.5% of the women reported using Herbal medicine. Overall, nearly, two-thirds of the respondents were taking medicines to manage the pain. Comparing across the three districts, respondents from AlMaafer district were more likely using medicine (67.5%) and herbs (6.8%) to treat severe dysmenorrhea (See Table 40).

Table 40: *Dysmenorrhea care-seeking behaviour for treatment among respondents by all districts and by each district (n=252)*

Respondents	Medication use for dysmenorrhea	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Nothing done	39.2% (29)	41.4% (12)	53.3% (8)	30.0% (9)
	Used Drug from pharmacy	58.1% (43)	58.6% (17)	46.7% (7)	63.3% (19)
	Herbal use	2.7% (2)	0.0% (0)	0.0% (0)	6.7% (2)
	Total	74	29	15	30
Women	Nothing done	31.5% (56)	30.4% (14)	46.6% (21)	24.4% (21)
	Drug from pharmacy	64.0% (114)	67.4% (31)	51.1% (23)	68.6% (60)
	Herbal use	4.5% (8)	2.2% (1)	2.2% (1)	7.0% (6)
	Total	178	46	45	87
Overall	Nothing done	33.7% (85)	34.7% (26)	48.3% (29)	25.6% (30)
	Used Drug from pharmacy	62.3% (157)	64.0% (48)	50.0% (30)	67.5% (79)
	Herbal use	4.0% (10)	1.3% (1)	1.7% (1)	6.8% (8)
	Total (<i>P</i> =0.013)	252	75	60	117

Girls were more likely (71.6%) compared to women (61.2%) to seek consultation for menstruation related symptoms. Among girls, the majority (two-thirds) consulted with their relatives, followed by their friends (10.8%) and health workers (5.7%). The girls in AlMaafer district were more likely to consult with either their relatives (63%) or friends (6.7%). The girls in Lawdar district were most likely to consult with their friends (20%). Among women, 42.1% preferred consulting with their relatives and 11.2% preferred consulting with their friends. 11.8% of women consulted health workers in public health facilities, while 6.7% also consulted health workers in private health facilities. Across the three districts, women in AlSheikh Othman were less likely (6.5%) to consult friends. Women in Lawdar district did not have any consultation with health workers in private health facilities, while women in AlMaafer district had the preference of consulting health workers in private health facilities (10.9%). Overall, 35.7% of all respondents did not consult anybody on menstruation related-symptoms. Consultation with relatives was the most common (48.4%), followed by health workers (14.3%), and then friends (11.1%). A traditional healer was unpopular for consultation in all districts (See Table 41). The interview with an NGO coordinator explained that “few doctors and midwives provide advice and guidance, therefore women listen to relatives and friends.”

Table 41: Persons consulted for having symptoms during menstruation among respondents by all districts and by each district (n=252)

Respondents	Whom consulted	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Nobody	28.4% (21)	20.7% (6)	40.0% (6)	30.0% (9)
	Relatives	63.5% (47)	72.4% (21)	40.0% (6)	63.5% (20)
	Friends	10.8% (8)	10.3% (3)	20.0% (3)	6.7% (2)
	Traditional healer	1.4% (1)	0% (0)	6.7% (1)	0% (0)
	Health worker in public HF	3.8% (2)	4.3% (1)	11.1% (1)	0% (0)
	Health worker in private HF	1.9% (1)	0% (0)	11.1% (1)	0% (0)
	Total	74	29	15	30
Women	None	38.8% (69)	37.0% (17)	44.4% (20)	36.8% (32)
	Relatives	42.1% (75)	43.5% (20)	28.9% (13)	48.3% (42)
	Friends	11.2% (20)	6.5% (3)	13.5% (6)	12.6% (11)
	Traditional healer	0% (0)	0% (0)	0% (0)	0% (0)
	Health worker in public HF	11.8% (21)	13.0% (6)	17.8% (8)	8.0% (7)
	Health worker in private HF	6.7% (12)	6.5% (3)	0% (0)	10.3% (9)
	Total	178	46	45	87
Overall	None	35.7% (90)	30.7% (23)	43.3% (26)	35.0% (41)
	Relatives ($P=0.033$)	48.4% (122)	54.7% (41)	31.7% (19)	53.0% (62)
	Friends	11.1% (28)	8.0% (6)	15.0% (9)	11.1% (13)
	Traditional healer	0.4% (1)	0% (0)	1.7% (1)	0% (0)
	Health worker in public HF	9.1% (23)	9.3% (7)	15.0% (9)	6.0% (7)
	Health worker in private HF	5.2% (13)	4.0% (3)	1.7% (1)	7.7% (9)
	Total	252	46	45	87

3.2 Pregnancy and Childbearing Experience

3.2.1 Current pregnant

3.2.1a Antenatal care and point of services

88.9% of pregnant girls sought antenatal care during pregnancy. The majority followed up with a doctor (66.7%). 75% of the women sought antenatal care during pregnancy, and 51.8% followed up with a doctor. Comparing across the districts, women in Lawdar were the least (31.3%) to seek ANC compared to women from AlSheikh Othman (14.3%) and women from AlMaafer (26.9%). Overall, three-quarter of respondents sought ANC follow-up, either through midwives (23.1%) or doctors (51.8%) as given in Table 42.

50% of the girls, who sought ANC, used private health facilities across all districts. Among those who sought ANC, over half of the women (52.0) used private health facilities and 42% of women used public health facilities. Across the three districts, among women, who sought care, women in AlSheikh Othman preferred having (57.8%) ANC in public health facilities, while women in Lawdar and AlMaafer preferred obtaining ANC in the private health facilities (61.5% and 52.2% respectively). Overall, most of all respondents (52%) sought ANC using private health facilities. Seeking ANC from community midwife at home for ANC was only reported among few respondents (6%), mainly among respondents in AlMaafer district.

One of the RH provider in a health centre voiced “*pregnants go to private health facilities where doctors available all time, getting respectful treatment, excellence services than government health facilities, and less waiting-time.*”

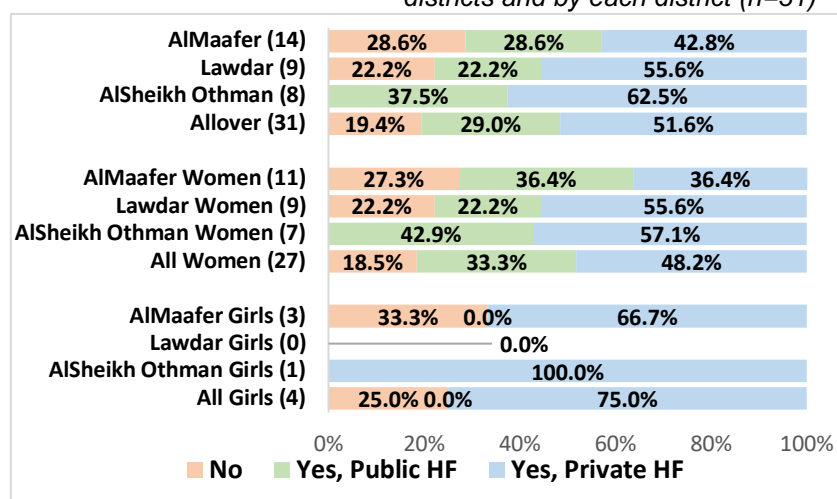
Table 42: Antenatal care practice, provider and place of provision among current pregnant respondents by all districts and by each district (n=65)

Respondents	ANC provider	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	None	11.1% (1)	0.0% (0)	0.0% (0)	20.0% (1)
	Midwife	22.2% (2)	0.0% (0)	0.0% (0)	40.0% (2)
	Doctor	66.7% (6)	100.0% (2)	100.0% (2)	40.0% (2)
	Total	9	2	2	5
Women	None	25.0% (14)	14.3% (2)	31.3% (5)	26.9% (7)
	Midwife	23.2% (13)	14.3% (2)	25.0% (4)	26.9% (7)
	Doctor	51.8% (29)	71.4% (10)	43.8% (7)	46.2% (12)
	Total	56	14	16	26
Overall	None	23.1% (15)	12.5% (2)	27.8% (5)	25.8% (8)
	Midwife	23.1% (15)	12.5% (2)	22.2% (4)	29.0% (9)
	Doctor	53.8% (35)	75.0% (12)	50.0% (9)	45.2% (14)
	Total	65	16	18	31
Respondents	Place of provision	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Public HF	37.5% (3)	50.0% (1)	50.0% (1)	25.0% (1)
	Private HF	50.0% (4)	50.0% (1)	50.0% (1)	50.0% (2)
	CMW at home	12.5% (1)	0.0% (0)	0.0% (0)	25.0% (1)
	Total	8	2	2	4
Women	Public HF	42.9% (18)	58.3% (7)	36.4% (4)	36.8% (7)
	Private HF	52.4% (22)	41.7% (5)	63.6% (7)	52.6% (10)
	CMW at home	4.7% (2)	0% (0)	0% (0)	10.6% (2)
	Total	42	12	11	19
Overall	Public HF	42.0% (21)	57.8% (8)	38.5% (5)	34.8% (8)
	Private HF	52.0% (26)	42.2% (6)	61.5% (8)	52.2% (12)
	CMW at home	6.0% (3)	0% (0)	0% (0)	13.0% (3)
	Total	50	14	13	23

3.2.1b Care seeking behaviour for current pregnancy-related complications

Figure 20 summarizes the health care seeking behaviours among girls (4) and women (27) who reported pregnancy-related complications. Among the girls, only one (from AlMaafer) of the 4 girls did not seek medical help for the complications. The remaining sought care from health care providers in private health facilities.

Figure 15: Seeking care behaviour among currently pregnant respondents with complications by all districts and by each district (n=31)



81.5% of women reported pregnancy-related complications, among whom 18.5% did not seek help for these complications. Among women who sought help, 48.2% used the private health facilities and 33.3% used the public health facilities. For the total sample, 80.6% of respondents with pregnancy-related complications sought care, more predominantly, from private health facilities (51.6%) compared to 29.0% from public health facilities.

3.2.2 Maternal Health Care for women with completed pregnancies, during the last five years since the war started in March 2015

3.2.2.1 Antenatal care practices

Among the 14 girls who were pregnant during the five years prior to this assessment, 85.8% received antenatal care by skilled health professionals (midwives or doctors) and more than half of these girls (58.4%) received ANC in private health facilities as summarized in Table 43. 79.9% of the women who noted to have been pregnant received ANC by skilled providers, with higher rates of ANC (91.6%) among women in AISheikh Othman compared to women in Lawdar (73.3%) and AIMaafer (77.6%). These women were more likely to use public health facilities for ANC, in contrast with 53.6% of women in AIMaafer district who received ANC in private health facilities. 12.6% of women used community midwives for ANC at home. Overall, for the total sample, nearly 80% of respondents received ANC during the course of their pregnancy from skilled providers, among which 52.5% used the public health facilities. Community midwives for ANC at home were used by 3.5% of respondents (See Table 43).

Table 43: Antenatal care practices among pregnant respondents by all districts and by each district (n=323)

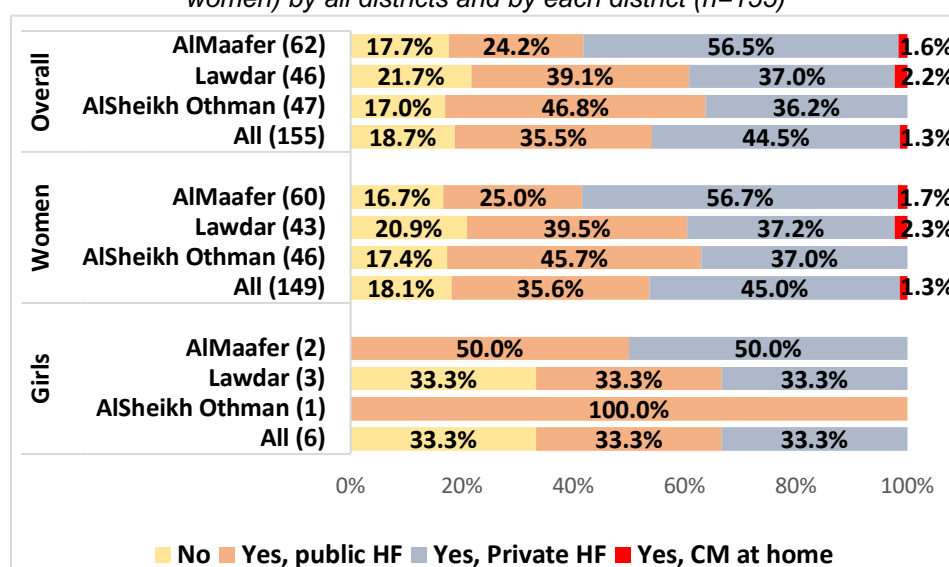
Respondents	Antenatal care provision	All districts	AISheikh Othman	Lawdar	AIMaafer
Girls	None	14.3% (2)	0.0% (0)	0.0% (0)	33.3% (2)
	Midwife	35.7% (5)	0.0% (0)	33.3% (2)	50.0% (3)
	Doctor	50.0% (7)	100.0% (2)	66.7% (4)	35.7% (1)
	Total	14	2	6	6
Women	None	20.1% (62)	8.4% (7)	26.7% (27)	22.4% (28)
	Midwife	30.4% (94)	14.5% (12)	33.7% (34)	38.4% (48)
	Doctor	49.5% (153)	77.1% (64)	39.6% (40)	39.2% (49)
	Total	309	83	101	125
Overall	None	19.8% (64)	8.2% (7)	25.2% (27)	22.9% (30)
	Midwife	29.1% (99)	14.1% (12)	33.6% (36)	38.9% (51)
	Doctor	51.1% (160)	77.7% (66)	41.2% (44)	38.2% (50)
	Total	323	85	107	131
Respondents	Institution of ANC provision				
Girls	Public HF	41.6% (5)	0.0% (0)	33.3% (2)	75.0% (3)
	Private HF	58.4% (7)	100.0% (2)	67.7% (4)	25.0% (1)
	Total	12	2	6	4
Women	Public HF	53.0% (131)	60.5% (46)	60.8% (45)	41.2% (40)
	Private HF	34.4% (107)	38.2% (29)	36.5% (27)	52.6% (51)
	Community midwife at home	12.6% (9)	1.3% (1)	3.7% (2)	6.2% (6)
	Total	247	76	74	97
Overall	Public HF	52.5% (136)	59.0% (46)	58.8% (47)	42.6% (43)
	Private HF	44.0% (114)	39.7% (31)	38.7% (31)	51.5% (52)
	Community midwife at home	3.5% (9)	1.3% (1)	2.5% (2)	5.9% (6)
	Total	259	78	80	101

3.2.2.2 Care seeking behaviour for pregnancy-related complications

Among the six girls who reported pregnancy-related complications, 33.3% of them did not seek medical help for the pregnancy-related complications (See Figure 21). Among those who sought care, 33.3% sought care at public health facilities and 33.3% at private health facilities

(see Figure 19). Among women who reported pregnancy-related complications, 18.1% did not seek care for their complications. Among those who sought care, 45% of these women sought care from the private health facilities, and 35.6% from public health facilities. Across the three districts, the private health facility use was highest among women in AlMaafer (56.7%). A male in FGD mentioned, “*Shortage of qualified health workers particularly females, combined with lack of female doctors and female obstetrician & gynaecologist in public health facilities led women to turn to private health facilities, where female staff are available.*”

Figure 21: Care seeking behaviour among pregnant respondents with complications (6 girls and 149 women) by all districts and by each district (n=155)



Overall, for the total sample, 81.3% of the respondents who experienced complications sought care and the majority of them (44.5%) used the private health facilities. Very few (1.3%) sought care by a community midwife at home. The use of public health facilities for pregnancy-related complications was most common (46.8%) among AlSheikh Othman respondents.

3.2.2.3 Place of childbirth

57.1% of girls, as well as women, had their childbirth at home with the highest percentage (over 82%) among both groups was observed in AlMaafer district. Public health facilities for childbirth were used by 28.6% of the girls and 27.2% of the women. Overall, for the total sample, 57.3% of deliveries took place at home as shown in Table 44.

Table 44: Place of delivery among respondents by all districts and by each district (n=323)

Respondents	Place of delivery	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	At home	57.1% (8)	50.0% (1)	33.3% (2)	83.3% (5)
	Public HF	28.6% (4)	0.0% (0)	50.0% (3)	16.7% (1)
	Private HF	14.3% (2)	50.0% (1)	16.7% (1)	0.0% (0)
	Total	14	2	6	6
Women	At home	57.3% (177)	38.6% (32)	41.6% (42)	82.4% (103)
	Public HF	27.2% (84)	44.5% (37)	33.7% (43)	3.2% (4)
	Private HF	15.5% (48)	16.9% (14)	15.8% (16)	14.4% (18)
	Total	309	83	101	125
Overall	At home	57.3% (185)	38.8% (33)	41.1% (44)	82.4% (108)
	Public HF	27.2% (88)	43.5% (37)	43.0% (46)	3.8% (5)
	Private HF	15.5% (50)	17.6% (15)	15.9% (16)	13.7% (18)
	Total	323	85	107	131

Participants in a community volunteers FGD commented that “many women preferred to have childbirth at home because they think to go to a health facility unless they experienced a serious problem and even they seek the care so late due to fears of operations in hospitals.” one participant in a male FGD added “women delivered their babies at home due to unavailability of childbirth services in most of health centres, only very few health centres provide this service though with medications and equipment are often in short supply, only during working hours and as it is known, labor often comes during the night.”

3.2.2.4 Delivery assistance for home deliveries

Table 45 shows that 50% of the eight girls who had their childbirth at home were assisted by a community midwife (skilled birth attendant). Among women, the use of a community midwife for their childbirth at home was 38.4%. The remaining women delivered with the help of either TBAs (45.2%) or by family member/neighbour (14.1%). Across the three districts, half of women in AISheikh Othman and AlMaafer used TBAs during childbirth, while one-third of women in Lawdar preferred family member/neighbour during their childbirth. Overall, 41.1% of all respondents used skilled birth attendants during their childbirth at home (38.9% were assisted by a community midwife and 2.2% were assisted by a doctor).

Table 45: Childbirth assistant among respondents who had home deliveries by all districts and by each district (n=185)

Respondents	Delivery assistant	All districts	AISheikh Othman	Lawdar	AlMaafer
Girls	TBA	50.0% (4)	0.0% (0)	50.0% (1)	60.0% (3)
	Community midwife	50.0% (4)	100.0% (1)	50.0% (1)	40.0% (2)
	Total	8	1	2	5
Women	TBA	45.2% (80)	50.0% (16)	26.2% (11)	51.5% (53)
	Community midwife	38.4% (68)	37.5% (12)	38.1% (16)	38.8% (40)
	Doctor	2.3% (4)	6.3% (2)	2.4% (1)	1.0% (1)
	Family member / neighbour	14.1% (25)	6.3% (2)	33.3% (14)	8.7% (9)
	Total	177	32	42	103
Allover	TBA	45.4% (84)	48.5% (16)	27.3% (12)	51.9% (56)
	Community midwife	38.9% (72)	39.4% (13)	38.6% (17)	38.9% (42)
	Doctor	2.2% (4)	6.1% (2)	2.3% (1)	0.9% (1)
	Family member / neighbour	13.5% (25)	6.1% (2)	31.8% (14)	8.3% (9)
	Total	185	33	44	108

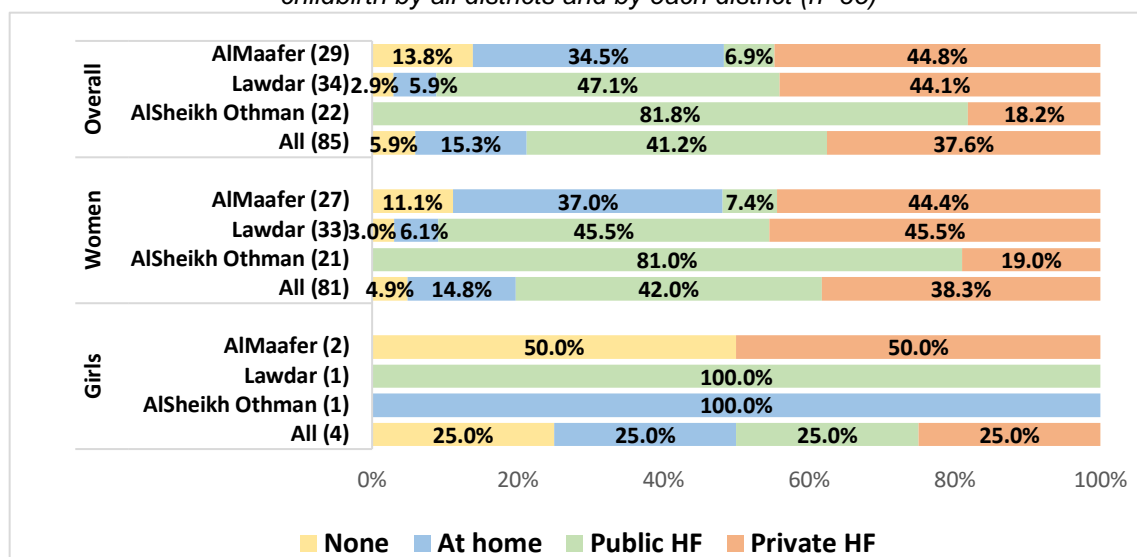
The FGDs with community midwives pointed out the challenges they faced “though we are conducting more home births than before though our movement restricted due to security reason, but still confronting the competition with TBAs due to lack of awareness in the community on the risk involved with TBAs practices, and they perceive us inexperienced as we are younger than TBAs.”

3.2.2.5 Health Seeking behaviours for complications during childbirth

As shown in Figure 22, 25% (1 out of 4 girls) who experienced childbirth-related complications did not seek medical care for her complications. The remaining 75% of girls sought health care at different places: 25% at home, 25% at public heal facility, and 25% at private health facility. Very few (4.8%) women did not seek care for their complications during childbirth. 42% of women who sought care for childbirth-related complications got the care from public health facilities with highest proportion (81%) among AISheikh Othman women. Whereas the utilization of private health was among 38.2% of women and was mostly among Lawdar and AlMaafer women (45.5% and 44.4% respectively). Receiving care at home for complications was among 14.8% of women and more likely among AlMaafer women (37%). Overall, 94.1%

of all respondents had pursued care to treat the complications they had through utilizing health facilities (88.8%) and homecare (5.9%).

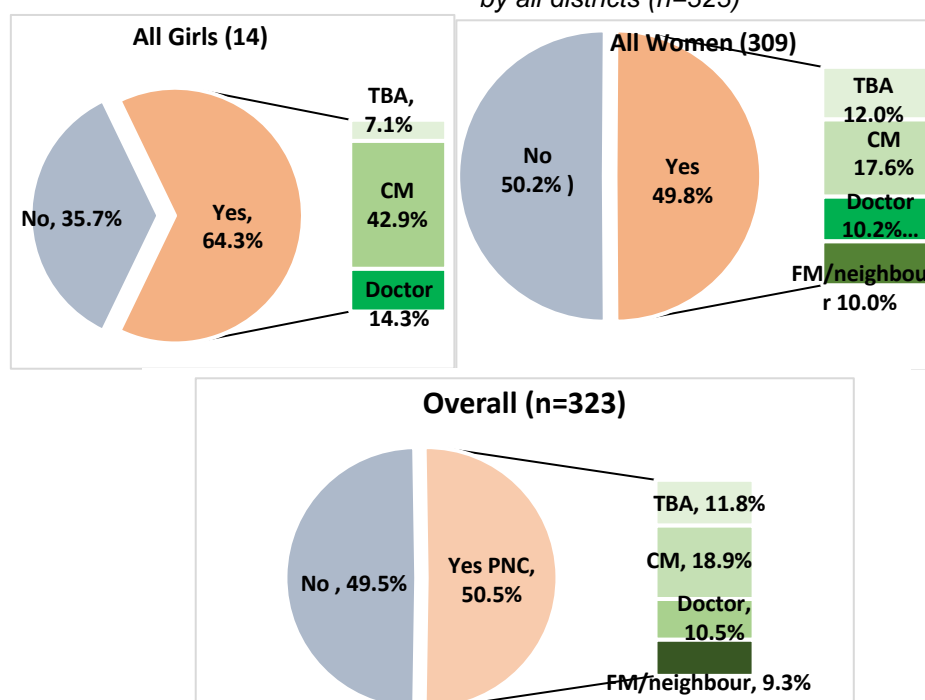
Figure 16: Seeking care behaviour among respondents who experienced complications during childbirth by all districts and by each district (n=85)



3.2.2.6 Postnatal care

As described in Figure 23, 64.3% of the 14 pregnant girls received postnatal care. The majority (57.2%) received PNC from a health professional (doctor or community midwife). Only 7.1% (1 girl from AlMaafer district) received PNC from TBA as shown in Table 46.

Figure 173: Postnatal care practice among all Girls and all women and Overall, by types of providers by all districts (n=323)



Nearly 50% of the women who reported being pregnant in the last five years received PNC, among whom 27.8% of women sought PNC from health professionals and 22.2% from either

a TBA or a family member/neighbour. Overall, 51% of all respondents received PNC and almost 30% of them sought care from health professionals.

Table 46: *Postnatal care status and types of providers among respondents who had deliveries since March 2015, by each selected district (n=323)*

Respondents	Postnatal care status	AlSheikh Othman	Lawdar	AlMaafer
Girls	None	50.0% (1)	33.3% (2)	33.3% (2)
	TBA	0.0% (0)	0.0% (0)	16.7% (1)
	Community midwife	50.0% (1)	50.0% (3)	33.3% (2)
	Doctor	0.0% (0)	16.7% (1)	16.7% (1)
	Total	2	6	6
Women	None	62.7% (52)	54.5% (55)	38.4% (48)
	TBA	4.8% (4)	1.0% (1)	25.6% (32)
	Community midwife	10.8% (9)	21.8% (22)	19.2% (24)
	Doctor	20.5% (17)	9.9% (10)	4.0% (5)
	Family member/neighbour	1.2% (1)	12.9% (13)	12.8% (16)
	Total	83	101	125
Allover	None	62.4% (53)	53.3% (57)	38.2% (50)
	TBA	4.7% (4)	0.9% (1)	25.2% (33)
	Community midwife	11.8% (10)	23.4% (25)	19.8% (26)
	Doctor	20.0% (17)	10.3% (11)	4.6% (6)
	Family member/neighbour	1.2% (1)	12.1% (13)	12.2% (16)
	Total	85	107	131

Across the three districts, the use of TBA for PNC was highest (25.6%) among women in AlMaafer compared to 1% of women in Lawdar and 4.8% of women in AlSheikh. Overall, for the total sample, 50.5% of all respondents received postnatal care as shown in Figure 20, among whom, 29.4% received PNC by skilled health professionals (community midwife and doctor), while 21.1% received PNC from a TBA and/or a family member/neighbour. Unskilled PNC (by TBA and family member/neighbour) was higher (37.4%) among AlMaafer respondents, while skilled PNC (by doctor and community midwife) was higher (33.7%) among Lawdar respondents as shown in Table 46.

3.2.2.7 The continuum of maternal health care

As described in Table 47, for both girls and women, use of the recommended number of ANC and PNC visits very low, with high rates of dropouts across the different trimesters. Drop out was mainly attributed (by more than 43%) to the limited number of available skilled ANC/PNC services. 7.1% of girls (from AlMaafer) and 14.6% of women did not use any ANC or PNC during the course of their pregnancies. Use was lowest (4.8%) among women in AlSheikh Othman district compared to those in Lawdar (19.8%) and AlMaafer (16.8%) districts.

Table 47: *Scoring attainment among respondents by stages of maternal care by all districts and by each district (n=323)*

Respondents	Score of skilled maternal care	All districts (n=323)	AlSheikh Othman (n=85)	Lawdar (n=107)	AlMaafer (n=131)
Girls	"1" for ANC	85.7% (12)	100.0% (2)	100.0% (6)	66.7% (4)
	"2" for ANC+SBA	64.3% (9)	100.0% (2)	83.3% (5)	33.3% (2)
	"3" for ANC+SBA+PNC	21.4% (3)	50.0% (1)	16.7% (1)	16.6% (1)
	Score "0"	7.1% (1)	0.0% (0)	0.0% (0)	16.6% (1)
	Total	14	2	6	6
Women	"1" for ANC	79.9% (247)	91.6% (76)	73.3% (74)	77.6% (97)
	"2" for ANC+SBA	63.8% (197)	77.1% (64)	73.3% (74)	47.2% (59)
	"3" for ANC+SBA+PNC	20.4% (63)	22.9% (19)	22.8% (23)	16.8% (21)
	Score "0"	14.6% (45)	4.8% (4)	19.8% (20)	16.8% (21)
	Total	309	83	101	125

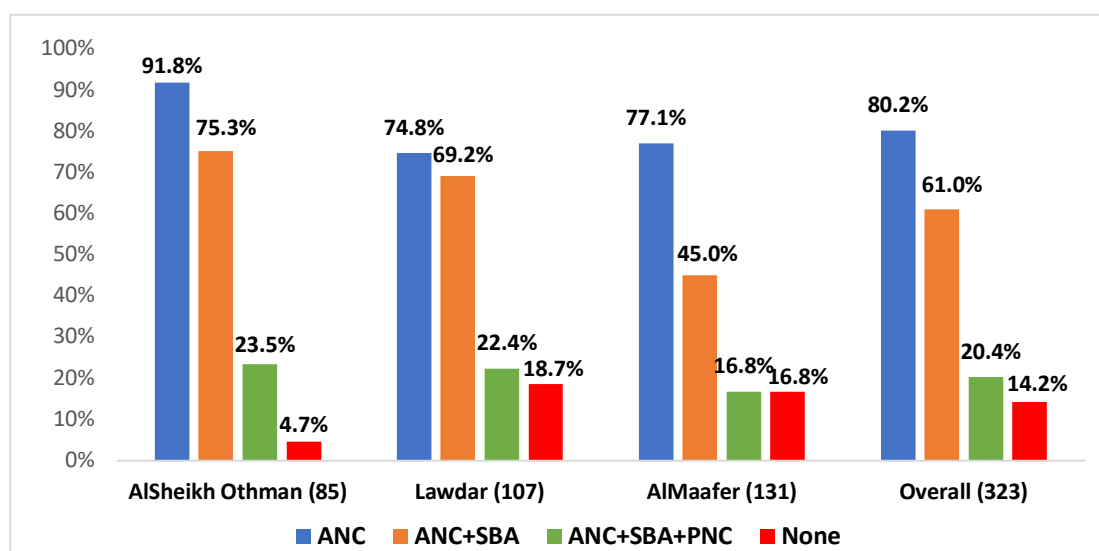


Figure 18: Overall Maternal Continuum of Care by each district and all districts (n=323)

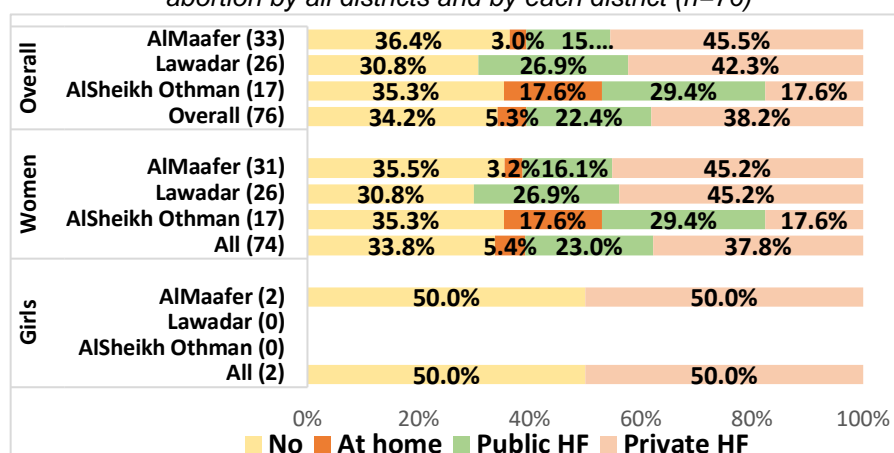
As described in Figure 24, only 20.4% of all respondents completed the full maternal continuum of care (i.e., at least 1 ANC visit, childbirth, and 2 PNC visits by skilled health providers) and 14.2% of respondents did not receive any maternal services along the pathway from skilled antenatal care during the pregnancy to skilled birth attendant during childbirth and then to skilled postnatal care. Comparing the three districts, AlMaafer respondents had the least figure of pregnant (16.8%) who were able to attain the maternal continuum of care compared to respondents from AlSheikh Othman (23.5%) and Lawdar (22.4%). Also, it revealed that 18.7% of the respondents in Lawdar were not practicing any maternal health care during their completed pregnancy compared to 4.7% of respondents from AlSheikh Othman and 16.8% among AlMaafer respondents.

3.3 Abortion Care

3.3.1 Health seeking behaviour for abortion care

Figure 25 describes the health seeking behaviour among girls and women for abortion care. One (50%) of the two girls who reported having an abortion in the past five years since the start of the war used a private health facility to get care compared to two-thirds (66.8%) of women who sought abortion care.

Figure 2519: Health care seeking behaviour and place of provision among respondents who had abortion by all districts and by each district (n=76)



Among these women, more than half of them (57.1%) used private health facilities and 8.2% had the abortion at home. Comparing across the three districts, women in AlSheikh Othman reported higher use of abortion care at home (17.6%) and at public health facilities (29.4%) compared to AlMaafer women (3.2% and 16.1% respectively). 45.2% of the women in Lawdar used private health facilities for abortion care. Overall, 38.2% of respondents obtained that care from private health facilities.

3.3.2 Health seeking behaviour for abortion-related complications

The two identified girls who had an abortion (in AlMaafer district) experienced bleeding as a result of their abortion and only one received treatment at a private health facility to manage her complications. The majority (over 70%) of women who reported abortion-related complications, across the three districts, sought care for their abortion-related complications, among whom, 49.1% of women sought care at private health facilities as shown (Table 48). Across the three districts, more than 50% of the women in AlSheikh Othman sought treatment for their abortion complications at public health facilities compared to 22.7% of women in Lawdar and 7.4% of women in AlMaafer. Abortion-related home care was practiced only among very few women (7.4%), mainly in AlMaafer. Overall, for the total sample, 65% of the respondents stressed the importance of managing abortion-related complications in health facilities, and they were more likely to seek care (47.5%) from private health facilities. Comparing across the three districts, more than 50% of the respondents in AlSheikh Othman sought care for abortion-related complications at public health facilities compared to 22.7% of women in Lawdar and 6.9% of women in AlMaafer. The interview with a RH provider pointed out “All midwives in our district were not trained on manual vacuum aspiration and we don’t have female doctors, therefore women approached the private health facilities for abortion treatment due to availability of female doctors there.”

Table 48: Health seeking behaviour among respondents who had abortion complications by all districts and each selected district (n=59)

Respondents	Seeking behaviour for abortion complications	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	No	50.0% (1)	0.0% (0)	0.0% (0)	50.0% (1)
	Yes, Private HF	50.0% (1)	0.0% (0)	0.0% (0)	50.0% (1)
	Total	2	0	0	2
Women	No	28.1% (16)	25.0% (2)	27.3% (6)	29.6% (8)
	Yes, At home	3.5% (2)	0% (0)	0% (0)	7.4% (2)
	Yes, Public HF	19.3% (11)	50.0% (4)	22.7% (5)	7.4% (2)
	Yes, Private HF	49.1% (28)	25.0% (2)	50.0% (11)	55.6% (15)
	Total	57	8	22	27
Overall	No	30.5% (18)	25.0% (2)	27.3% (6)	31.0% (9)
	Yes, At home	3.3% (2)	0% (0)	0% (0)	6.9% (2)
	Yes, Public HF	18.6% (11)	50.0% (4)	22.7% (5)	6.9% (2)
	Yes, Private HF	47.5% (28)	25.0% (2)	50.0% (11)	55.2% (16)
	Total	59	8	22	29

3.4 Reproductive Tract Infections (RTIs)

3.4.1 Health seeking behaviour for RTIs

Table 49 shows that 25% of girls who had reported any RTIs-related symptom received care at private health facilities compared to 8.3% who managed their symptoms at home. Comparing across the three districts, 30.7% of girls in AlSheikh Othman used public health facilities to manage their RTIs related symptoms compared to the girls in Lawdar and AlMaafer who were significantly less likely to receive care, in general, and when they sought care, it

was at a private health facility. A KI interview with health director at district level explained *“Women go to private health facilities due lack of the services they want in public health facilities and the private health facilities are open 24 hours.”*

Table 49: Health seeking behaviour for RTIs among respondents who had any RTIs symptom by all districts and each selected district (n=280)

Respondents	Seeking behaviour for treatment	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	No	54.2% (26)	30.8% (4)	69.2% (9)	59.1 (13)
	Yes, at home	8.3% (4)	15.4% (2)	0.0% (0)	9.1% (2)
	Yes, at Public HF	12.5% (6)	30.7% (4)	7.7% (1)	4.5% (1)
	Yes, at Private HF	25.0% (12)	23.1% (3)	23.1% (3)	27.3% (6)
	Total	48	13	13	22
Women	No	36.2% (84)	41.7% (30)	41.4% (24)	29.4% (30)
	Yes, at home	6.0% (14)	4.2% (3)	0% (0)	10.8% (11)
	Yes, at Public HF	24.1% (56)	30.6% (22)	29.3% (17)	16.7% (17)
	Yes, at Private HF	33.6% (78)	23.6% (17)	29.3% (17)	43.1% (44)
	Total (P=0.001)	232	72	58	102
Overall	No	39.3% (110)	40.0% (34)	46.5% (33)	34.7% (43)
	Yes, at home	6.4% (18)	5.9% (5)	0% (0)	10.5% (13)
	Yes, at Public HF	22.1% (62)	30.6% (26)	25.4% (18)	14.5% (18)
	Yes, at Private HF	32.1% (90)	23.5% (20)	28.2% (20)	40.3% (50)
	Total (P=0.000)	280	85	71	124

Women were more likely to seek care to manage their RTIs-related symptoms compared to girls. Nearly two-thirds of women who received care in this assessment sought care and 33.6% of them sought care at private health facilities. Comparing the three districts, 30.6% of the women in AlSheikh Othman compared to 25.4% of the women in Lawdar and 14.5% of the women in AlMaafer sought care at public health facilities. Treatment at home was more likely (10.5%) among women in AlMaafer. An ADP woman in one FGD said *“we are very poor and occupied with fetching water and home care, we can go only to public health facilities and eventually we end up taking prescriptions to buy from private pharmacies that we cannot afford; therefore, we treat ourselves with warm water and salt.”* Overall, for the total sample, 60.7% of respondents sought care at health facilities in order to manage their RTIs' related symptoms.

3.5 Family Planning

3.5.1 Current family planning use among currently married and non-pregnant respondents

Table 50 describes the distribution of current family planning use among girls and women. Overall, 23.5% of girls reported using FP at the time of the survey. Comparing across the three districts, FP use was higher among girls in Lawdar (37.5%) compared to girls in AlMaafer (16.7%) and the girls in AlSheikh Othman who were not using any FP method. 54.3% of women were current users of FP, with current use being highest among women in AlSheikh Othman (69%) followed by women in Lawdar (56.2%) and AlMaafer (43.0%). Overall, for the total sample, the current FP use was 52.5% at the time of the survey.

The interviews with KIs and FGDs in all districts almost mentioned the shortage of contraceptives in public health facilities compiled with husband's refusal and misconceptions. A male participant in a FGD mentioned *“There is a misconception among members of the community on family planning methods that they lead to infertility and health problems such as bleeding.”*

Table 50: Current use of contraceptives among respondents who were currently married and non-pregnant by all districts and each selected district (n=284)

Respondents	Current use	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Yes	23.5% (4)	0.0% (0)	37.5% (3)	16.7% (1)
	No	76.5% (13)	100.0% (3)	62.5% (5)	83.3% (5)
	Total	17	3	8	6
Women	Yes	54.3% (145)	69.0% (49)	56.2% (50)	43.0% (46)
	No	45.7% (122)	31.0% (22)	43.8% (39)	57.0% (61)
	Total	267	71	89	107
Overall	Yes	52.5% (149)	66.2% (49)	54.6% (53)	41.6% (47)
	No	47.5% (135)	33.8% (25)	45.4% (44)	58.4% (66)
	Total	284	74	97	113

Table 51 described the various types of family planning methods used as well as the sources for obtaining modern contraceptive methods. The only family planning method used by all girls was the pills. The majority of girls (75%) obtained their pills from public health facilities and the remaining one girl, from a pharmacy. The most three common contraceptive methods used among women in all districts were oral pills (53.8%), injectables (23.4%), and IUD (9%). 2.8% of women used implants, except for women in AlMaafer. Male condoms were used by 2.1%. Permanent contraceptives method (i.e, female sterilization) were only used among 1.4% and by women in AlMaafer. With regards to traditional methods, 3.4% of women practised rhythm and 2.8% practised withdrawal. Across the three districts, women in AlMaafer did not use any traditional method, while women in Lawdar (12%) were more likely to use these methods. Exclusive breastfeeding was used only among few (4.1%) of the women in AlSheikh Othman. Overall, of all respondents, the pills were the most common contraceptive method used across the districts.

The majority of girls (75%) and women (55.2%) obtained their contraceptive methods from public health facilities, followed by pharmacies among 23.4% of women. 11.7% of women also had their contraceptive methods from private health facilities, particularly among women in AlMaafer (17%) and in AlSheikh Othman (14.3%). Few women (2.8%) obtained their contraceptive methods from community midwives. Overall, for the total sample, public health facilities were the main source for obtaining the contraceptive methods used by 58.9% of respondents, followed by pharmacies (24.8%), private health facilities (12.1%), and community midwives (4.3%).

Table 51: Contraceptive methods use and source of obtaining among respondents who were currently married and non-pregnant by all districts and each selected district (n=149)

Respondents	Contraceptive Method	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Oral pills	100.0% (4)	0% (0)	100.0% (3)	100% (1)
	Total	4	0	3	1
Women	Female sterilization	1.4% (2)	0% (0)	0% (0)	1.4% (2)
	Oral pills	53.8% (78)	61.2% (30)	52.0% (26)	47.8% (22)
	IUD	9.0% (13)	12.2% (6)	4.0% (2)	10.9% (5)
	Implant	2.8% (4)	6.1% (3)	2.0% (1)	0% (0)
	Injectables	23.4% (34)	10.2% (5)	26.0% (13)	34.8% (16)
	Male condom	2.1% (3)	0% (0)	4.0% (2)	2.2% (1)
	Exclusive breastfeeding	1.4% (2)	4.1% (2)	0% (0)	0% (0)
	Rhythm method	3.4% (5)	2.0% (1)	8.0% (4)	0% (0)
	Withdrawal	2.8% (4)	4.1% (2)	4.0% (2)	0% (0)
	Total	145	49	50	46

Respondents	Place obtained of modern contraceptive	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Public HF	75.0% (3)	0% (0)	66.7% (2)	100% (1)
	Pharmacy	25.0% (1)	0% (0)	33.3% (1)	0% (0)
	Total	4	0	3	1
Women	Public HF	55.2% (80)	51.0% (25)	62.0% (31)	52.2% (24)
	Private HF	11.7% (17)	14.3% (7)	4.0% (2)	17.4% (8)
	Pharmacy	23.4% (34)	24.5% (12)	16.0% (8)	30.4% (14)
	Community midwife	2.8% (6)	4.1% (2)	8.0% (4)	0% (0)
	Total	137	46	45	46
Overall	Public HF	58.9% (83)	51.0% (25)	68.8% (33)	53.2% (25)
	Private HF	12.1% (17)	14.3% (7)	4.2% (2)	17.0% (8)
	Pharmacy	24.8% (35)	24.5% (12)	18.8% (9)	29.8% (14)
	Community midwife	4.3% (6)	4.1% (2)	8.3% (4)	0% (0)
	Total	141	46	48	47

3.5.2 Purpose and reasons for choice of family planning methods use among current users

Table 52 describes the main reasons for current family planning use. Delay of pregnancy was the common reason, as indicated by all the girls who were current users and by 88.9% of the women. The remaining (11.1%) women wanted to limit and not have more children. Across the three districts, women in AlMaafer district, more likely, (21.7%) did not want to have more children compared to 9.1% of AlSheikh Othman and 10% of Lawdar women. Overall, 87.2% of all respondents reported using family planning to delay pregnancy.

Table 52: Purpose of current family planning use among respondents who were current married by all districts and each selected district (n=149)

Respondents	Reason of family planning use	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Delay pregnancy	100.0% (4)	0.0% (0)	100.0% (3)	100.0% (1)
	Total	4	0	3	1
Women	Delay pregnancy	88.9% (126)	91.9% (45)	90.0% (45)	78.3% (36)
	Not to have more children	11.1% (19)	9.1% (4)	10.0% (5)	21.7% (10)
	Total	145	49	50	46
Overall	Delay pregnancy	87.2% (130)	91.8% (45)	90.6% (48)	78.7% (37)
	Not to have more children	12.8% (19)	8.2% (4)	9.4% (5)	21.3% (10)
	Total	149	49	53	47

Table 53 describes the reasons reported by the respondents for their specific preference of the selected FP method that they are using. Ease to use was the main reason selecting a specific type of contraceptive method, as indicated by 75% of girls. On the other hand, 33.8% of women reported that their main reason for the selection is that it was indicated by the health provider. Comparing across the three districts, ease of use was the main reason among women in AlSheikh Othman (30.6%) compared to it being indicated by the health care providers, as reported by women in Lawdar (46.0%) and AlMaafer (41.3%). Overall, for the total sample, the main reasons for selecting a specific family planning method included: “choice of the provider” (32.9%), and “suitable for my body” was among nearly one-third of the respondents. Other reasons were “easy to use” (20.1%), and “gives me longer protection or longer use” (15.4%).

Table 53: Reasons for choice of contraceptive method among respondents who were current users by all districts and each selected district (n=149)

Respondents	Reason for method choice	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Easy to use	75.0% (3)	0.0% (0)	66.7% (2)	100.0% (1)
	Suitable for my body	25.0% (1)	0.0% (0)	33.3% (1)	0.0% (0)
	Total	4	0	3	1
Women	Easy to use	18.6% (27)	38.8% (19)	12.0% (6)	4.3% (2)
	Gives me longer time of protection	9.0% (13)	14.3% (7)	4.0% (2)	8.7% (4)
	Choice of the provider	33.8% (49)	14.3% (7)	46.0% (23)	41.3% (19)
	Suitable for my body	31.7% (46)	30.6% (15)	30.0% (15)	34.8% (16)
	Using it for a longer time	6.9% (10)	2.0% (1)	8.0% (4)	10.9% (5)
	Total	145	49	50	46
Overall	Easy to use	20.1% (30)	38.8% (19)	15.1% (8)	6.4% (3)
	Gives me longer time of protection	8.7% (13)	14.3% (7)	3.8% (2)	8.5% (4)
	Choice of the provider	32.9% (49)	14.3% (7)	43.4% (23)	40.4% (19)
	Suitable for my body	31.5% (47)	30.6% (15)	30.2% (16)	34.0% (16)
	Using it for a longer time	6.7% (10)	2.0% (1)	7.5% (4)	10.6% (5)
	Total	149	49	53	47

3.5.3 Ever use of contraceptive methods among ever married respondents

Table 54 describes the ever use of family planning methods. Only 3 out of 26 ever married girls (and particularly from Lawdar district) reported ever using either pills or injectables. More than half the women reported ever using family planning across the three districts.

Table 54: Ever use and type of contraceptives among respondents who were ever married by all districts and each selected district (n=368)

Respondents	Ever used contraceptive methods	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Yes	11.5% (3)	0.0% (0)	30.0% (3)	0.0% (0)
	No	88.5% (23)	100.0% (5)	70.0% (7)	100.0% (11)
	Total	26	5	10	11
Women	Yes	55.0% (188)	50.0% (48)	57.4% (62)	56.5% (78)
	No	45.0% (154)	50.0% (48)	42.6% (46)	43.5% (60)
	Total	342	96	108	138
Overall	Yes	51.9% (191)	47.5% (48)	55.1% (65)	52.3% (78)
	No	48.1% (177)	52.6% (53)	44.9% (53)	47.7% (71)
	Total	368	101	118	149
Respondents	Contraceptive method ever used	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Oral pills	66.7% (2)	0% (0)	66.7% (2)	0.0% (0)
	Injectables	33.3% (1)	0% (0)	33.3% (1)	0.0% (0)
	Total (100%)	3	0	3	0
Women	Female sterilization	0.8% (2)	(0)	(0)	2.1% (2)
	Male sterilization	0.4% (1)	(0)	1.1% (1)	(0)
	Oral pills	52.1% (134)	52.2% (36)	46.8% (44)	57.4% (54)
	IUD	6.6% (17)	7.2% (5)	7.4% (7)	5.3% (5)
	Implant	1.9% (5)	2.9% (2)	1.1% (1)	2.1% (2)
	Injectables	21.4% (55)	20.3% (14)	14.9% (14)	28.7% (27)
	Male condom	5.8% (15)	7.2% (5)	8.5% (8)	2.1% (2)
	Lactational Amenorrhea method	2.7% (7)	2.9% (2)	4.3% (4)	1.1% (1)
	Rhythm method	4.3% (11)	5.8% (4)	7.4% (7)	(0)
	Withdrawal	3.5% (9)	1.4% (1)	8.5% (8)	(0)
	Vaginal suppositories	1.4% (1)	(0)	(0)	1.1% (1)
	Total	188	48	62	78

Overall, the ever-users of contraceptive methods were 51.9% of all respondents. A KI health provider stated, *“There is a spread of an idea based on false religious background, not to use family planning neither to limit nor to delay pregnancies since God is the breadwinner. They are unaware on the importance of caring for the maternal health.”*

Among the ever-users of contraceptive methods, pills were the common method used (52.1%). Injectables was the second choice (21.4%) and IUD was third choice (6.6%) in all districts. Traditional methods, lactational amenorrhea, and male condom methods were used more by women from Lawdar, while female sterilization was only among women in AlMaafer district.

Summary Section 4

- 13 health facilities were assessed. These health facilities included 3 hospitals: one at a governorate level and two at a district level.
- All health facilities were operated by the government and the majority of them were financed by different international organizations, but the running operational costs in all facilities depended mainly on cost-sharing.
- The health facilities in AISheikh Othman had the worst waste disposal systems compared to Lawdar and AIMaafer health facilities.
- The infrastructure of all health facilities including hospitals and health centres was better in AISheikh Othman compared to Lawdar and AIMaafer. Many of the health facilities in Lawdar and AIMaafer districts lacked maternal OPD and were inadequate to accommodate RH services such as counselling, emergency cases, post-abortion care, laboratory, and ultrasonography.
- There was a maldistribution of human resources in all districts. Severe shortage of RH human resources observed in Lawdar and AIMaafer districts. Only five out of 13 health facilities (38.5%), four of them located in AISheikh Othman and one health center in AIMaafer district, fulfilled the MOPHP EmOC standard.
- The health facilities staff in AISheikh Othman had received most of the specified training subjects (18 out of 21), while in Lawdar district only the hospital midwives were trained on two training subjects and none of its health centers staff got any in-service training. The midwives in the hospital and 3 health centers in AIMaafer district had received training on 4 subjects.
- 46.2% of health facilities had received Kit 1, 15.4% were supplied with Kit 2, 53.8% got Kit 4, and another 15.4% obtained Kit 7. Only 1 out of 13 health facilities (7.7%) reported having kit 8 and 7.7% were provided with Kit 9. The kits received were in small quantity. None of health facilities in AISheikh Othman district received any type of kit.
- The two reasons behind inadequate supplies of kits were: the long process of the supply system, which led to stock out of RH commodities that led to out-of-pocket purchase from private pharmacies, the other reason was lack of knowledge on RH kits.
- There were severe shortages of RH commodities included medicines and needed medical equipment.
- Only 1 of the 3 hospitals had the ability to provide all required RH services. None of the 10 health centers could afford all essential RH services.
- 7 out 13 health facilities (53.5%) were providing family planning services with the availability of four contraceptives: pills, injectables, IUDs, implants, and male condoms.
- There was lack of a systematic referral mechanism and even records of referred cases in all health facilities.
- There was lack of ambulance services to transfer emergency cases from a health facility to a higher qualified health facility in all assessed health facilities.
- 51.1% of all respondents (8.9% of adolescent girls and 52.3% of women) ever used RH services from any health worker.
- The majority of respondents (76.5% of adolescent girls and 68.6% of women), who ever used RH services from any health worker, used public health facilities.
- Physical accessibility was the main reason of choosing the health facility to receive RH services.
- 30 minutes was the mean waiting time to get the RH services in the public health facilities.
- All girls and 82.6% of women reported that they felt comfortable on interaction with the providers to explain and clarify their RH health problems.
- 17.4% of women felt uncomfortable on three issues: First, the providers' negative behaviour, the impatience and unfriendly care towards them (11.1%). Second, lack of privacy (0.8%), and the last was on the process of service (5.5%).
- General satisfaction of respondents, who attained RH services in public health facilities: 71.4% of girls were completely satisfied and 28.6% were partially satisfied. Among women, 61.1% were completely satisfied, 34.4% were partially satisfied, and 4.5% were unsatisfied with RH services.
- 45% of respondents paid the demanded costs for the RH care received in public health facilities.
- COVID-19 pandemic had interrupted the RH services at all levels of public health system: hospitals, health centers, primary health care units, and community-based. The disruption was more intensive in Aden governorate and AIMaafer district compared to Lawdar district. At a time when the need for RH services is high, covid-19 pandemic had exacerbated the situation by reducing access to public health facilities.

Section 4: Readiness of Public health facilities for RH services (supply)

This section summarizes the supply readiness of public health care facilities (based on 13 health facilities assessments) in providing regular RH services for adolescent girls and women. It also describes the identified challenges in need for improvements. The section describes the readiness of these facilities in terms of: availability of infrastructure and basic amenities; health manpower and their respective RH-related training needs; availability of RH kits and basic equipment; and availability of the different RH services, as well as RH services' problems as identified by health facilities managers.

4.1 Characteristics of health facilities

13 health facilities were assessed in this study. The main selection criteria for these facilities was based on whether or not they provide the following EmOC services: one CEmOC and 3-4 BEmOC health facilities in each district. The director of the health facility was the main source of information. This was coupled with interviewers' observations and data collection from records on utilization of available services. These health facilities included 3 hospitals: one at a governorate level and 2 at a district level, in addition to 10 health centres as given in Table 55.

Table 55: Distribution of health facilities by type and by district

Type of HF	AlSheikh Othman	Lawdar	AlMaafer	Overall
Governorate hospital	1			1
District hospital	0	1	1	2
Health centre	3	3	4	10
Total of HFs	4	4	5	13

4.1.1 Operation of health facilities

All health facilities were operated by the government, but the majority of them were financed by different international organizations, whether directly and/or through national or international non-governmental organizations, as shown in Table 56. The financial support included: specific staff incentives on a monthly basis, provision of RH kits-including drugs and equipment-as well as fuel for electric generator. The running operational costs in all facilities depended mainly on cost-sharing, i.e., on services that are paid by the beneficiaries because running costs from the government was not sufficient.

Table 56: Distribution of health facilities by sources of financial/resources and by districts

Type of HF	AlSheikh Othman	Lawdar	AlMaafer	Overall
HO+WB+High Medical Commission	1			1
HO+WB+UNICEF	1			1
HO+YARH/IPPF	1			1
Aden MOPHP, FAO, Medical Foundation, WHO	1			1
Government			1	1
HO+Save Children			2	2
Lawdar HO		1		1
UNICEF, WB		1	1	2
WB, FMF/UNFPA		1		1
WHO, Doctors without boarder, Emergency Response Project, CSSW		1		1
WHO, Qatar Red Crescent, Red Cross			1	1
Total of HFs	4	4	5	13

All the three hospitals in the districts operated at 24 hours/7 days a week, while health centres operated only half a day (from 8 am to 1 am). The working days across the different health centres differed across the three districts as shown in Table 57. Only one health centre (located in AlMaafer) operated at seven days a week. The remaining centres operated at either 6 days (5 HCs) or 5 days (4 HCs).

Table 57: *Distribution of health facilities by working days/week and by districts*

Working days per week	AlSheikh Othman	Lawdar	AlMaafer	Overall
7 days	1	1	2	4
6 days	1	1	3	5
5 days	2	2	0	4
Total of HFs	4	4	5	13

4.1.2 Catchment population

Based on international standards, for every 100,000 population, one CEmONC and 4 BEmONC are needed. As reported by the health facility director on population served, it is observed that the governorate hospital for maternal & neonatal health in AlSheikh Othman were overloaded with cases compared to the other two hospitals located in AlMaafer and Lawdar, as shown in Table 58. As for the health centres, the average served population per health centre of AlSheikh Othman was much higher than average population served per health centre located either in Lawdar or AlMaafer.

Table 58: *Average population coverage by type of health facility and by districts*

Catchment population	AlSheikh Othman	Lawdar	AlMaafer
Hospitals Mean	630,000	130,000	18,617
Min - Max			
Health centres Mean	81,333	12,494	13,868
(Min – Max)	(64,000 - 100,000)	(8,600 - 20,084)	(11,271 - 15,577)
Total of HFs	4	4	5

4.2 Availability of resources

4.2.1 Infrastructure

Table 59 summarizes the available infrastructure of the 13 health facilities. Among these health facilities, only one health facility (AlSheikh Othman hospital, which was the referral hospital for maternal & newborn health care for Aden governorate had separate rooms for GBV clients, Manual Vacuum Aspiration/post abortion care (MVA/PAC), and Prevention of Maternal to Child Transmission PMTCT/HIV. All health facilities lacked a breastfeeding corner in the outpatient department. Only 38% of the health facilities had a labour room (the three hospitals and two health centres: one in AlSheikh Othman and one in Lawdar. Almost half of the health facilities in AlSheikh Othman had an ultrasonography, in contrast to the centers in Lawdar and AlMaafer, where only few of them had it. 62% of the health facilities had a counselling room to ensure the privacy of clients. Also, it was observed that the limited availability in space led to the absence of maternal OPD and to having few rooms to provide maternal health services in 38% of the health centres.

Among the three hospitals, two hospitals (66.7%) provided C-EmOC services. These were in AlSheikh Othman and Lawdar, where they had a separate department for obstetric services. Separate obstetric theatre and a newborn intensive care unit were available only in AlSheikh Othman hospital, while a blood transfusion room was lacking only in Lawdar hospital.

All facilities had general waste disposal systems, but with different enforced safety precautions. The use of sharp containers for sharp waste disposal was available in 76.9% of facilities, whereas, the use of disposable containers for infectious waste was found among three out of the 13 (23.1%) facilities. 61.5% of the facilities had waste incinerators for final solid waste disposal. Generally, across the three districts, the health facilities in AISheikh Othman had better infrastructure, but worse waste disposal systems, compared to Lawdar and AIMaafer health facilities.

The health facilities managers in AISheikh Othman district reported continuous interruption of electricity and shortage of fuel for the generators, as well as frequent breakdown of the sewage systems. One of AIMaafer and two of Lawdar health facilities managers reported the need for the facilities' rehabilitation and extension of the health facilities.

Overall, the infrastructure of all health facilities, including hospitals and health centres, was better in AISheikh Othman compared to Lawdar and AIMaafer. In particular, the infrastructure of many health facilities in Lawdar and AIMaafer lacked maternal OPD and were inadequate to accommodate RH services such as counselling, emergency cases, post-abortion care, and medical ultrasonography.

Table 59: Infrastructure of health facilities with availability of space of RH services among health facilities by each district and by all districts (n=13)

Infrastructure	AISheikh Othman		Lawdar		AIMaafer		Overall availability		
	Hospital	HCs N=3	Hospital	HCs N=3	Hospital	HCs N=4	Hospital N=3	HCs N=10	All N=13
Emergency room	Yes	3	yes	1	yes	0	3	5	61.5% (8)
Family planning room	Yes	3	Yes	3	Yes	3	3	9	92.3% (12)
Counselling room	Yes	3	No	3	No	1	1	7	61.5% (8)
Patients' waiting space	Yes	3	Yes	3	No	3	2	9	84.6% (11)
ANC/PNC room	Yes	1	Yes	3	Yes	1	3	5	61.5% (8)
Labour room	Yes	1	Yes	1	Yes	0	3	2	38.5% (5)
Obstetric ward	Yes	-	Yes	-	No	-	66.7% (2)	-	
Women ward	Yes	-	Yes	-	Yes	-	100% (3)	-	
Neonatal ward	Yes	-	No	-	No	-	33.3% (1)		
MVA/PAC room	Yes	0	No	0	No	0	1	0	7.7% (1)
Medical ultrasonography room	Yes	3	Yes	0	Yes	1	3	4	53.8% (7)
Laboratory room	Yes	3	Yes	2	Yes	4	3	9	92.3% (12)
Blood transfusion room	Yes	-	No	-	Yes	-	66.6% (2)	2	
PMTCT/HIV	Yes	0	No	0	No	0	1	0	7.7% (1)
Nutrition room	Yes	3	Yes	2	No	4	2	9	84.6% (11)
Maternal OPD	Yes	3	No	1	Yes	2	2	6	61.5% (8)
Breastfeeding corner in OPD	No	0	No	0	No	0	0	0	0% (0)
General operation theatre	Yes	-	Yes	-	Yes	-	100% (3)	-	
Obstetric operations room	Yes	-	No	-	No	-	33.3% (1)	-	
Neonatal Intensive care unit	Yes	-	No	-	No	-	33.3% (1)	-	
Medicine dispensary room	Yes	3	Yes	2	Yes	4	3	9	92.3% (12)
Immunization room	Yes	2	Yes	1	Yes	2	3	5	61.5% (8)
GBV room	Yes	0	No	0	No	0	1	0	7.7% (1)
Disposable waste									
Sharp container for sharp waste	Yes	0	Yes	3	Yes	4	3	7	76.9% (10)
Disposable container for infectious waste	No	2	No	1	No	0	0	3	23.1% (3)
Final disposal: waste incinerator	Yes	0	No	2	Yes	4	2	6	61.5% (8)
Total of HFs	4		4		5		13		

4.2.2 Human resources

According to the RH department/PS/MOPHP standards developed for EmONC services, the EmONC guidelines for human resources for each facility is presented in the table below:

B-EmONC			C-EmONC		
Staff category	Critical ¹	Essential ²	Staff category	Critical ¹	Essential ²
Trained GP	1	2	Ob/Gyn Specialist	2	3
Community Midwife	2	4	Trained GP	3	4
Nurse	2	4	Neonatal specialist	1	2
Medical Assistant	1	2	Trained GP in neonatology	2	3
Lab Tech	1	2	Anaesthesia Specialist	1	2
Radiological Technician	1	2	Anaesthesia Assistant	2	4
Pharmacy Assistant	1	2	Nurse Midwife	6	8
Murshida	2	4	Neonatal Nurse	4	6

1 Critical = Required minimum for launching improved services
2 Essential = Required minimum for 100% compliance with QA Service Standards

4.2.2.1a Available staff in CEmOC hospitals

Table 60 summarizes the availability of health staff in the three hospitals, assessed for CEmOC services provision. The staffing ratio in AISheikh Othman per needed human resources for provision of CEmOC services was adequate and had higher than the recommended numbers of obstetrician & gynaecologists. This ratio is well aligned with the essential standards of Yemen MOPHP. This is in contrast to the other two hospitals in AIMaafer and Lawdar, where there were severe shortages of specialized medical staff, such as obstetricians, gynaecologists, anaesthesiologists, and general doctors. Lawdar hospital had only one female Obst & Gyn, while AIMaafer hospital did not have any and the caesarean sections were carried out by a male surgeon. Both hospitals relied on anaesthesia technicians due to lack of anaesthesiologist. In addition, both hospitals depended on medical assistants due to the lack of trained general doctors. The availability of midwives was adequate, except in AIMaafer hospital, which was in need of qualified midwives. Generally, AIMaafer and Lawdar hospitals lacked the needed human resources to provide the critical CEmOC as per national MOPHP standards.

Table 60: Human resources availability among assessed CEmOC hospitals by districts (n=3)

Staff category	AISheikh Othman		Lawdar		AIMaafer	
	F	M	F	M	F	M
Obst & Gyn	70	17	1	0	0	0
Anaesthesiologist	0	5	0	1	0	0
Anaesthesia technician	5	5	0	2	0	1
Theatre nurse	10	0	0	0	0	0
Neonatal specialist	3	3	0	0	0	0
Neonatal nurse	12	6	0	0	0	0
Psycho-social specialist	5	0	0	0	0	0
General physician	4	3	1	5	0	1
Medical assistant	0	0	0	14	4	4
Radiologist	4	6	0	6	0	0
Nurse	131	42	14	28	15	3
Qualified midwife (3-4 years training)		39		8		3
Community midwife (2-year training)		0		8		5
Female psycho-social worker		5		0		0
Laboratory technician	14	9	0	11	7	3
Female HW for GBV victims' treatment		3		0		0
Met MOPHP standard	Yes		No		No	

4.2.2.1b Available staff in B-EmOC health centres

Table 61 summarizes the distribution and availability of human resources among the health centres assessed for the provision of RH services. In general, there were important differences in availability of human resources across and within districts. The 3 health centres in AISheikh Othman had adequate human resources to provide RH services. However, one health centre, AISheikh Othman HC, was overstaffed compared to the other two health centres, AIMahariq and AIMemdarah. AIMahariq HC is located in the poorest area with the majority of marginalized citizens. It was standing at critical level of MOPHP standard for provision of BEmOC. The three health centres in Lawdar district were lacking general doctors and one of them, Ammagel HC, did not even have laboratory technician. Although Amserah HC was better staffed than the other two health centres, but still did not meet the MOPHP critical standard. All the health centers in Lawdar district have shortage of health manpower. From the four health centres in AIMaafer district, only one health centre had a general doctor and was the only health centre could meet the MOPHP critical standard. In general, all health centres in the three districts had, at least, one female health provider trained in midwifery. This assessment identified a limited availability of female RH providers to meet the needs for RH services' provision in the three districts.

Overall, there was a maldistribution of human resources in all districts and severe shortage of RH human resources in almost all assessed facilities located in Lawdar and AIMaafer districts. Only five out of 13 health facilities (38.5%), four of them located in AISheikh Othman and one health centre in AIMaafer district, fulfilled the MOPHP EmOC standard.

Table 61: Availability of human resources in health centers by districts (n=10)

Staff Category	AlSheikh Othman (n=3)				Lawdar (n=3)				AlMaafer (n=4)				
	AlMa hariq	AlMem darah	AlSheikh Othman	All	AlHa dhn	Amma gel	Amse rah	All	22 May	AlHiab	AlKhia mi	AlSinah	All
Obst & Gyn Female	2	2	4	8	0	0	0	0	0	0	0	0	0
Theatre nurse Male	0	0	1	1	0	0	0	0	0	0	0	0	0
General physician Female	0	0	4	4	0	0	0	0	0	0	0	1	1
General physician Male	0	0	1	1	0	0	0	0	0	0	0	0	0
Medical assistant Female	0	0	0	0	0	0	0	0	1	1	1	2	5
Medical assistant Male	0	1	2	3	0	1	2	3	0	0	0	0	0
Radiologist Female	2	0	0	2	0	0	0	0	0	0	0	0	0
Nurse female	1	3	16	20	1	1	2	4	0	0	0	6	6
Nurse male	0	0	4	4	5	3	2	10	1	1	0	3	5
Qualified midwife (3-4 years training)	3	8	14	25	0	0	1	1	0	0	8	0	8
Community midwife (2-year)	6	7	7	20	1	1	4	6	1	1	0	3	5
Murshidat (1-year training in Midwifery)	0	0	0	0	3	1	0	4	0	0	2	0	2
Psycho-social worker Female	0	1	0	1	0	0	0	0	0	0	0	0	0
Laboratory technician female	1	2	4	7	1	0	0	1	1	1	3	4	9
Laboratory technician male	0	0	0	0	0	0	2	2	1	1	1	3	7
Female HW for GBV victims' treatment	0	0	0	0	0	0	0	0	0	0	0	0	0
Met MOPHP staffing standard	Yes	Yes	Yes		No	No	No		No	No	No	Yes, critical	

4.2.2.2 Continuous training of health human resources

Table 62 describes the distribution of staff training capacities in the assessed facilities, in last three months prior to the assessment. Based on the report of facilities managers, 61.5% of health facilities staff (midwives and Obst&Gyn) had received training on FP-implants insertion & removal. Less than half of the health facilities (42.6%) reported that their staff were trained in IUD insertion and removal. Training on FP counselling (for midwives) and Management & Care of Maternal and Child Nutrition (for medical assistants and midwives) were provided in 30.8% of the health facilities staff. The proportion of health facilities which reported receiving training for their staff on EmONC, ANC, Safe Childbirth Delivery Practice, Labor Room Protocol, Manual Vacuum Aspiration & Post-abortion Care, Infection Prevention, and MISP for coordinators was 15.2%. Only one out of 13 health facilities staff (7.7%) had received training on Helping Babies Breathe/ Newborn Resuscitation, Emergency Response, Psychological First Aid or Psychosocial Support, RTIs / STIs, Essential newborn care, and Cervical Cancer Screening. All health facilities managers reported not receiving any training for their staff on Helping Mothers Survive, Management of GBV, and Clinical Management of Rape. All midwives participated in FGDs confirmed that they did not receive any training in GBV.

Across the three districts, the health facilities staff in AISheikh Othman-whether in the hospital concentrating only on Obstetrician & Gynaecologists or the health centres with more focus on midwives-together had received most of the training (18 out of 21). The hospital's midwives in Lawdar district were trained on two training (MVA/post abortion care and MISP) and none of its health canter's staff got any in-service training. The training situation in AIMaafer was better than in Lawdar, at least the midwives in the hospital and the three health centers were trained on four training (IUD and implant insertion, nutrition care and ANC package).

Table 62: The distribution of health facilities with trained staff by training subjects and by districts

Training subject	All HFs (n=13)	AISheikh Othman		Lawdar		AIMaafer	
		Hospital	HCs (n=3)	Hospital	HCs (n=3)	Hospital	HCs (n=4)
Helping Babies Breathe/ Newborn Resuscitation	7.7% (1)		1 (Midwives)		0		0
Emergency Response	7.7% (1)		1 (Midwives)		0		0
Helping Mothers Survive	0.0% (0)		0		0		0
Management of women and girls who have experienced sexual and domestic violence	0.0% (0)		0		0		0
Clinical Management of Rape (CMR)	0.0% (0)		0		0		0
Psychological First Aid or Psychosocial Support	7.7% (1)		1 (Midwives)		0		0
Family Planning (Long Acting): a) IUDs	42.6% (6)	1 (Obst&Gyn)	1 (obst+Midwives)	0	0	1 (Midwives)	3 (Midwives)
b) Implants	61.5% (8)	1 (Obst&Gyn)	1 (Midwives) + 2 (Obst&Gyn)	0	0	1 (Midwives)	3 (Midwives)
c) Post-Partum IUD	7.7% (1)	0	1 (Midwives & Obst&Gyn)	0	0	0	0
FP Counselling	30.8% (4)	1 (Obst&Gyn)	1 (Midwives)		0		2 (Midwives)
EmONC	15.4% (2)	1 (Obst&Gyn)	1 (Midwives)		0		0
Infection Prevention Control	15.4% (2)	1 (Obst&Gyn)	1 (Midwives)		0		0
RTIs / STIs	7.7% (1)	1 (Obst&Gyn)			0		0

Training subject	All HFs (n=13)	AlSheikh Othman		Lawdar		AlMaafer	
		Hospital	HCs (n=3)	Hospital	HCs (n=3)	Hospital	HCs (n=4)
Management & Care of Maternal & Child Nutrition	30.8% (4)		1 (Midwives)		0		3 (Medical assistants +Midwives)
ANC Package	15.4% (2)	1 (Obst&Gyn)			0		1 (Midwives)
Manual Vacuum Aspiration & Post-abortion Care	15.4% (2)	1 (Obst&Gyn)		1 (Midwives)	0		0
MISP Training for Coordinator	15.4% (2)	1 (Obst&Gyn)		1 (Midwives)	0		0
Safe Childbirth Delivery Practice	15.4% (2)	1 (Obst&Gyn)	1 (Midwives)		0		0
Labor Room Protocol	15.4% (2)	1 (Obst&Gyn)	1 (Midwives)		0		0
Essential newborn care	7.7% (1)		1 (Midwives)		0		0
Cervical Cancer Screening	7.7% (1)	1 (Obst&Gyn)	1 (Obst&Gyn)		0		0

4.3 Availability of RH Kits

Table 63 describes the availability of RH kits in the 13 health facilities, as reported by the health facilities managers. Overall, 46.2% of health facilities had received Kit 1 and 53.8% got Kit 4. Few (15.4%) were supplied with Kit 2 and another 15.4% obtained Kit 7. Only 1 out of 13 (7.7%) health facilities reported having kit 8 and 7.7% were provided with Kit 9. Comparing across districts, none of health facilities in AlSheikh Othman district received any type of kits; while in Lawdar district, the hospital was supplied with Kit 8 and kit 9 in addition to health centers receiving kits of contraceptives methods (Kit 1 and Kit 4). For AlMaafer district, the hospital and its health centres reported the supply for various kits on contraceptives methods (kit1, kit 4 and kit) and kit 2.

Table 63: Distribution of health facilities which received the kits by types of kits and by districts

Type of Kit	AlSheikh Othman		Lawdar		AlMaafer		Overall		
	Hospital	HCs N=3	Hospital	HCs N=3	Hospital	HCs N=4	Hospital N=3	HCs N=10	All N=13
Kit 1: Condoms	0	0	0	2	1	3	1	5	46.2% (6)
Kit 2: Clean Delivery, Individual	0	0	0	0	0	2	0	2	15.4% (2)
Kit 3: Post Rape Treatment	0	0	0	0	0	0	0	0	0% (0)
Kit 4 Oral and Injectable Contraception	0	0	0	2	1	3	2	5	53.8% (7)
Kit 5: Treatment of Sexually Transmitted Infections	0	0	0	0	0	0	0	0	0% (0)
Kit 6: Clinical Delivery Assistance	0	0	0	0	0	0	0	0	0% (0)
Kit 7: Intrauterine Device	0	0	0	0	1	1	1	1	15.4% (2)
Kit 8: Management of Miscarriage and Complications of Abortion	0	0	1	0	0	0	1	0	7.7% (1)
Kit 9: Suture of Tears (Cervical & Vaginal Examination)	0	0	1	0	0	0	1	0	7.7% (1)
Kit 10: Vacuum Extraction Delivery	0	0	0	0	0	0	0	0	0% (0)
Kit 11: Referral Level Kit for Reproductive Health	0	0	0	0	0	0	0	0	0% (0)
Kit 12 Blood Transfusion	0	0	0	0	0	0	0	0	0% (0)

For all health facilities which received any type of kit, the managers reported that they had a maximum of three kits available. The reasons for inadequate supplies of kits, as indicated by the majority of health facilities managers, were:

- The long process of the supply system. Usually, all RH commodities were delivered to Aden MOPHP central stores. The health facilities in need of any RH commodities have to submit requests to the district health office, who then submit these requests to governorate health officer. The governorate health office collects all requests from all the districts in the governorate and forward the collective request to the Aden MOPHP. Then the MOPHP release the requested RH commodities to Governorate health office who then distribute them to the districts and then to health facilities. This process led to stock out of RH commodities.
- Unfamiliarity of health facilities and district health offices with RH kits.
- Severe shortage of RH commodities, including basic drugs and equipment.

4.4 Availability of Reproductive Health Services

4.4.1 Availability of Antenatal Care (ANC) services

Table 64 summarized the availability of ANC services. All health facilities provided pregnant women with iron and folic acid. Most (92.3%) indicated availability of pregnancy assessment tests, including the basic analysis such as, urine and Hb estimation tests in addition to health education & counselling and 84.6% provided maternal immunization and blood sugar test. Two-thirds (69.25) of health facilities could provide blood grouping and Rh factor tests. 53.8% provided ultrasound services. Only two hospitals (15.4% of all health facilities) had the ability to test for HIV. Management of pregnancy-related complications was provided in few of the health facilities depending on the type of complications. These services ranged from the management of severe anaemia (46.2%), pregnancy with communicable diseases (38.5%), pregnancy with non-communicable diseases (23.1%), antepartum haemorrhage (30.8%), and Pre-Eclampsia/eclampsia (15.4%).

Table 64: Availability of Antenatal Care services in health facilities by all districts and by each district

Services available	AlSheikh Othman		Lawdar		AlMaafer		Overall		
	Hospital	HCS N=3	Hospital	HCS N=3	Hospital	HCS N=4	Hospitals N=3	HCS N=10	All N=13
1- ANC									
Obstetric and foetal assessment	Yes	3	yes	2	yes	4	3	9	92.3% (12)
Supply of Iron and Folic Acid	Yes	3	Yes	3	Yes	4	3	10	100% (13)
Maternal Immunization	Yes	3	No	3	No	4	1	10	84.6% (11)
Health education, advice, and counselling	Yes	3	Yes	3	No	4	2	10	92.3% (12)
2- Screening and test									
Urinalysis	Yes	3	Yes	2	Yes	4	3	9	92.3% (12)
Hb estimation	Yes	3	Yes	2	Yes	4	3	9	92.3% (12)
Blood grouping and Rh factor	Yes	3	Yes	1	Yes	2	3	6	69.2% (9)
Testing for HIV	Yes	0	No	0	Yes	0	2	0	15.4% (2)
Blood sugar	Yes	3	Yes	1	Yes	4	3	8	84.6% (11)
Ultrasonography	Yes	3	Yes	0	Yes	1	3	4	53.8% (7)
3- Pregnancy Complications									
Pregnancy with Hypertension / Diabetes Management	Yes	1	Yes	0	No	0	2	1	23.1% (3)
Pregnancy with communicable diseases Management	Yes	1	No	0	Yes	2	2	3	38.5% (5)

Services available	AlSheikh Othman		Lawdar		AlMaafer		Overall		
	Hospital	HCS N=3	Hospital	HCS N=3	Hospital	HCS N=4	Hospitals N=3	HCS N=10	All N=13
Pre-Eclampsia / Eclampsia Management	Yes	0	Yes	0	No	0	2	0	15.4% (2)
Severe Anaemia Management	Yes	0	Yes	2	Yes	1	3	3	46.2% (6)
APH (Antepartum Hemorrhage) Management	Yes	0	Yes	0	Yes	1	3	1	30.8% (4)

Across districts, only one hospital in AlSheikh Othman reported its ability to provide all the related services described above. On the other hand, Lawdar hospital lacked three of the four main types of services (HIV testing, maternal immunization, and management of pregnancies with communicable diseases), and AlMaafer hospital lacked all four (maternal Immunization, health education & counselling, management of pregnancies with non-communicable disease, and Pre-Eclampsia/eclampsia). The health centres in AlSheikh Othman were providing almost all needed services for ANC and screening & tests. However, they were limited in their services to management of pregnancy-related complications. The health centers in Lawdar district were relatively the poorest in provision of screening & tests services compared to health centers in AlMaafer district. Ultrasonography service was unavailable in all health centers of Lawdar (available in one of AlMaafer HCs), in addition to the nonexistence of laboratory services in one of Lawdar health centres.

4.4.2 Availability of Obstetrical, newborn and Postnatal Care services

Table 65 describes the health facilities readiness for obstetric and postnatal care services. Almost two-thirds of the 13 health facilities offered normal vaginal deliveries.

Table 65: Availability of Obstetrical and Postnatal Care services in health facilities by all districts and by each district

Services available	AlSheikh Othman		Lawdar		AlMaafer		Overall		
	Hospital	HCS N=3	Hospital	HCS N=3	Hospital	HCS N=4	Hospitals N=3	HCS N=10	All N=13
1- Obstetrical Care									
Normal Vaginal Delivery	Yes	1	Yes	1	Yes	4	3	6	69.2% (9)
Manual removal of Placenta	Yes	1	Yes	1	Yes	3	3	5	61.5% (8)
C-section	Yes	-	Yes	-	Yes	-	100% (3)	-	
Rupture Uterus Management	Yes	-	Yes	-	Yes	-	100% (3)	-	
Blood transfusion	Yes	-	Yes	-	Yes	-	100% (3)	-	
Essential newborn care	Yes	0	Yes	0	No	1	2	1	23.1% (3)
Resuscitation for newborn asphyxia	Yes	1	Yes	1	Yes	2	3	4	53.8% (7)
Removal of remaining products	Yes	0	Yes	0	Yes	2	3	2	38.5% (5)
Breastfeeding within 1 st hour	Yes	1	Yes	1	Yes	3	3	5	61.5% (8)
2- Initial stabilization of obstetric emergency before referral	-	1	Yes	1	Yes	2	2	4	50.0% (6) (n=12)
3- Post Natal Care									
Counselling on postnatal care, breastfeeding, etc.	Yes	1	Yes	3	Yes	4	3	8	84.6% (11)
Post-Natal follow up	Yes	0	Yes	2	Yes	1	3	3	46.2% (6)
Identification and Management of post-natal complications:	Yes	0	Yes	3	Yes	3	3	6	69.2% (9)
Management of miscarriage and complications of abortions	Yes	0	No	1	Yes	0	2	1	23.1% (3)

61.5% of all health facilities and offered manual removal of placenta obstetric and only 38.5% reported on available services for removal of remaining products of placenta. 61.5% support of breastfeeding within the 1st hour. Although 53.8% of health facilities had services on resuscitation for newborn asphyxia, only 23.1% were providing essential newborn care. All the assessed hospitals were providing surgical deliveries, including management of rupture uterus, blood transfusion, initial stabilization of obstetrical emergency before referral, and resuscitation for newborn asphyxia. In contrast, the health centres in all districts were poor on provision of essential obstetric and newborn services as well as initial stabilization of emergency for referral. Relatively, the proportion of health centres in AlMaafer were better compared to proportion of health centers in AISheikh Othman and Lawdar in provision of essential obstetric and newborn care. As for the provision of postnatal care, 84.6% of health facilities were offering counselling on postnatal care, and 69.2% had services for postnatal identification and management of complications. The availability of services on follow-up for postnatal cases was less than 50% (46.2%), while management of abortion and its complications was in 23.1% of health facilities. Comparing across the three districts, all hospitals provided postnatal care and management of abortion-related complications services except Lawdar hospital. The health centers in AISheikh Othman district were the poorest (only one of the three centers with provided postnatal counselling services. The remaining postnatal and management of abortion complications services were missing.) compared to health centers in Lawdar and AlMaafer districts.

4.4.3 Availability of Family planning, STDs/RTIs, GBV, Adolescent-friendly health and ambulance care services

4.4.3.1 Availability of family planning services

Table 66 summarizes the different types of available family planning services. All health facilities provided counselling services on family planning. Pills were available in all health facilities and the majority of health facilities had male condoms and injectables (92.3%) available, followed by implants (84.6%). 69.2% of the health facilities provided emergency contraception and 53.8% provided IUD insertion & removal services. Vasectomy and tubal ligation were also provided in all hospitals. The use of contraceptives mix in any health facility in Yemen is to have four methods: pills, injectables, IUDs, and implants. Considering this requirement, it indicates that only 8 out 13 health facilities (61.5%) were achieved. Comparing across districts, all health facilities in AISheikh Othman and only 3 health facilities in AlMaafer could meet the contraceptives mix. The family planning services in the health facilities of Lawdar district were poor (IUD service was unavailable in all health facilities, injectables service in 2 health facilities, and implants in only one health facility.)

Table 66: Availability of Family planning services in health facilities by all districts and by each district

Services available	AISheikh Othman		Lawdar		AlMaafer		Overall		
	Hospital	HCS N=3	Hospital	HCS N=3	Hospital	HCS N=4	Hospitals N=3	HCS N=10	All N=13
Counselling on FP methods	Yes	3	Yes	3	Yes	4	3	10	100% (13)
FP services: Pill	Yes	3	Yes	3	Yes	4	3	10	100% (13)
FP services: Male Condoms	Yes	2	Yes	3	Yes	4	3	9	92.3% (12)
Emergency contraception	Yes	1	Yes	1	Yes	4	3	6	69.2% (9)
FP services: injectables	Yes	3	Yes	2	Yes	4	3	9	92.3% (12)
FP services: Implant	Yes	3	Yes	1	Yes	4	3	8	84.6% (11)
FP services: IUD	Yes	3	No	0	Yes	2	2	5	53.8% (7)
FP services: Vasectomy	Yes	-	Yes	-	Yes	-	100% (3)	-	
FP services: Tubal ligation	Yes	-	Yes	-	Yes	-	100% (3)	-	

4.4.3.2 Availability of RTIs services

As summarized in Table 67, the provision of RTIs services in the assessed health facilities was very limited across all districts in terms of counselling, testing, prevention, and treatment. Only one hospital in AISheikh Othman district was providing all items RTIs related services. Treatment services were offered in only 30.4% of health facilities (all hospitals and one health centre in AIMaafer district).

Table 67: Availability RTIs services in health facilities by all districts and by each district

Services available	AISheikh Othman		Lawdar		AIMaafer		Overall		
	Hospital	HCs N=3	Hospital	HCs N=3	Hospital	HCs N=4	Hospitals N=3	HCs N=10	All N=13
HIV/AIDS Counseling	Yes	0	No	0	No	0	1	0	7.7% (1)
HIV/AIDS Testing	Yes	0	No	0	Yes	0	2	0	15.4% (2)
Prevention of maternal –to-child transmission of HIV (PMTCT)	Yes	0	No	0	No	0	1	0	7.7% (1)
RTIs treatment	Yes	0	Yes	0	Yes	1	3	1	30.8% (4)

4.4.3.3 Availability of GBV, adolescent health and ambulance services

Table 68 summarizes the distribution of health facilities providing GBV, adolescent health, and ambulance services to transport emergency cases for treatment. This assessment found that provision of these services was very limited, especially in health centers. Only one hospital in AISheikh Othman provided services to manage all GBV services. Only 2 health facilities (15.4%) located in AISheikh Othman district provided services to women and girls who experienced domestic violence as well as provided STIs prophylaxis and psychological support for post-rape clients.

Table 68: Availability of GBV, Adolescent health and ambulance services in health facilities by all districts and by each district

Services available	AISheikh Othman		Lawdar		AIMaafer		Overall		
	Hospital	HCs N=3	Hospital	HCs N=3	Hospital	HCs N=4	Hospitals N=3	HCs N=10	All N=13
1- Sexual & Domestic Violence									
Services to treat women and girls who experienced domestic violence	Yes	1	No	0	No	0	1	1	15.4% (2)
Clinical Management of Rape (CMR)	Yes	0	No	0	No	0	1	0	7.7% (1)
<i>Provide the following elements of post-rape care</i>									
a) Emergency Contraception	Yes	0	No	0	Yes	1	2	1	23.1% (3)
b) HIV post-exposure prophylaxis	Yes	0	No	0	No	0	1	0	7.7% (1)
c) STIs prophylaxis/ presumptive treatment	Yes	0	No	0	Yes	0	2	0	15.4% (2)
d) Psychological support, crisis counselling, psychological first aid	Yes	1	No	0	No	0	1	1	15.4% (2)
e) Referral directory of violence	Yes	0	No	0	No	0	1	0	7.7% (1)
2- Adolescent Health Services									
counseling on FP services	Yes	0	Yes	0	No	0	2	0	15.4% (2)
counseling on HIV services	Yes	0	No	0	Yes	0	2	0	15.4% (2)
3- Ambulance cars	No (3)	0	No (2)	0	No	0	0	0	0% (0)

As for adolescent health, the two most common provided services included counselling on FP and HIV services. These services were available in 15.4% of health facilities, which both were hospitals. None of the health facilities rendered ambulance services. Although two hospitals had ambulance cars (one in AISheikh with 3 ambulance cars and the other one in Lawdar with

two ambulance cars), the cars were not used for emergency cases. The referred emergency cases were transferred either on public or private transportation and their families incurred the expenses. A community midwife in FGD mentioned, “None of the health facilities provide ambulance services to rescue emergency cases.” Though providers in all health facilities reported that they made referrals for unavailable services, but there was a lack of systematic referral mechanism and even records on referred cases.

4.5. The use of health facilities services

4.5.1 Ever used of health services from any health worker

Among all 532 respondents, (190 adolescent girls and 342 women), 272 respondents (51.1%) reported to have ever used RH services from any health worker as given in Figure 26. Less than 10% of girls and 75% of women reported ever using RH services. Across the districts, the girls in Lawdar district were more likely to use RH services (11.7%) compared to girls in AISheikh Othman (5.7%) and girls in AIMaafer districts (9.1%). Women in AISheikh Othman reported more ever use of RH services (78.1%) compared to women in Lawdar (67.6%) and in AIMaafer (77.5%).

Figure 20: The ever use of RH services among respondents by all districts and each district (n=532)

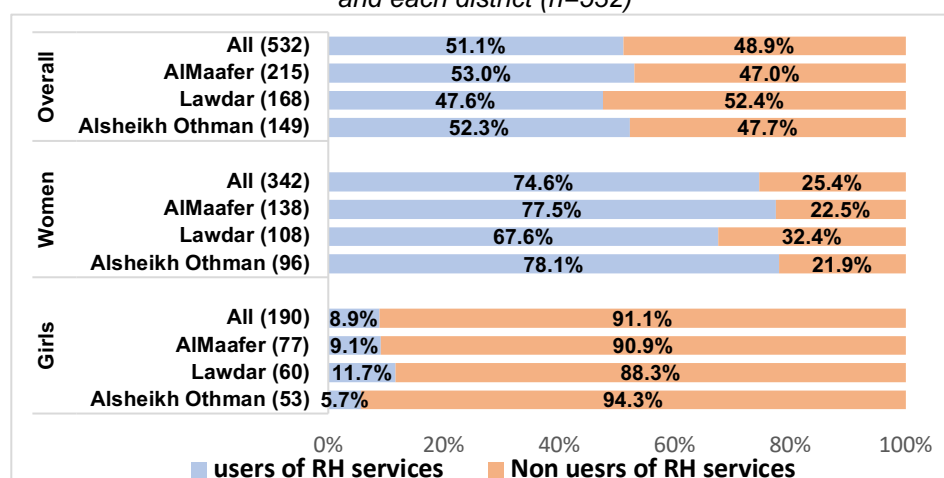


Table 69 summarizes the most used RH services by respondents who reported ever using RH services (N=272). The majority of girls used health services for antenatal care, 35.3% for family planning, few (less than 12%) for childbirth care or postnatal care, and only one girl (5.9%) for abortion care. Among women, family planning and antenatal care services were the most common used services (65.1% and 61.2% respectively), followed by childbirth care (26.3%) and postnatal care (10.2%). Less than 9% of women used the health services for abortion care or RTIs treatment or dysmenorrhea care. Overall, for the whole sample, the use of health services among respondents was mainly for family planning (63.2%) and antenatal care (61.4%) services. Only 1 in 4 of respondents used RH services for childbirth services in all districts.

Table 69: Distribution of respondents who ever used RH services by type of services received and by all districts and by each district (n=272)

Respondents	Type of services received	All districts	AlSheikh Othman	Lawdar	AIMaafer
Girls	Family planning	35.3% (6)	33.3% (1)	57.1% (4)	14.3% (1)
	Antenatal care	64.7% (11)	66.7% (2)	42.9% (3)	85.7% (6)
	Childbirth care	11.8% (2)	0.0% (0)	14.3% (1)	14.3% (1)
	Postnatal care	11.8% (2)	0% (0)	0% (0)	28.6% (2)

Respondents	Type of services received	All districts	AlSheikh Othman	Lawdar	AlMaafer
Women	Abortion care	5.9% (1)	0% (0)	0% (0)	14.3% (1)
	Total	17	3	7	7
	Family planning	65.1% (166)	66.7% (50)	71.2% (52)	59.8% (64)
	Antenatal care	61.2% (156)	73.3% (55)	53.4% (39)	57.9% (62)
	Childbirth care	26.3% (67)	34.7% (26)	16.4% (12)	27.1% (29)
	Postnatal care	10.2% (26)	6.7% (5)	11.0% (8)	12.1% (13)
	Abortion care	8.6% (22)	10.7% (8)	6.8% (5)	8.4% (9)
	RTIs treatment	7.5% (19)	10.7% (8)	6.8% (5)	5.6% (6)
	Dysmenorrhea	4.3% (11)	6.7% (5)	0% (0)	5.6% (6)
	Total	255	75	73	107
Overall	Family planning	63.2% (172)	65.4% (51)	70.0% (56)	57.0% (65)
	Antenatal care	61.4% (167)	73.1% (57)	52.5% (42)	59.6% (68)
	Childbirth care	25.4% (69)	33.3% (26)	16.3% (13)	26.3% (30)
	Postnatal care	10.3% (28)	6.4% (5)	10.0% (8)	13.2% (15)
	Abortion care	8.5% (23)	10.3% (8)	6.3% (5)	8.8% (10)
	RTIs treatment	7.0% (19)	10.3% (8)	6.3% (5)	5.3% (6)
	Dysmenorrhea	4.3% (11)	6.7% (5)	0% (0)	5.6% (6)
	Total	272	78	80	114

Among the respondents who have ever used the services from any health worker, 76.5% of adolescent girls and 68.6% of the women received RH service from public health facilities as given in Table 70.

Table 70: Distribution of respondents who ever used RH services by place, where received, and by all districts and by each district (n=272)

Respondents	Place where last RH service received	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Public HF	76.5% (13)	100.0% (3)	85.7% (6)	57.1% (4)
	Private HF	23.5% (4)	0% (0)	14.3% (1)	42.9% (3)
	Total	17	3	7	7
Women	At home	5.1% (13)	0% (0)	1.4% (1)	11.2% (12)
	Public HF	68.6% (175)	77.3% (58)	78.1% (57)	56.1% (60)
	Private HF	26.3% (67)	22.7% (17)	20.5% (15)	32.7% (35)
	Total	255	75	73	107
Overall	At home	4.8% (13)	0% (0)	1.3% (1)	10.5% (12)
	Public HF	69.1% (188)	78.2% (61)	78.8% (63)	56.1% (64)
	Private HF	26.1% (71)	21.8% (17)	20.0% (16)	33.3% (38)
	Total	272	78	80	114

The utilization of health workers (doctors and community midwife) at home was used only by few women (5.1%) and most of them were from AlMaafer. Over the whole sample, the use of public health facilities for RH services was most common (69.1%). Almost 25% of all respondents used the private health facilities with the highest proportion of respondents (33.3%) in AlMaafer district compared to respondents in AlSheikh Othman district (21.8%) and in Lawdar (20.0%).

4.5.1.1 Reasons behind choosing the health facility

Table 71 summarizes the most common reasons for choosing RH services at health facilities among the 272 respondents (17 Adolescent girls and 255 women) who reported ever use. Physical accessibility to the health facility was the most common reason for use, as reported by over half of adolescent girls (57.9%) and women (51.2%). Across the districts, 22.2% of girls in AlMaafer highlighted three most common reasons: closeness to the health facility, suggestion by a community health worker, or recommendation by a doctor/nurse. Whereas, the girls in the other two districts (AlSheikh Othman and Lawdar) indicated that proximity to health facilities was the main reason for using the health facility. Women report three most

common yet distinct reasons, these included: suggested by husband (21.5%), suggested by other family members (11.2%), and suggested by a neighbour/friend (7.6%). Over the three districts, similarly, less than half of the women (41.1%) in AlMaafer reported use due to proximity of the health facility. It should be noted that most of the health facilities in the rural area of AlMaafer were not easily accessible. Overall, 51.6% of all respondents indicated the reason for utilization of health facilities is proximity to their houses and almost 1 in 5 was because their husbands suggested.

Table 71: *Distribution of respondents who ever used RH services by reasons of place choice and by all districts and by each district*

Respondents	Reason	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	It is close to my house	57.9% (11)	100.0% (3)	85.7% (6)	22.2% (2)
	Suggested by the husband	10.5% (2)	0% (0)	14.3% (1)	11.1% (1)
	Suggested by other family members	5.3% (1)	0% (0)	0% (0)	11.1% (1)
	Suggested by a neighbour	10.5% (2)	0% (0)	0% (0)	22.2% (2)
	Recommended by the health worker who visited the home	5.3% (1)	0% (0)	0% (0)	11.1% (1)
	Suggested by a doctor/nurse	10.5% (2)	0% (0)	0% (0)	22.2% (2)
	Total	17	3	7	7
Women	It is close to my house	51.2% (169)	63.6% (63)	50.4% (60)	41.1% (46)
	Suggested by the husband	21.5% (71)	17.2% (17)	20.2% (24)	26.8% (30)
	Suggested by other family members	11.2% (37)	10.1% (10)	11.8% (14)	11.6% (13)
	Suggested by a neighbour/friend	7.6% (25)	5.1% (5)	7.6% (9)	9.8% (11)
	Recommended by the health worker who visited the home	3.6% (12)	1.0% (1)	5.9% (7)	3.6% (4)
	Suggested by a doctor/nurse	4.8% (16)	3.0% (3)	4.2% (5)	7.1% (8)
	Total	255	75	73	107
Overall	It is close to my house	51.6% (180)	64.7% (66)	52.4% (66)	39.7% (48)
	Suggested by the husband	20.9% (73)	16.7% (17)	19.8% (25)	25.6% (31)
	Suggested by other family members	10.9% (38)	9.8% (10)	11.1% (14)	11.6% (14)
	Suggested by a neighbour/friend	7.7% (27)	4.9% (5)	7.1% (9)	10.7% (13)
	Recommended by the health worker who visited the home	3.7% (13)	1.0% (1)	5.6% (7)	4.1% (5)
	Suggested by a doctor/nurse	5.2% (18)	2.9% (3)	4.0% (5)	8.3% (10)
	Total	272	78	80	114

4.5.2 Experience while seeking care at public health facilities for RH services

Table 72 summarizes the means and time spent to reach a targeted public health facility. All girls and a substantial proportion of women (82.8%) reached the needed public health facility on foot. Almost three-quarters of girls spent less than 15 minutes to reach the sought health facility. 18.2% of women were using transportation (either private (10.4%) or public (6.8%)). The majority of women (77.4%) spent no more than 30 minutes to reach the desired public health facility. Over the three districts, women in Lawdar district (69.2%) spent less than 15 min to reach the health facilities compared to women in AlSheikh Othman (35.8%) and women in AlMaafer (21.3%). Overall, the majority of all respondents (77.9%) could reach the wanted health facility within half an hour.

Table 72: Means and time to reach public health facility by respondents and by all districts and by each district

Respondents	Means used to reach HF	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	On foot	100% (14)	100.0% (3)	100.0% (7)	100.0% (4)
	Total	14	3	7	4
Women	On foot	82.8% (183)	74.6% (50)	89.2% (58)	84.3% (75)
	Private transportation	10.4% (23)	11.9% (8)	10.8% (7)	9.0% (8)
	Public transportation	6.8% (15)	13.5% (9)	0% (0)	6.8% (6)
	Total	221	67	65	89
Overall	On foot	83.8% (197)	75.7% (53)	90.3% (65)	84.9% (79)
	Private transportation	9.8% (23)	11.4% (8)	9.7% (7)	8.6% (8)
	Public transportation	6.4% (15)	12.9% (9)	0% (0)	6.4% (6)
	Total	235	70	72	93
Respondents	Time to reach HF	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Less than 15 minutes	71.4% (10)	66.7% (2)	71.4% (5)	75.0% (3)
	15 to 30 minutes	14.3% (2)	0.0% (0)	28.6% (2)	0.0% (0)
	31 minutes to 1 hour	14.3% (2)	33.3% (1)	0% (0)	25.0% (1)
	Total	14	3	7	4
Women	Less than 15 minutes	39.8% (88)	35.8% (24)	69.2% (45)	21.3% (19)
	15 to 30 minutes	37.6% (83)	46.3% (31)	16.9% (11)	46.1% (41)
	31 minutes to 1 hour	21.7% (48)	17.9% (12)	13.8% (9)	30.3% (27)
	Hour to 2 hours	0.5% (1)	0.0% (0)	0.0% (0)	1.1% (1)
	More than 2 hours	0.5% (1)	0.0% (0)	0.0% (0)	1.1% (1)
	Total	221	67	65	89
Overall	Less than 15 minutes	41.7% (98)	37.1% (26)	69.4% (50)	23.7% (22)
	15 to 30 minutes	36.2% (85)	44.3% (31)	18.1% (13)	44.1% (41)
	31 minutes to 1 hour	21.3% (50)	18.6% (13)	12.5% (9)	30.1% (28)
	Hour to 2 hours	0.4% (1)	0.0% (0)	0.0% (0)	1.1% (1)
	More than 2 hours	0.4% (1)	0.0% (0)	0.0% (0)	1.1% (1)
	Total	235	70	72	93

4.5.2.1 Waiting time to get the services

As shown in Table 73, more than three-quarters of girls (78.6%) and women (78.3%) received the sought RH services in the public health facility within 30 minutes. Across the districts, the mean waiting time for girls was longer (50 minutes) to get the services in public health facilities of AlSheikh Othman compared to 24 minutes waiting time in health facilities of Lawdar and 14 minutes waiting time in health facilities of AlMaafer.

Table 73: Waiting time to get the services from public health facilities among respondents, by all districts and each selected district

Respondents	Waiting time	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	5-30 min	78.6% (11)	33.3% (1)	85.7% (6)	100% (4)
	60 min	21.4% (3)	66.7% (2)	14.3% (1)	0% (0)
	Mean (SD±) Median	26 (±20) 18	50 (±17) 50	24 (±17) 15	14 (±9) 13
	Total	14	3	7	4
Women	3-30 min	78.3% (173)	64.2% (43)	89.2% (58)	80.9% (72)
	31-60 min	17.6% (39)	32.8% (22)	7.7% (5)	10.7% (12)
	2-3 hours	4.1% (9)	3.0% (2)	3.1% (2)	9.4% (5)
	Mean (SD±) Median	30 (±30) 20	38 (±23) 30	20 (±28) 10	31 (±35) 20
	Total	221	67	65	89
overall	3-30 min	78.3% (184)	64.2% (43)	88.9% (64)	81.7% (76)
	31-60 min	17.9% (42)	32.8% (22)	8.3% (6)	12.9% (12)
	2-3 hours	3.8% (9)	3.0% (2)	2.8% (2)	5.4% (5)
	Mean (SD±) Median	30 (±30) 20	39 (±23) 30	21 (±27) 10	31 (±35) 20
	Total	235	70	72	93

The mean waiting time to obtain the needed services was 30 minutes among women in all three districts. Overall, for the whole sample, the mean waiting time to get the needed RH services in public health facilities was 30 minutes.

4.5.2.2 Perceptions about public health facilities services

Table 74 describes experiences at the health facilities during the use of public health services. All girls and the majority of women (82.6%) reported that they felt comfortable with their interaction with the providers to explain and clarify their RH health problems. 17.4% of women felt uncomfortable and complained about: The providers' negative behaviour, impatience, and unfriendly care (11.1%); Some women were not able to understand the language, others were shy and found the behaviour unacceptable. They reported that the health care providers didn't often ask for physical symptoms and were in a rush and did not spend enough time. The second issue was the lack of privacy (0.8%), and the last issue was on the process of the service (5.5%), such as prolonged waiting time, opening hours being too short, the facility being crowded, and the interruption of electricity.

Table 74: Respondents' comfort feeling toward public health facilities and reasons for feeling discomfort, by all districts and by each district

Respondents	Being comfortable	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Yes, feeling comfortable	100.0% (14)	100% (3)	100% (7)	100% (4)
	Feeling discomfort	0% (0)	0% (0)	0% (0)	0% (0)
	Total	14	3	7	4
Women	Yes, feeling comfortable	82.6% (200)	74.4% (58)	83.1% (59)	89.2% (83)
	Afraid from service provider	0.4% (1)	1.3% (1)	0% (0)	0% (0)
	Did not understand provider's language	0.4% (1)	0% (0)	1.4% (1)	0% (0)
	Felt shy	2.1% (5)	2.6% (2)	2.8% (2)	1.1% (1)
	Service provider behaved unacceptably	4.1% (10)	5.1% (4)	7.0% (5)	1.1% (1)
	Service provider did not ask for physical symptoms	1.2% (3)	2.6% (2)	0% (0)	1.1% (1)
	Provider was in rash and didn't allow time for me	2.9% (7)	1.3% (1)	5.6% (4)	2.2% (2)
	There is no privacy	0.8% (2)	2.6% (2)	0% (0)	0% (0)
	Have long waiting time	1.7% (4)	1.3% (1)	0% (0)	3.2% (3)
	Opening hours is too short	1.7% (4)	5.1% (4)	0% (0)	0% (0)
	The facility was very crowded	1.7% (4)	2.6 % (2)	0% (0)	2.2% (2)
	The facility was without electricity	0.4% (1)	1.3% (1)	0% (0)	0% (0)
	Total	221	67	65	89
	Overall Yes, feeling comfortable	91.1% (214)	87.1% (61)	91.7% (66)	96.8% (90)
	Total	235	70	72	93

Passing through districts, negative interpersonal aspects of care were reported in all districts but was less reported among women in AlMaafer (5.5%) compared to women in AlSheikh Othman (12.9%) and women in Lawdar (16.8%). Overall, for the whole sample, the majority of respondents (91.1%) felt comfortable with their experience in public health facilities.

General satisfaction of respondents on attaining the needed RH services in public health facilities was describes in Table 75. 71.4% of girls were completely satisfied and 28.6% partially satisfied on needed RH services received in public health facilities, but a with huge difference across the districts. 1 in 4 girls in AlMaafer, all girls in Lawdar, and 2 in 3 girls in AlSheikh Othman were completely satisfied. 61.1% of women were completely satisfied and 34.4% were partially satisfied on getting the sought RH service. On the other side, 4.5% were unsatisfied with RH services they got in public health facilities. Over the three districts,

complete satisfaction on the receiving of needed RH services were more expressed in Lawdar district (86.2%) compared to women in AlSheikh Othman (37.3%) and in Lawdar (60.7%). Overall, 61.1% of all respondents indicated that they were, in general, completely satisfied with obtaining the wanted RH services in public health facilities.

Table 75: Respondents general satisfaction on RH services in public health facilities by all districts and each district (n=235)

Respondents	Satisfaction	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Completely satisfied	71.4% (11)	66.7% (2)	100.0% (7)	25.0% (1)
	Partially satisfied	28.6% (4)	33.3% (1)	0% (0)	75.0% (3)
	Total	14	3	7	4
Women	Completely satisfied	61.1% (135)	37.3% (25)	86.2% (56)	60.7% (54)
	Partially satisfied	34.4% (76)	58.2% (39)	12.3% (8)	32.6% (29)
	Not satisfied	4.5% (10)	4.5% (3)	1.5% (1)	6.7% (6)
	Total	221	67	65	89
Allover	Completely satisfied	61.7% (145)	38.6% (27)	87.5% (63)	51.1% (55)
	Partially satisfied	34.0% (80)	57.1% (40)	11.1% (8)	34.4% (32)
	Not satisfied	4.3% (10)	4.3% (3)	1.4% (1)	6.5% (6)
	Total	235	70	72	93

4.5.2.3 Out-of-pocket spending for RH services

As shown in table 76, 21.4% of girls (all living in AlSheikh Othman district) and 46.2% of the women paid out of pockets for the services they sought in the public health facilities. Across the districts, almost all women (98.5%) reported paying out-of-pocket in AlSheikh, while 21.5% of women in Lawdar and 24.4% of women in AlMaafer district indicated so.

Table 76: RH services fees in public health facilities reported by respondents, by all districts and each selected district (n=235)

Respondents	Payment for services	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Demanded	21.4% (3)	100% (3)	0% (0)	0% (0)
	Paid by myself	0% (0)	0% (0)	0% (0)	0% (0)
	Nothing paid	78.6% (11)	0.0% (0)	100% (7)	100% (4)
	Total	14	3	7	4
Women	Demanded	46.2% (102)	98.5% (66)	21.5% (14)	24.7% (22)
	Paid by myself	2.7% (6)	1.5% (1)	3.1% (2)	3.4% (3)
	Nothing paid	51.1% (113)	0% (0)	75.4% (49)	71.9% (64)
	Total	221	67	65	89
Overall	Demanded	44.7% (105)	98.6% (69)	19.4% (14)	23.7% (22)
	Paid by myself	2.6% (6)	1.4% (1)	2.8% (2)	3.2% (3)
	Nothing paid	52.8% (124)	0% (0)	77.8% (56)	73.1% (68)
	Total	235	70	72	93

For the total sample, 45% of respondents out of pocket for the RH care received in public health facilities. This study also found that all respondents who experienced normal vaginal deliveries in public health facilities were charged, on average, 5,000 Yemeni Rials (YRs), and the average cost for c-sections was 30,000 YRs. A male in FGD said, “The cost of a patient’s file is more than 5000 YRs, blood transfusion costs 4000 YRs and childbirth costs 2000 YRs for the provider in public hospital. How could this happen with the high poverty in this crises situation?”

4.6. The impact of COVID-19 pandemic on RH services

In Yemen, the first case of coronavirus was announced on 10 April 2020, and was detected in Hadramout Governorate. It was further followed by five cases that were identified in Aden. On

20th April, the MOPHP in Aden imposed national lockdown measures to control the COVID-19 pandemic, a month after this assessment completed the fieldwork in all three districts (March 2020).

Confronted with COVID-19, providing essential RH services posed a huge challenge in Yemen, with already a fragile and destroyed health care system. This study tried to assess the general effects of COVID-19 on RH services in the three selected districts. Figures 27 and 28 illustrate the disruption of the essential maternal health services at times of COVID-19 pandemic. The majority of respondents in Aden (94.4%) indicated the disruption of childbirth services, whether normal or surgical deliveries, due to closure of the public referral hospital in AlSheikh Othman for one month (17 May-15 June 2020) because health personnel refused to work without the needed personnel protective equipment. Disruption of this service was also reported by 83% of respondents in AlMaafer district, while in Lawdar, it was reported only by less than 50% of its participants. In addition, the disruption of ANC services and treatment of pregnancy-related complications was reported among nearly one-quarter of participants in Aden (22.2% and 27.8% respectively) but was indicated among more than half of participants in Lawdar (58.8%) and AlMaafer (83.3% and 55.6% respectively). Overall, of all respondents, ANC, childbirth, and treatment of pregnancy-related services in public health facilities were disrupted during COVID-19 pandemic in the three districts.

Figure 21: The distribution of respondents reported on disruption of maternal health service by component and by district

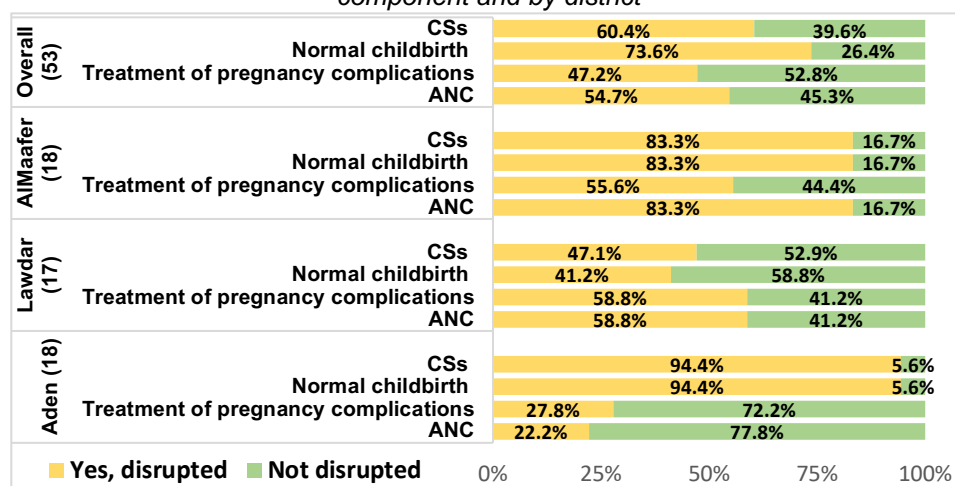
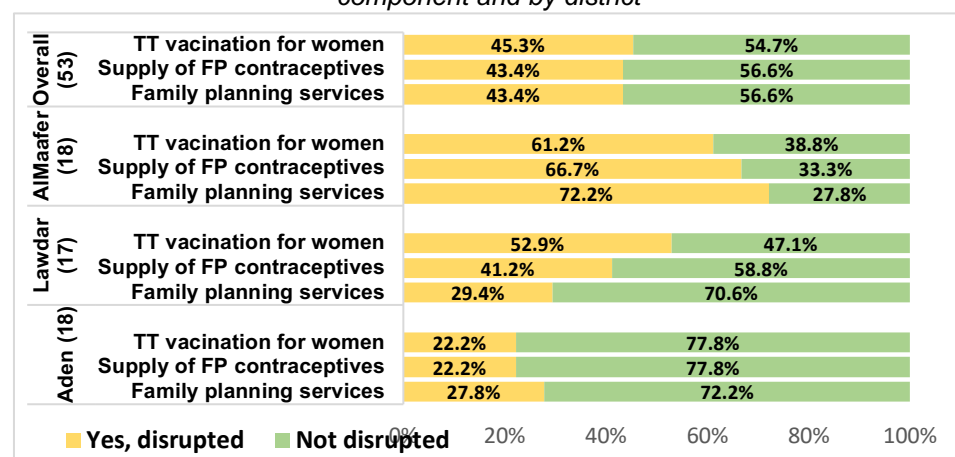


Figure 22: The distribution of respondents reported on disruption of maternal health service by component and by district



Generally, there was a consensus among over 40% of all respondents that the COVID-19 pandemic had a considerable negative effect on the provision of family planning services, including the supply of contraceptives methods and Tetanus Toxoid vaccination for girls and women as given in Figure 24b.

Only 7 out of 53 (13.2%) respondents (4 in Aden and 3 Lawdar) indicated there was no disruption of RH services in their areas due to COVID-19 pandemic as given in Table 77. The remaining 86.8% of all respondents assured the occurrence of RH services disruption in their areas.

Table 77: *The distribution of participants perception disruption of RH services by all districts and each district*

Perception on disruption of RH services	All districts	Aden	Lawdar	AlMaafer
Not any of RH services being disrupted	13.2% (7)	22.2% (4)	17.6% (3)	0.0% (0)
Yes, partially or all of RH services disrupted	86.8% (46)	77.8% (14)	82.4% (14)	100.0% (18)
Total	53	18	17	18

Table 78 presents the reasons behind the disruption of RH services in public health facilities, as reported by 46 of the participants who were assured on RH services disruption. The main three reasons for the disruption of RH services were reported by over half of the participants and contained the mix of supply and demand sides. The first two reasons from the demand side were: the reduction of attendance outpatient volume (91.3% of respondents) and the lockdown of public transportation hindering access to the health facilities (52.2% of respondents). The third reason was from the supply, where the most shared cause among most participants (87.0%) in all districts reported that personnel protective equipment available for health care providers was insufficient. Other reasons reported were the decrease on childbirth attendance due to cancellation of such services, especially in hospitals (41.3%) and insufficiency of service providers (41.3%) and unavailability/stock out of contraceptives (32.6%) or essential medicines (23.9%). Across districts, more respondents (35.7%) pointed out the reason on closure of outpatient RH services in their district, while 22.2% of respondents in AlMaafer signified another reason was that RH-related staff were deployed to provide COVID-19 relief.

Table 78: *The reasons behind disruption of RH services reported by participants agreed on disruption of RH services, by all districts and each district*

Reasons of disruption of RH services	All districts	Aden	Lawdar	AlMaafer
1- Closure of outpatient RH services as per government directive	13.2% (6)	7.1% (1)	35.7% (5)	0.0% (0)
2- Decrease in outpatient volume due to patients not being present	91.3% (46)	78.6% (11)	100% (14)	94.4% (17)
3- Decrease in cases for childbirth service volume in hospitals due to cancellation of such care and insufficient staff to provide services.	41.3% (19)	71.4% (10)	50.0% (7)	11.1% (2)
4- RH-related clinical staff deployed to provide COVID-19 relief.	10.9% (5)	7.1% (1)	0.0% (0)	22.2% (4)
5- Insufficient personal protective equipment available for health care providers	87.0% (40)	85.7% (12)	85.7% (12)	88.9% (16)
6- Unavailability/stock out of essential medicines for RH care.	23.9% (11)	0.0% (0)	14.3% (2)	50.0% (9)
7- Unavailability/stock out of contraceptives for FP services.	32.6% (15)	14.3% (2)	50.0% (7)	33.3% (6)
8- Public transport lockdowns hindering access to the health facilities.	52.2% (24)	35.7% (5)	71.4% (10)	50.0% (9)
Total	46	14	14	18

Table 79 illustrates the deployment of RH services providers in COVID-19 relief. More than half of the participants (58.5%) reported that there was no change with duties of RH services providers. 17.4% of participants confirmed on deployment of all RH services, partially along with their routine RH duties. Across districts, 16.7% of respondents in AlMaafer and AlSheikh Othman pointed out all their RH services providers were deployed to support COVID-19 efforts full-time, while none of the respondents in Lawdar reported that this happened in their district.

Table 79: *Distribution of participants in accordance with deployment of RH providers in supporting COVID-19 efforts by all districts and by each district*

Reasons of disruption of RH services	All districts	Aden	Lawdar	AlMaafer
No change with RH providers.	58.5% (31)	61.1% (11)	70.6% (12)	44.4% (8)
YES, all RH providers partially supporting COVID-19 efforts along with routine RH care activities.	17.4% (9)	11.1% (2)	5.9% (1)	33.3% (6)
YES, all RH providers supporting COVID-19 efforts full-time.	11.3% (6)	16.7% (3)	0.0% (0)	16.7% (3)
YES, some RH providers partially supporting COVID-19 efforts along with routine RH care activities.	9.4% (5)	5.6% (1)	23.5% (4)	0.0% (0)
YES, some RH providers supporting COVID-19 efforts full-time	3.8% (2)	5.6% (1)	0.0% (0)	5.6% (1)
Total	53	18	17	18

4.5.1 Impact of COVID-19 on RH services at levels of public health facilities

Table 80 shows that 60.4% of participants indicated that the outpatient RH services in health centers and primary health care units (PHCUs) remained open, especially in Lawdar and AlMaafer district (70.6% and 72.2% respectively). 32.1% of participants indicated that these facilities were open with limited staff capacity in Aden (44.4%). Childbirth services were seriously disrupted in all districts. Only few respondents (28.3%) indicated that childbirth for normal deliveries services remained open. The greatest interruption of health services was particularly reported in Aden.

Table 80: *Availability of RH services in public HCs and PHCUs during COVID-19 pandemic by all districts and by each district*

RH services access in HCs and PHCUs	All districts	Aden	Lawdar	AlMaafer
Yes, Outpatient RH services are closed.	3.8% (2)	11.1% (2)	0.0% (0)	0.0% (0)
Yes, Outpatient RH services are open.	60.4% (32)	38.9% (7)	70.6% (12)	72.2% (13)
Yes, Outpatient RH services are open with limited staff.	35.8% (19)	44.4% (9)	29.4% (5)	27.8% (5)
Total	53	18	17	18
Yes, Childbirth for normal delivery services is open.	28.3% (15)	5.6% (1)	52.9% (9)	27.8% (5)
Total	53	18	17	18

As described in Table 81, Only 12 out of 53 (22.6%) participants reported that outpatient RH services were interrupted in public hospitals during COVID-19 pandemic. The majority of Aden respondents (66.7%) agreed that the RH outpatient services were closed due to closure of hospitals. None of respondents in Lawdar and AlMaafer districts reported on closure of RH outpatient services in their hospitals. Even in the hospitals that continued to provide RH services, nearly one-third of all participants indicated available numbers of staff was limited. 60.4% of participants reported that inpatient normal deliveries in hospitals were open, and the

disruption of this service was highest in Aden as reported by only 16.7% of the participants. Few respondents (24.5%) reported that inpatient management for RH emergency cases were open, and the disruption of this service was lowest in Lawdar as stated by 52.9% of participants compared to 24.5% in AlSheikh Othman and 0% in AlMaafer.

Table 81: Availability of RH services in public hospitals during COVID-19 pandemic by all districts and by each district

RH services in Hospitals	All districts	Aden	Lawdar	AlMaafer
Yes, Outpatient RH services are closed.	22.6% (12)	66.7% (12)	0.0% (0)	0.0% (0)
Yes, Outpatient RH services are open.	45.3% (24)	5.6% (1)	70.6% (12)	61.1% (11)
Yes, Outpatient RH services are open with limited staff.	32.1% (17)	27.8% (5)	29.4% (5)	38.9% (7)
Total	53	18	17	18
Yes, inpatient Childbirth management for normal delivery services are open.	60.4% (32)	16.7% (3)	100.0% (17)	60.4% (12)
Total	53	18	17	18
Yes, Inpatient Management for RH services are open only for emergency cases.	24.5% (13)	22.2% (4)	52.9% (9)	0.0% (0)
Total	53	18	17	18

Community-based RH services were also interrupted, either partially or completely due to the COVID-19 pandemic as reported by two-thirds of participants (See Table 82), and as indicated by all participants in AlMaafer, 82.4% of participants in Lawdar and 44.5% in Aden. The main cause attributed to the disruption of these community-based services, as indicated by the respondents, was the fear of spreading COVID-19 among women and community providers.

Table 82: Availability of community-based RH services during COVID-19 pandemic by all districts and by each district

Access to RH services at Community-based level	All districts	Aden	Lawdar	AlMaafer
No, RH services have not been affected by COVID-19 pandemic	24.5% (13)	55.6% (10)	17.6% (3)	0.0% (0)
Yes, partially or all of RH services had been negatively affected by COVID-19	75.5% (40)	44.4% (8)	82.4% (14)	100.0% (18)
Total	53	18	17	18

The second wave of Covid-19 pandemic was already started from mid-February 2021 in Yemen. Recorded cases of Covid-19 in the first two weeks of March were 22 times higher than the number of cases in the first two weeks of February with a sharp rise in the number of people being admitted to healthcare facilities with severe symptoms as these were the only people who are tested. Since mid-February, with the number of new cases reported rising from 21 in the week of 15 February 2021, followed by 112, 175, 327, 507 and 691 new cases respectively in each of the subsequent five weeks. The number of COVID-19 associated deaths has also increased over the same period, from two deaths the week of 15 February to 13, 19, 33, 54 and 95 deaths respectively in each of the weeks that followed. So, Covid-19 is accelerating fast in Yemen entering its seventh year of war with severely damaged health care system, economic collapse, and recently with shortfall in humanitarian aid funding. Head of Mission of MSF in Yemen expressed “All aspects of the Covid-19 intervention are lacking and need greater international support, from public health messaging, to vaccinations to oxygen therapy – support is needed across the board.”

The Emergency Coronavirus Committee of MOPHP in Aden declared on 22 March 2021 a health emergency in areas under its control, as infections in a second wave of a coronavirus

epidemic surge, ordered health centres to increase preparations, wedding halls to close, and mosques, malls and markets to cut opening times. The situation is really getting worse every day with the increasing number of cases of COVID and the fatality rate nearly 22 per cent - one of the highest in the world- due mainly to late arrival of patients and a lack of experienced human resources and capacities. The manager of the ICRC supported isolation centre in Al Gamhouria hospital in Aden pointed out *“The centre hosts about 100 patients, most of them arrived in very critical condition, they need lots of oxygen. We consume about 50 to 100 oxygen concentrators daily.”* Actually, the number of cases is likely to be far higher than the reported figure because the level of testing is still low, and many deaths occurred at homes.

Yemen government in Aden received on 31st March 2021 its first batch 360,000 doses of AstraZeneca’s vaccine together with 13,000 safety boxes and 1.3 million syringes as part of the total 1.9 million vaccine doses for 2021- through the global COVAX scheme. Additional shots would arrive in May. The COVAX vaccines will be free, distributed across the country, and to vaccinate priority groups such as frontline health care workers, older people and people with co-morbidities. According to OCHA Situation Report on 6th April 2021 *“Yemen will receive 14 million doses of COVID-19 vaccines through the COVAX Facility, which will cover the vaccination of some 23 per cent of the population across all governorates.”*

Summary Section 5

- *Adolescent girls and women reported a wide range of complex barriers that prevented them from accessing reproductive health services. These barriers can be categorized into six themes: physical inaccessibility, lack of knowledge of available RH services and benefits, cultural & social misconceptions, lack of family support, economic barriers, and limited quality of available RH services.*
- *Barriers to use Antenatal Care: Most noted barrier was economic barrier (38.8%), followed by limited quality of provided RH services (17.8%), and the lack of awareness of ANC benefits and services (15.5%).*
- *Barriers to seeking health facilities-based normal deliveries: The three main barriers were cited: economic (30.9%), the limited quality of provided services in health facilities (22.9%), and culture misconceptions & beliefs (18.4%).*
- *Barriers to seeking care for childbirth related complications: The two main barriers cited were Lack of awareness of RH benefits and available (60%) followed by economic barriers due to lack of money (40%).*
- *Barriers affecting the uptake of postnatal care services: The two main barriers cited were lack of awareness of the PNC benefits and available services (71.8%) followed by the economic unaffordability (14.3%).*
- *Barriers to utilization of post-abortion health services: The two main barriers to accessing management of abortion-related complications were: the economic barrier (50%) and the lack of awareness of the benefits and existent services of post abortion care (26.9%).*
- *Barriers treatment for RTIs: The two main barriers cited were Lack of awareness of the benefits of RTIs treatment and available services (50.3%) followed by economic unaffordability (32.1%).*
- *Barriers to current use of family planning: Most non-users (62.2% of respondents) wanted to have children. This was followed by Fear of contraceptive use impacts on health (17.9%) and husbands' refusal to use contraception (16.3%).*
- *Barriers to RH services use: The most common barriers were inability to access public health facilities (85.2%), lack of awareness of RH use benefits (69.7%), limited quality of RH health services (13.3%), and the economic barrier (12.0%).*
- *Generally, irrespective of the RH service needed, three major barriers impeded adolescent girls and women in all districts from seeking the needed RH services. These were as follows:*
 1. *the economic (financial) barrier. This was amplified given the prevailing poverty and the increased transportation costs,*
 2. *lack of health awareness in timely seeking of needed RH services, and*
 3. *the limited quality of RH services in public health facilities.*

Section 5: Barriers to Accessing RH Services

This section summarizes the barriers impacting access to RH services from both the perspective of stakeholders (data collected during the qualitative phase of the research), and the perspective of adolescent girls and women (data collected during the quantitative phase of this research). Reported barriers were grouped in main six themes as shown in the table below:

Themes	Barriers
Physical inaccessibility	Health facility was far/Access was so difficult Facility was difficult to reach
Lack of awareness on available RH services and benefits	Unaware of this service Did not have any problems Not having any serious problems Perceived lack of need to seek services Did not know where/whom to go to
Cultural and social misconceptions	All in God's will Unavailability of someone to accompany them Feeling embarrassed Home care was better At the beginning of pregnancy
Lack of Family support	Did not have time Not allowed by Family/Husband
Economic / Financial (unaffordability)	Did not have money Services were expensive
Unqualified RH services	Fear of seeking services at the health care centre Services were not available here Unsatisfied with the services provided in the health facilities Lack of Medicines Lack of respectful care for patients Previous HC experience was not good Concerned about being treated by a male physician or health care provider Needs someone to facilitate Lack of attention towards cases Availability of services in the morning only Lack of needed medical equipment

5.1 Barriers during current pregnancy

5.1.1 Barriers to use Antenatal care service

Table 83 summarizes the reasons for lack of use of antenatal care service. The only reason as reported by the only girl was not having any health problems. The two major reasons reported by women for not using antenatal care service were lack of money (33.3%) and the unavailability of a family member or friend to accompany them to the health facility (22.2%). Overall, the two main barriers among all respondents were the economic barrier (31.6%) and lack of awareness of the ANC benefits and available services (31.6%). Comparing across the districts, respondents in AlSheikh Othman district lacked awareness of ANC benefits and

services the most (100%). The economic barrier was reported highest (44.4%) among respondents in AlMaafer district. The respondents in Lawdar district reported four equally important barriers, these were: economic unaffordability, cultural & social misconceptions, lack of awareness of available RH services & benefits, and lack of family support.

Table 83: Reasons on lack of use of Antenatal care service among current pregnant respondents, by all districts and by each district (n=15)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Did not have any problems	100.0% (1)	0.0% (0)	0.0% (0)	100.0% (1)
	Total	1	0	0	1
Women	Not allowed by Family/Husband	11.1% (2)	(0)	25.0% (2)	% (0)
	Did not have money	33.3% (6)	(0)	25.0% (2)	50.0% (4)
	Unavailability of someone to accompany them	22.2% (4)	(0)	25.0% (2)	25.0% (2)
	Fear of seeking services at the health care centre	5.6% (1)	(0)	0% (0)	12.5% (1)
	Did not have any problems	11.1% (2)	50.0% (1)	0% (0)	12.5% (1)
	Perceived Lack of need to seek services	11.1% (2)	50.0% (1)	12.5% (1)	0% (0)
	At the beginning of their pregnancy	5.6% (1)	(0)	12.5% (1)	0% (0)
	Total	14	2	5	7
Overall	Economic barrier	31.6% (6)	(0)	25.0% (2)	44.4% (4)
	Did not have money	31.6% (6)	(0)	25.0% (2)	44.4% (4)
	Cultural and social misconceptions	21.1% (4)	(0)	25.0% (2)	22.2% (2)
	Unavailability of someone to accompany them	21.1% (4)	(0)	25.0% (2)	22.2% (2)
	Lack of awareness of the ANC benefits & services	31.6% (6)	100.0% (2)	25.0% (2)	22.2% (2)
	Did not have any problems	15.8% (3)	50.0% (1)	0.0% (0)	22.2% (2)
	Perceived Lack of need to seek services	10.5% (2)	50.0% (1)	12.5% (1)	(0)
	At the beginning of their pregnancy	5.3% (1)	(0)	12.5% (1)	(0)
	Lack of family support	10.5% (2)	(0)	25.0% (2)	(0)
	Not allowed by Family/Husband	10.5% (2)	(0)	25.0% (2)	(0)
	Unqualified RH services	5.3% (1)	(0)	(0)	11.1% (1)
	Fear of seeking services at the health care centre	5.3% (1)	(0)	(0)	11.1% (1)
	Total	15	2	5	8

5.1.2 Barriers to care seeking for pregnancy-related complications

Lack of money was the main barrier indicated by respondents of both groups that prevented from seeking care of pregnancy-related complications, as reported by the one girl and 80% of women, as shown in Table 84. Overall, the poor economic status was the main barrier among 71.4% of all respondents. An IDP participant pointed out that “Poverty was the leading challenge; we don’t even have the cost of transportation. So, we have to take a sick pregnant mother in a trolley or carry her over our backs.” FGD, IDP girl.

Table 84: Reasons to seek care among current pregnant respondents with pregnancy-related complications by all districts and by each district (n=6)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Did not have money	100.0% (1)	0.0% (0)	0.0% (0)	100.0% (1)
	Total	1	0	0	1
Women	Did not have money	80.0% (4)	(0)	66.7% (2)	66.7% (2)
	Unavailability of someone to accompany them	20.0% (1)	(0)	33.3% (1)	(0)
	Lack of Medicines	20.0% (1)	(0)	(0)	33.3% (1)
	Total	5	0	2	3

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Overall	Economic barrier	71.4% (5)	(0)	66.7% (2)	75.0% (3)
	Did not have money	71.4% (5)	(0)	66.7% (2)	75.0% (3)
	Cultural and social misconceptions	14.3% (1)	(0)	33.3% (1)	(0)
	Unavailability of someone to accompany them	14.3% (1)	(0)	33.3% (1)	(0)
	Unqualified RH services	14.3% (1)	(0)	(0)	25.0% (1)
	Lack of Medicines	14.3% (1)	(0)	(0)	25.0% (1)
	Total	6	0	2	4

5.2 Barriers among pregnant during 5 years since the war started

5.2.1 Barriers to use antenatal care service

Table 85 summarizes the reasons cited among the pregnant respondents for not seeking ANC services during the past 5 years since the start of the war. Among the girls who were pregnant (n= 2) from AlMaafer district, one was not allowed by her husband, whereas the other one perceived she did not need to because she did not have any problems during her pregnancy. Among women, lack of money was the main barrier (35.2%), followed by lack of perceived need because of not having problems during pregnancy (13.6%), not having someone (family member or friend to accompany them (9.1%), lack of availability of health services (8%), and refusals of their husbands (6.8%).

Table 85: Reasons for the non-use of antenatal care service among respondents by all districts and by each district (n=64)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Not allowed by Family/Husband	50.0% (1)	(0)	(0)	50.0% (1)
	Did not have any problems	50.0% (1)	(0)	(0)	50.0% (1)
	Total (100%)	2	0	0	2
Women	Health facility was far/Access was so difficult	5.7% (5)	(0)	10.5% (4)	2.5% (1)
	Services are not available here	8.0% (7)	10.0% (1)	2.6% (1)	12.5% (5)
	Unsatisfied with the services provided in HFs	2.3% (2)	10.0% (1)	2.6% (1)	(0)
	Not allowed by Family/Husband	6.8% (6)	10.0% (1)	5.3% (2)	7.5% (3)
	Did not have money	35.2% (31)	30.0 (3)	31.6 (12)	40.0% (16)
	Unavailability of someone to accompany them	9.1% (8)	20.0% (2)	5.3% (2)	10.0% (4)
	Fear of seeking services at the health care centre	2.3% (2)	(0)	2.6% (1)	2.5% (1)
	Did not have time	4.5% (4)	(0)	7.9% (3)	2.5% (1)
	Lack of Medicines	5.7% (5)	(0)	5.3% (2)	7.5% (3)
	Services were expensive	4.5% (4)	(0)	5.3% (2)	5.0% (2)
	Unaware of this service	1.1% (1)	(0)	(0)	2.5% (1)
	Did not have any problems	13.6% (12)	20.0 (2)	18.4% (7)	7.5% (3)
	All in God's will	1.1% (1)	(0)	2.6% (1)	(0)
	Total (100%)	62	7	27	28
Overall	Economic barrier	38.8% (35)	30.0% (3)	36.9% (14)	42.9% (18)
	Did not have money	34.4% (31)	30.0 (3)	31.6 (12)	38.1% (16)
	Services were expensive	4.4% (4)	(0)	5.3% (2)	4.8% (2)
	Cultural and social misconceptions	10.0% (9)	20.0% (2)	7.9% (3)	9.5% (4)
	Unavailability of someone to accompany them	8.9% (8)	20.0% (2)	5.3% (2)	9.5% (4)
	All in God's will	1.1% (1)	(0)	2.6% (1)	(0)
	Lack of awareness on ANC benefits & services	15.5% (14)	20.0% (2)	18.4% (7)	11.9% (5)
	Did not have any problems	14.4% (13)	20.0 (2)	18.4% (7)	9.5% (4)
	Unaware of this service	1.1% (1)	(0)	(0)	2.4% (1)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
	Lack of family support	12.2% (11)	10.0% (1)	13.2% (5)	11.9% (5)
	Not allowed by Family/Husband	7.8% (7)	10.0% (1)	5.3% (2)	9.5% (4)
	Did not have time	4.4% (4)	(0)	7.9% (3)	2.4% (1)
	Physical inaccessibility	5.6% (5)	10.0% (1)	10.5% (4)	2.4% (1)
	Health facility was far/Access was so difficult	5.6% (5)	(0)	10.5% (4)	2.4% (1)
	Unqualified RH services	17.8% (16)	20.0% (1)	13.1% (4)	21.4% (4)
	Services were not available here	7.8% (7)	10.0% (1)	2.6% (1)	11.9% (5)
	Fear of seeking services at the health care centre	2.2% (2)	(0)	2.6% (1)	2.4% (1)
	Unsatisfied with services provided in HFs	2.2% (2)	10.0% (1)	2.6% (1)	(0)
	Lack of Medicines	5.6% (5)	(0)	5.3% (2)	7.1% (3)
	Total	64	7	27	30

Overall, the economic barrier was the major barrier among 38.8% of all respondents particularly high among respondents in AlMaafer district (42.9%). A KI Health provider mentioned “No free medications and tests are available. Fees for laboratory and diagnostic examinations are too expensive. Many women cannot afford to pay them even when discounted.” This was followed by the limited quality of provided RH services (17.8%), and the lack of awareness of ANC benefits and services among 15.5% of all respondents.

5.2.2 Barriers to care seeking for the pregnancy-related complications during 5 years since the war started

Table 86 summarizes the reasons among girls and women, who did not seek care for their pregnancy-related complications. Lack of money and unawareness of available RH services prevented the two girls to seek the care. Among women, 38.9% reported lack of money and 11.1% were not satisfied with the quality of services provided at the health facilities. Overall, the two major two barriers, across all districts, were the economic barrier (39.5%) and limited quality of RH services (29.1%). Other contributing barriers were: lack of family support (15.8%) and lack of awareness of the RH benefits and available services (13.2%).

Table 86: Reasons on the non-use of RH services among respondents who experienced pregnancy-related complications by all districts and by each district (n=30)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Did not have money	50.0% (1)	(0)	(0)	100.0% (1)
	Unaware of such care	50.0% (1)	(0)	100.0% (1)	(0)
	Total	2	0	1	1
Women	Not knowing where/whom to go to	5.6% (2)	10.0% (1)	(0)	7.1% (1)
	Unsatisfied with the services provided in the facilities	11.1% (4)	10.0% (1)	21.4% (3)	(0)
	Services were not available there	2.8% (1)	10.0% (1)	(0)	(0)
	Not allowed by Family/Husband	8.3% (3)	(0)	7.1% (1)	14.3% (2)
	Did not have money	38.9% (14)	30.0% (3)	35.7% (5)	42.9% (6)
	Unavailability of someone to accompany them	8.3% (3)	(0)	14.3% (2)	7.1% (1)
	Fear of seeking services at the health care centre	5.6% (2)	(0)	7.1% (1)	7.1% (1)
	Did not have time	8.3% (3)	10.0% (1)	7.1% (1)	7.1% (1)
	Lack of Medicines	8.3% (3)	10.0% (1)	(0)	14.3% (2)
	Health care centre was far away from home	2.8% (1)	10.0% (1)	(0)	(0)
	Perceived lack of need to seek services	5.6% (2)	10.0% (1)	7.1% (1)	(0)
	Total	28	8	10	10

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Overall	Economic barrier	39.5% (15)	30.0% (3)	33.3% (5)	46.7% (7)
	Did not have money	39.5% (15)	30.0% (3)	33.3% (5)	46.7% (7)
	Cultural and social misconceptions	7.9% (3)	(0)	13.3% (2)	6.7% (1)
	Unavailability of someone to accompany them	7.9% (3)	(0)	13.3% (2)	6.7% (1)
	Lack of awareness on available RH services and benefits	13.2% (5)	20.4% (2)	13.4% (2)	6.7% (1)
	Not knowing where/whom to go to	5.3% (2)	10.0% (1)	(0)	6.7% (1)
	Unaware of such care	2.6% (1)	(0)	6.7% (1)	(0)
	Perceived Lack of need to seek services	5.3% (2)	10.0% (1)	6.7% (1)	(0)
	Lack of family support	15.8% (6)	10.0% (1)	13.4% (2)	20.0% (3)
	Not allowed by Family/Husband	7.9% (3)	(0)	6.7% (1)	13.3% (2)
	Did not have time	7.9% (3)	10.0% (1)	6.7% (1)	6.7% (1)
	Physical inaccessibility	2.6% (1)	10.0% (1)	(0)	(0)
	Health facility was far/Access was so difficult	2.6% (1)	10.0% (1)	(0)	(0)
	Unqualified RH services	29.1% (10)	30.0% (3)	26.7% (4)	20.0% (3)
	Services were not available there	2.6% (1)	10.0% (1)	(0)	(0)
	Fear of seeking services at the health care centre	5.3% (2)	(0)	6.7% (1)	6.7% (1)
	Unsatisfied with the services provided in HF	13.3% (4)	10.0% (1)	20.0% (3)	(0)
	Lack of Medicines	7.9% (3)	10.0% (1)	(0)	13.3% (2)
	Total	30	8	11	11

5.2.3 Barriers to seeking health facilities-based normal deliveries

Table 87 summarizes the reasons on non-use of health facilities for normal deliveries among respondents, who delivered at home. One-third of the girls indicated they lacked money and another one-third faced closure of health facilities at night. An IDP women in the FGD stated: *“childbirth services are not provided 24 hours in all health centers due to midwives refusing to take the night duty. RH services have been limited to working hours only.”* Among women, 30.8% indicated lack of money to be the main reason, followed by availability of a midwife nearby (8.1%), perceived not necessary because of lack of pregnancy-related complications (6.9%), and lack of satisfaction with the quality of health services provided at the health facilities (6.9%). Overall, for the total sample, three main barriers were reported for not using of childbirth services at the health facilities, these were: 1) economic unaffordability (30.9%), especially among 32.5% of respondents in AlMaafer district. 2) the limited quality of RH services in health facilities (22.9%), particularly among 35.1% of respondents in AlSheikh Othman district. 3) Cultural and social beliefs misconceptions (18.4%), particularly among respondents in AlMaafer district (23.8%). Other barriers included: lack of health awareness of the related benefits and available services of institutional childbirth care (10.1%), especially among 17.6% of the respondents in Al Lawdar district, followed by lack of family support (8.2%), and physical (geographical) inaccessibility (4.7%). Geographical inaccessibility was commonly reported by many of the KIs and FGDs participants in AlMaafer and Lawdar districts, who expressed that the far distance between health facility and population residence combined with difficult/poor roads' infrastructure and scarcity of transportation to be a significant barrier impeding use of needed RH services. One KI community leader stated, *“Geographic distance, and challenging roads with scarcity of transportation and its high cost ranging from 20,000 to 30,000 YRs in this financial difficulty has prohibited women accessing health care services.”*

Table 87: Reasons on non-use of health facilities among respondents, who delivered at home, by all districts and by each district (n=185)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Not knowing where/whom to go to	11.1% (1)	100.0% (1)	(0)	(0)
	Did not have money	33.3% (3)	(0)	50.0% (1)	33.3% (2)
	Lack of Medicines	22.2% (2)	(0)	50.0% (1)	16.7% (1)
	Health facilities closed at night	33.3% (3)	(0)	(0)	50.0% (3)
	Total	8	1	2	5
Women	Not knowing where/whom to go to	0.8% (2)	(0)	(0)	1.4% (2)
	Unaware of such care	2.4% (6)	(0)	(0)	4.1% (6)
	Health facility was far/Access was so difficult	4.9% (12)	2.8% (1)	7.6% (5)	4.1% (6)
	Unsatisfied with the services provided in the health facilities	6.9% (17)	19.4% (7)	9.1% (6)	2.8% (4)
	Services were not available here	5.3% (13)	2.8% (1)	1.5% (1)	7.6% (11)
	Not allowed by Family/Husband	3.6% (9)	2.8% (1)	3.0% (2)	4.1% (6)
	Did not have money	30.8% (76)	27.8% (10)	28.8% (19)	32.4% (47)
	Unavailability of someone to accompany them	6.5% (16)	5.6% (2)	3.0% (2)	8.3% (12)
	Previous HC experience was not good	0.4% (1)	2.8% (1)	(0)	(0)
	Fear of seeking services at the health care centre	5.3% (13)	11.1% (4)	3.0% (2)	4.8% (7)
	Did not have time	4.9% (12)	11.1% (4)	4.5% (3)	3/4% (5)
	Lack of Medicines	2.4% (6)	(0)	6.1% (4)	2.4% (2)
	Did not feel it was necessary, no complications	6.9% (17)	5.6% (2)	18,2% (12)	2.1% (3)
	Health facility was closed at night	1.6% (4)	(0)	(0)	2.8% (4)
	Home care was better	4.5% (11)	5.6% (2)	(0)	6.2% (9)
	Midwife lives nearby	8.1% (20)	(0)	7.6% (5)	10.3% (15)
	Total	177	32	42	103
Overall	Economic barrier	30.9% (79)	27.0% (10)	29.4% (20)	32.5% (49)
	Did not have money	30.9% (79)	27.0% (10)	29.4% (20)	32.5% (49)
	Cultural and social misconceptions	18.4% (47)	10.8% (4)	10.3% (7)	23.8% (36)
	Unavailability of someone to accompany them	6.3% (16)	5.4% (2)	2.9% (2)	7.9% (12)
	Home was better	4.3% (11)	5.4% (2)	(0)	6.0% (9)
	Midwife lives nearby	7.8% (20)	(0)	7.4% (5)	9.9% (15)
	Lack of awareness on available RH services and benefits	10.1% (26)	8.1% (3)	17.6% (12)	7.3% (11)
	Not knowing where/whom to go to	1.2% (3)	2.7% (1)	(0)	1.3% (2)
	Unaware such care	2.3% (6)	(0)	(0)	4.0% (6)
	Feeling unimportant, no complications	6.6% (17)	5.4% (2)	17.6% (12)	2.0% (3)
	Lack of family support	8.2% (21)	13.5% (5)	7.3% (5)	8.6% (11)
	Not allowed by Family/Husband	3.5% (9)	2.7% (1)	2.9% (2)	4.0% (6)
	Did not have time	4.7% (12)	10.8% (4)	4.4% (3)	4.6% (5)
	Physical inaccessibility	4.7% (12)	2.7% (1)	7.4% (5)	4.0% (6)
	Health facility was far/Access was so difficult	4.7% (12)	2.7% (1)	7.4% (5)	4.0% (6)
	Unqualified RH services	22.9% (59)	35.1% (13)	21.4% (14)	21.1% (32)
	Services were not available here	5.1% (13)	2.7% (1)	2.3% (1)	7.3% (11)
	Previous HC experience was not good	0.4% (1)	2.7% (1)	(0)	(0)
	Fear of seeking services at the health care centre	5.0% (13)	10.8% (4)	2.9% (2)	4.6% (7)
	Unsatisfied with the services provided in HF	6.6% (17)	18.9% (7)	8.8% (6)	2.6% (4)
	Lack of Medicines	3.1% (8)	(0)	7.4% (5)	2.0% (3)
	Health facility was closed at night	2.7% (7)	(0)	(0)	4.6% (7)
	Total	185	33	44	108

5.2.4 Barriers to seeking care for childbirth-related complications

All respondents (one girl and four women), who did not seek care for their childbirth-related complications, were having bleeding and needed immediate professional health care. But 60% of the respondents were blocked to seek care due to lack of awareness on RH benefits and available services. The remaining respondents (40%) lacked money, as presented in Table

88. A KI NGO participant pointed, “Poor health literacy is common; therefore, women do not even know where to get and what services are provided.”

Table 88: Reasons on unsought care among respondents who were having complication during delivery, by all districts and by each district (n=5)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Perceived Lack of need to seek services	100% (1)	(0)	(0)	100.0% (1)
	Total	1	0	0	1
Women	Perceived Lack of need to seek services	25.0% (1)	(0)	100.0% (1)	(0)
	Not knowing where/whom to go to	25.0% (1)	(0)	(0)	33.3% (1)
	Did not have money	50.0% (2)	(0)	(0)	66.7% (2)
	Total	4	0	1	3
Overall	Economic barrier	40.0% (2)	(0)	(0)	50.0% (2)
	Did not have money	40.0% (2)	(0)	(0)	50.0% (2)
	Lack of awareness on available RH services and benefits	60.0% (3)	(0)	100.0% (1)	50.0% (2)
	Perceived Lack of need to seek services	40.0% (2)	(0)	100.0% (1)	25.0% (1)
	Not knowing where/whom to go to	20.0% (1)	(0)	(0)	25.0% (1)
	Total	5	0	1	4

5.2.5 Barriers affecting the uptake of postnatal care services

Table 89 summarizes the reasons behind lack of use PNC service. Lack of perceived need for PNC was the most common cited reason as indicated by 80% of the girls and 61.4% of the women. This was followed by lack of financial abilities as reported by 13.7% of the women. Across the three districts. Lack of health awareness of PNC was another reason as indicated by 19.7% of the women in AlMaafer district, while unavailability of someone to accompany them was among 12.8% of women in Lawdar district limited them to use PNC service. Overall, the two main barriers cited were lack of awareness of PNC benefits and services by 71.8% of respondents, followed by the economic unaffordability among 14.3% of respondents. A community midwife and a community volunteer in FGDs in addition to a KI NGO stressed, “There are lack of proper health education and privacy when counselling in health facilities. Therefore, awareness on RH benefits is a profound problem.”

Table 89: Reasons on the non-utilization of postnatal care (PNC) services among respondents who did not receive postnatal care, by all district and each selected district (n=160)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Perceived Lack of need to seek services	80.0% (5)	100.0% (1)	100.0% (2)	66.7% (2)
	Lack of Medicines	20.0% (1)	(0)	(0)	33.3% (1)
	Total	5	1	2	2
Women	Did not know where/whom to go to	2.5% (5)	3.4% (2)	(0)	6.6% (4)
	Unaware of such care	6.1% (12)	(0)	(0)	19.7% (12)
	found it difficult to reach there	2.5% (5)	1.7% (1)	1.3% (1)	4.9% (3)
	Unsatisfied with the services provided in facilities	0.5% (1)	(0)	1.3% (1)	(0)
	Services were not available here	0.5% (1)	(0)	(0)	1.6% (1)
	Not allowed by Family/Husband	2.0% (4)	1.7% (1)	3.8% (3)	(0)
	Did not have money	13.7% (27)	13.6% (8)	14.1% (11)	13.1% (8)
	Unavailability of someone to accompany them	6.6% (13)	3.4% (2)	12.8% (10)	1.6% (1)
	The services were not good	0.5% (1)	1.7% (1)	(0)	(0)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Overall	Did not have time	0.5% (1)	1.7% (1)	(0)	(0)
	Lack of Medicines	2.0% (4)	1.7% (1)	3.8% (3)	(0)
	It was expensive	1.0% (2)	0 (0)	1.3% (1)	1.6% (1)
	Perceived Lack of need to seek services	61.4% (121)	71.2% (42)	61.5% (48)	50.8% (31)
	Total	155	52	55	48
	Economic barrier	14.3% (29)	13.3% (8)	15.1% (12)	14.1% (9)
	Did not have money	13.3% (27)	13.3% (8)	13.8% (11)	12.5% (8)
	It was expensive	1.0% (2)	0 (0)	1.3% (1)	1.6% (1)
	Cultural and social misconceptions	6.4% (13)	3.3% (2)	12.5% (10)	1.6% (1)
	Unavailability of someone to accompany them	6.4% (13)	3.3% (2)	12.5% (10)	1.6% (1)
	Lack of awareness on available RH services and benefits	71.8% (144)	72.0% (45)	62.5% (50)	76.7% (49)
	Perceived Lack of need to seek services	62.1% (126)	71.7% (43)	62.5% (50)	51.6% (33)
	Did not know where/whom to go to	3.8% (6)	3.3% (2)	(0)	6.3% (4)
	Unaware of such care	5.9% (12)	(0)	(0)	18.8% (12)
	Lack of family support	2.5% (5)	3.4% (2)	3.8% (3)	0% (0)
	Not allowed by Family/Husband	2.0% (4)	1.7% (1)	3.8% (3)	(0)
	Did not have time	0.5% (1)	1.7% (1)	(0)	(0)
	Physical inaccessibility	2.5% (5)	1.7% (1)	1.3% (1)	4.7% (3)
	Found it difficult to reach there	2.5% (5)	1.7% (1)	1.3% (1)	4.7% (3)
	Unqualified RH services	4.0% (8)	3.4% (2)	6.8% (4)	3.2% (2)
	Services were not available here	0.5% (1)	(0)	(0)	1.6% (1)
	The services were not good	0.5% (1)	1.7% (1)	(0)	(0)
	Unsatisfied with the services provided in HF	0.5% (1)	(0)	1.3% (1)	(0)
	Lack of Medicines	2.5% (5)	1.7% (1)	5.5% (3)	1.6% (1)
	Total	160	53	57	50

5.3 Abortion Care

5.3.1 Barriers to utilization of post-abortion health service

As shown in Table 90, the lack of perceived need to use post-abortion health services was the main reason expressed by one girl from AlMaafer and 42.4% of all women. This was followed by limited financial ability (lack of money) as reported by 24.4% of women. Overall, for the total sample, respondents indicated two main reasons that prevented them from seeking post-abortion care services, these included: lack of health awareness of post-abortion care services as reported by 47.1% of respondents, and particularly more so by 57.1% of respondents in AlMaafer district, followed by economic unaffordability as indicated by 46.8% of respondents, particularly, and particularly more so among the respondents in AlSheikh Othman district (50%).

Table 90: Reasons on non-utilization of Post-abortion care service among respondents, who had abortions since March 2015, by all districts and each selected district (n=26)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Perceived Lack of need to seek services	100.0% (1)	(0)	(0)	100.0% (1)
	Total (100%)	1	0	0	1
Women	Perceived Lack of need to seek services	42.4% (14)	37.5% (3)	41.7% (5)	46.3% (6)
	Did not know where/whom to go to	3.0% (1)	(0)	(0)	7.7% (1)
	Unsatisfied with services provided in HFs	3.0% (1)	(0)	8.3% (1)	(0)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
	Services were not available here	3.0% (1)	(0)	(0)	7.7% (1)
	Did not have money	24.2% (8)	50.0% (4)	16.7% (2)	15.4% (2)
	Unavailability of someone to accompany them	6.1% (2)	12.5% (1)	(0)	7.7% (1)
	Lack of medicines	6.1% (2)	(0)	8.3% (1)	7.7% (1)
	It was expensive	12.1% (4)	(0)	25.0% (3)	7.7% (1)
	Total	25	6	8	11
Overall	Economic barrier	46.8% (12)	50.0% (4)	41.7% (5)	21.4% (3)
	Did not have money	30.8% (8)	50.0% (4)	16.7% (2)	14.3% (2)
	It was expensive	16.0% (4)	(0)	25.0% (3)	7.1% (1)
	Cultural and social misconceptions	7.7% (2)	12.5% (1)	0% (0)	7.1% (1)
	Unavailability of someone to accompany them	7.7% (2)	12.5% (1)	(0)	7.1% (1)
	Lack of awareness on available RH services and benefits	47.0% (16)	37.5% (3)	41.7% (5)	57.1% (8)
	Perceived Lack of need to seek services	44.1% (15)	37.5% (3)	41.7% (5)	50.0% (7)
	Did not know where/whom to go to	2.9% (1)	(0)	(0)	7.1% (1)
	Unqualified RH services	11.7% (4)	0% (0)	16.7% (2)	14.2% (2)
	Services were not available here	2.9% (1)	(0)	(0)	7.1% (1)
	Unsatisfied with services provided in HFs	2.9% (1)	(0)	8.3% (1)	(0)
	Lack of Medicines	5.9% (2)	(0)	8.3% (1)	7.1% (1)
	Total	26	6	8	12

5.3.2 Barriers to seeking care for abortion-related complications

Lack of information of available abortion services indicated by the adolescent girl from AlMaafer district. As for the women, the main barriers impeding women from seeking care were lack of money (40%) and lack of knowledge of the health benefits and availability of post-abortion health services (20%) as shown in Table 91.

Table 91: Reasons on non-use of abortion health services among respondents who had abortion complications since March 2015, by all districts and each selected district (n=17)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Did not know of such care	100.0% (1)	(0)	(0)	100.0% (1)
	Total	1	0	0	1
Women	Perceived Lack of need to seek services	20.0% (5)	(0)	25.0% (2)	21.4% (3)
	Did not know of such care	4.0% (1)	(0)	(0)	7.1% (1)
	Unsatisfied with services provided in HFs	4.1% (1)	(0)	(0)	7.1% (1)
	Did not have money	40.0% (10)	66.7% (2)	37.5% (3)	35.7% (5)
	Unavailability of someone to accompany them	8.0% (2)	33.3% (1)	(0)	7.1% (1)
	Lack of medicines	12.0% (3)	(0)	12.5% (1)	14.3% (2)
	It was expensive	12.0% (3)	(0)	25.0% (2)	7.1% (1)
	Total	16	2	6	8
Overall	Economic barrier	50.0% (13)	66.7% (2)	62.5% (5)	40.0% (6)
	Did not have money	38.5% (10)	66.7% (2)	37.5% (3)	33.3% (5)
	It was expensive	11.5% (3)	(0)	25.0% (2)	6.7% (1)
	Cultural and social misconceptions	7.7% (2)	33.3% (1)	0% (0)	6.7% (1)
	Unavailability of someone to accompany them	7.7% (2)	33.3% (1)	(0)	6.7% (1)
	Total	16	2	6	8

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
	Lack of awareness on available RH services and benefits	26.9% (7)	0% (0)	25.0% (2)	33.3% (3)
	Perceived Lack of need to seek services	19.2% (5)	(0)	25.0% (2)	20.0% (3)
	Did not know of such care	7.7% (2)	(0)	(0)	13.3% (2)
	Unqualified RH services	15.3% (4)	0% (0)	12.5% (1)	20.0% (3)
	Unsatisfied with services provided in HFs	3.8% (1)	(0)	(0)	6.7% (1)
	Lack of Medicines	11.5% (3)	(0)	12.5% (1)	13.3% (2)
	Total	17	2	6	9

Overall, two main barriers that prevented women from accessing health facilities for abortion-related complications were: the economic barrier as indicated by 50% of all respondents, followed by lack of knowledge of the benefits and availability of post-abortion care services (26.9%), which was most common among respondents in AlMaafer and Lawdar districts.

5.4 Reproductive Tract Infections (RTIs)

5.4.1 Barriers to seeking care for treatment of RTIs

Table 92 summarizes the reasons for not seeking care for RTIs treatment among respondents. The most common reported reason by 51.7% of all girls was lack of perceived need, which was more commonly reported by all girls in Lawdar district, followed by was lack of money (27.6%), which was more challenging among 75% of girls in AlSheikh Othman district, followed by feeling embarrassed to seek care (10.3%), which was more commonly cited by 18.8% of girls in AlMaafer district. An IDP girl in one FGD indicated, “*I was not bold to seek care in any health facility because of shyness.*” Among the women, two main reasons were indicated that prevented them from seeking treatment for RTIs symptoms, these included lack of perceived need for treatment (39.8%) followed lack of financial abilities (28.7%). Overall, for total sample, the two main reasons that prevented seeking the needed treatment were: lack of health awareness of the benefits of seeking related RTIs treatment and services (50.3%) followed by lack of financial abilities (32.1%).

Table 92: Reasons for not seeking RH services among respondents who experienced RTIs for the last 6 months prior to the study by all districts and each selected district (n=110)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Perceived Lack of need to seek services	51.7% (15)	25.0% (1)	100% (9)	31.3% (5)
	Did not know where/whom to go to	6.9% (2)	(0)	(0)	12.5% (2)
	Did not have money	27.6% (8)	75.0% (3)	(0)	31.3% (5)
	Lack of medicines	3.4% (1)	(0)	(0)	6.3% (1)
	Feeling embarrassed	10.3% (3)	(0)	(0)	18.8% (3)
	Total	26	4	9	13
Women	Perceived Lack of need to seek services	39.8% (43)	52.8% (19)	62.1% (18)	14.0% (6)
	Did not know where/whom to go to	5.6% (6)	2.8% (1)	3.4% (1)	9.3% (4)
	Did not know of such care	2.8% (3)	(0)	(0)	7.0% (3)
	It was difficult to reach there	2.8% (2)	2.8% (1)	(0)	2.3% (1)
	Services were not available here	0.9% (1)	2.8% (1)	(0)	(0)
	Unsatisfied with services provided in HFs	0.9% (1)	(0)	3.4% (1)	(0)
	Not allowed by family/husband	5.6% (6)	5.6% (2)	3.4% (1)	7.0% (3)
	Did not have money	28.7% (31)	22.2% (8)	13.8% (4)	44.2% (19)
	Unavailability of an Escort	4.6% (5)	5.6% (2)	6.9% (2)	2.3% (1)
	Lack of medicines	2.8% (3)	5.6% (2)	(0)	2.3% (1)
	Did not have time	1.9% (2)	(0)	3.4% (1)	2.3% (1)

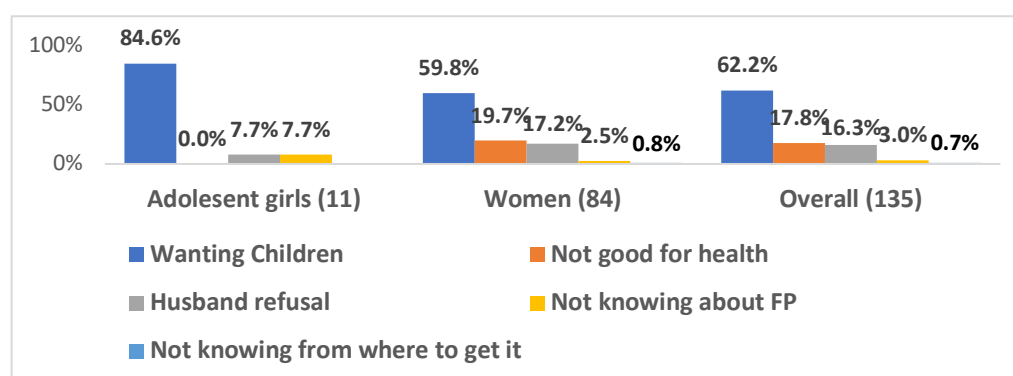
Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Overall	It was expensive	4.6% (5)	(0)	3.4% (1)	9.3% (4)
	Total	84	30	24	30
Overall	Economic barrier	32.1% (44)	27.5% (11)	13.1% (5)	41.5% (28)
	Did not have money	28.5% (39)	27.5% (11)	10.5% (4)	40.7% (24)
Overall	It was expensive	3.6% (5)	(0)	2.6% (1)	6.8% (4)
	Cultural and social misconceptions	6.7% (8)	5.0% (2)	5.3% (2)	7.4% (46)
Overall	Unavailability of someone to accompany them	4.5% (5)	5.0% (2)	5.3% (2)	2.3% (1)
	Feeling embarrassed	2.2% (3)	(0)	(0)	5.1% (3)
Overall	Lack of awareness on available RH services and benefits	50.3% (69)	52.5% (21)	73.7% (28)	33.9% (20)
	Perceived Lack of need to seek services	42.3% (58)	50.0% (20)	71.1% (27)	18.6% (11)
Overall	Did not know where/whom to go to	5.8% (8)	2.5% (1)	2.6% (1)	10.2% (6)
	Did not know of such care	2.2% (3)	(0)	(0)	5.1% (3)
Overall	Lack of family support	5.9% (8)	5.0% (2)	5.2% (2)	6.8% (4)
	Not allowed by family/husband	4.4% (6)	5.0% (2)	2.6% (1)	5.1% (3)
Overall	Did not have time	1.5% (2)	(0)	2.6% (1)	1.7% (1)
	Physical inaccessibility	1.5% (2)	2.5% (1)	0% (0)	1.7% (1)
Overall	It was difficult to reach there	1.5% (2)	2.5% (1)	(0)	1.7% (1)
	Unqualified RH services	4.4% (6)	7.5% (2)	2.6% (1)	3.4% (2)
Overall	Services were not available here	0.7% (1)	2.5% (1)	(0)	(0)
	Unsatisfied with services provided in HF's	0.7% (1)	(0)	2.6% (1)	(0)
Overall	Lack of Medicines	2.9% (4)	5.0% (2)	(0)	3.4% (2)
	Total	110	34	33	43

5.5 Family Planning

5.5.1 Barriers to current non-use of family planning

As shown in Figure 22, the main reason for current non-use of any contraceptive methods among both groups, 84.6% of adolescent girls and 59.8% of women, was associated with the desire to have more children. The other reasons as indicated by the two girls from AlMaafer district, were either husband's refusal or the lack of knowledge of family planning. The most commonly cited reasons among women were: perceived notion that family planning affects their health (19.7%), husband refusal (71.2%), lack of knowledge of FP (2.5%), and lack of knowledge of how to access FP (0.8%).

Figure 22: Reasons reported for the non-use of contraceptives among all girls, all women, and the overall respondents (n=135)



Overall, the majority of non-users' respondents (62.2%) wanted to have children. Fear of contraceptive use could impact health was cited by 17.9% of respondents, followed by

husband refusal to use contraception cited by 16.3%. Comparing across districts as shown in Table 93, respondents in Lawdar district were less likely to report husbands' opposition to FP use (6.8%), but more likely to perceive that family planning use could impact their health (22.7%) compared to the respondents in AlSheikh Othman and AlMaafer districts. A KI health provider indicated *"The husbands refused to attend counselling in the health facility, they don't take care seriously their wives' health."* Many KIs interviewers pointed out *"In most situation, it is husbands who are the main decision-makers and many in favour of having more children. This is why women had high fertility"*.

Table 93: Reasons that hinder contraceptives use among current non-users' respondents by each district (n=135)

Respondents	Reasons for not currently using FP	AlSheikh Othman	Lawdar	AlMaafer
Girls	Wanting children (11)	100.0% (3)	100.0% (5)	60.0% (3)
	Not knowing about FP (1)	0.0% (0)	0.0% (0)	20.0% (1)
	Husband refusal (1)	0.0% (0)	0.0% (0)	20.0% (1)
	Total	3	5	5
Women	Wanting children (73)	63.6% (14)	61.5% (24)	57.4% (35)
	Not knowing about FP (3)	4.5% (1)	5.1% (2)	0.0% (0)
	Not knowing from where to get it (1)	0.0% (0)	0.0% (0)	1.6% (1)
	Not good for health (24)	9.1% (2)	25.6% (10)	19.7% (12)
	Husband refusal (21)	22.7% (5)	7.7% (3)	21.3% (13)
	Total	22	39	61
Overall	Wanting children (84)	68.0% (17)	65.9% (29)	57.6% (38)
	Not knowing about FP (4)	4.0% (1)	4.5% (2)	1.5% (1)
	Not knowing from where to get it (1)	0.0% (0)	0.0% (0)	1.5% (1)
	Not good for health (24)	8.0% (2)	22.7% (10)	18.2% (12)
	Husband refusal (22)	20.0% (5)	6.8% (3)	21.2% (14)
	Total	25	44	66

5.6 Utilization of Health Facilities for RH services

5.6.1 Barriers to utilization of RH services in any health facility

Table 94 summarizes the reasons among respondents, who never utilized any health facility for RH services. The majority of all girls (81.7%) perceived the lack of need to use RH services followed by limited financial abilities (4.2%). Among women, 40.9% also indicated lack of perceived need to use any health facility for RH services, followed by limited financial abilities (12.9%), and lack of satisfaction with the quality of RH serviced provided at the HFs (9.1%). Overall, the most common barriers, across the three districts, were lack of health awareness of the RH services' benefits and availability (69.7%), followed by the limited quality of RH health services (13.3%), and financial limitations (12.0%). A KI health provider said, *"Irregular presence of doctors, overcrowding in health centers, disrespectful treatment of health care providers combined with low health awareness in our society and poor financial conditions were all barriers preventing women from using the health facilities for RH services."*

Table 94: Reasons on Never being utilized at any health facility for RH services among respondents by all districts and each selected district (n=260)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Perceived Lack of need to seek services	81.7% (156)	78.2% (43)	88.1% (52)	79.2% (61)
	Did not know where/whom to go to	2.6% (5)	1.8% (1)	0% (0)	5.2% (4)
	Did not know of such care	1.6% (3)	3.6% (2)	0% (0)	1.3% (1)

Respondents	Reasons	All districts	AlSheikh Othman	Lawdar	AlMaafer
	Services were not available there	1.0% (2)	1.8% (1)	0% (0)	1.3% (1)
	Did not have money	4.2% (8)	7.3% (4)	1.7% (1)	3.9% (3)
	It was expensive	3.7% (7)	5.5% (3)	3.4% (2)	2.6% (2)
	Unavailability of someone to accompany them	1.0% (2)	0% (0)	3.4% (2)	0% (0)
	Unsatisfied with services provided in HFs	0.5% (1)	0% (0)	0% (0)	1.3% (1)
	Lack of medicines	3.1% (6)	1.8% (1)	1.7% (1)	5.2% (4)
	Did not have time	0.5% (1)	0% (0)	1.7% (1)	0% (0)
	Total	173	50	53	70
Women	Perceived Lack of need to seek services	40.9% (54)	37.1% (13)	57.7% (30)	24.4% (11)
	Did not know where/whom to go to	3.0% (4)	2.9% (1)	0% (0)	6.7% (3)
	Did not know of such care	2.3% (3)	2.9% (1)	0% (0)	4.4% (2)
	It was difficult to reach there	2.3% (3)	0% (0)	1.9% (1)	4.4% (2)
	Services were not available there	4.5% (6)	5.7% (2)	0% (0)	8.9% (4)
	Unsatisfied with services provided in HFs	9.1% (12)	14.3 (5)	7.7% (4)	6.7% (3)
	Not allowed by family/husband	1.5% (2)	2.9% (1)	2.9% (1)	0% (0)
	Did not have money	12.9% (17)	8.6% (3)	11.5% (6)	17.8% (8)
	Unavailability of someone to accompany them	1.5% (2)	0% (0)	1.9% (1)	2.2% (1)
	The services were not good	6.9% (6)	5.7% (2)	3.8% (2)	4.4% (2)
	Concerned about being treated by a male physician or health care provider	0.8% (1)	0% (0)	1.9% (1)	0% (0)
	Lack of medicines	6.8% (9)	11.4% (4)	3.8% (2)	6.7% (3)
	Did not have time	3.0% (4)	2.9% (1)	1.9% (1)	4.4% (2)
	It was expensive	5.3% (7)	2.9% (1)	5.8% (3)	6.7% (3)
	Health facility was far away	1.5% (2)	2.9% (1)	0% (0)	2.2% (1)
	Total	87	21	35	31
Overall	Economic barrier	12.0% (39)	15.5% (11)	10.8% (12)	12.9% (16)
	Did not have money	7.7% (25)	9.9% (7)	6.3% (7)	8.9% (11)
	It was expensive	4.3% (14)	5.6% (4)	4.5% (5)	4.0% (5)
	Cultural and social misconceptions	1.2% (4)	0% (0)	2.7% (3)	0.8% (1)
	Unavailability of someone to accompany them	1.2% (4)	0% (0)	2.7% (3)	0.8% (1)
	Lack of awareness on available RH services and benefits	69.7% (225)	68.5% (61)	73.2% (82)	66.1% (82)
	Perceived Lack of need to seek services	65.0% (210)	62.9% (56)	73.2% (82)	58.1% (72)
	Did not know where/whom to go to	2.8% (9)	2.2% (2)	0% (0)	5.6% (7)
	Did not know of such care	1.9% (6)	3.4% (3)	0% (0)	2.4% (3)
	Lack of family support	2.1% (7)	2.2% (2)	2.7% (3)	1.2% (2)
	Not allowed by family/husband	0.6% (2)	1.1% (1)	0.9% (1)	0% (0)
	Did not have time	1.5% (5)	1.1% (1)	1.8% (2)	1.2% (2)
	Physical inaccessibility	1.5% (5)	1.1% (1)	0.9% (1)	2.0% (3)
	Difficult to reach	0.9% (3)	0% (0)	0.9% (1)	1.2% (2)
	Health facility was far away	0.6% (2)	1.1% (1)	0% (0)	0.8% (1)
	Unqualified RH services	13.3% (43)	16.8% (15)	9.0% (10)	13.2% (18)
	Services were not available there	2.5% (8)	3.4% (3)	0% (0)	4.0% (5)
	Unsatisfied with services provided in HFs	4.0% (13)	5.6% (5)	3.6% (4)	2.4% (4)
	The services were not good	1.9% (6)	2.2% (2)	1.8% (2)	1.2% (2)
	Concerned about being treated by a male physician or health care provider	0.3% (1)	0% (0)	0.9% (1)	0% (0)
	Lack of Medicines	4.6% (15)	5.6% (5)	2.7% (3)	5.6% (7)
	Total	260	71	88	101

5.6.2 Barriers to use only public health facilities for RH services

Table 95 summarized the reasons behind lack of use public health facilities for RH health services, during the last five years since the war started. Lack of medicines and poor quality of services were the two main reasons reported by the three girls. Among women, two common reasons reported: lack of attention towards cases (22.8%) and unavailability of medicines (21.1%). According to one community volunteer in one of the FGDs *“Lack of medicines and equipment made women reluctant to use RH services.”* Other reasons impeding use were attributed poor quality of health services (12.7%) and lack of respectful treatment for patients (12.3%).

Table 95: Reasons on non-utilization of public health facilities for RH services among respondents who never used the public health facilities in the last five years, by all districts and each selected district

Respondents	Reasons for unuse of RH services in public HFs	All districts	AlSheikh Othman	Lawdar	AlMaafer
Girls	Lack of medicines	50.0% (2)	0% (0)	0% (0)	50.0% (2)
	The services were not good	50.0% (2)	0% (0)	0% (0)	50.0% (2)
	Total	3	0	0	3
Women	Lack of attention towards cases	22.8% (13)	33.3% (6)	9.1% (1)	21.4% (6)
	Lack of medicines	21.1% (12)	11.1% (2)	18.2% (2)	28.6% (8)
	It was expensive	7.0% (4)	16.7% (3)	0% (0)	3.6% (1)
	The services were not good	12.3% (7)	5.6% (1)	0% (0)	21.4% (6)
	Lack of respectful care for patients	12.3% (7)	27.8% (5)	9.1% (1)	3.6% (1)
	Need someone to facilitate	5.3% (3)	5.6% (1)	0% (0)	7.1% (2)
	Availability of services in the morning only	7.0% (4)	0% (0)	18.2% (2)	7.1% (2)
	Lack of medical equipment	1.8% (1)	0% (0)	0% (0)	3.6% (1)
	Difficult to reach	3.5% (2)	0% (0)	18.2% (2)	0% (0)
	Not allowed by the husband	1.8% (1)	0% (0)	9.1% (1)	0% (0)
	Perceived Lack of need to seek services	3.5% (2)	0% (0)	9.1% (1)	3.6% (1)
	Concerned about being treated by a male physician or health care provider	1.8% (1)	0% (0)	9.1% (1)	0% (0)
	Total	34	8	8	18
Overall	Economic barrier	6.6% (4)	16.7% (3)	0% (0)	3.1% (1)
	It was expensive	6.6% (4)	16.7% (3)	0% (0)	3.1% (1)
	Lack of health awareness on available RH services and benefits	3.3% (2)	0% (0)	9.1% (1)	3.1% (1)
	Perceived Lack of need to seek services	3.3% (2)	0% (0)	9.1% (1)	3.1% (1)
	Lack of family support	1.6% (1)	0% (0)	9.1% (1)	0% (0)
	Not allowed by the family/husband	1.6% (1)	0% (0)	9.1% (1)	0% (0)
	Physical inaccessibility	3.3% (2)	0% (0)	18.2% (2)	0% (0)
	Difficult to reach	3.3% (2)	0% (0)	18.2% (2)	0% (0)
	Unqualified RH services	85.2% (52)	83.3% (15)	63.6% (7)	93.9% (30)
	Lack of attention towards cases	21.3% (13)	33.3% (6)	9.1% (1)	18.8% (6)
	The services were not good	14.8% (9)	5.6% (1)	0% (0)	25.0% (8)
	Concerned about being treated by a male physician or health care provider	1.6% (1)	0% (0)	9.1% (1)	0% (0)
	Lack of Medicines	23.0% (14)	11.1% (2)	18.2% (2)	31.3% (10)
	Lack of respectful care for patients	11.5% (7)	27.8% (5)	9.1% (1)	3.1% (1)
	Need someone to facilitate	4.9% (3)	5.6% (1)	0% (0)	6.3% (2)
	Availability of services in the morning only	6.6% (4)	0% (0)	18.2% (2)	6.3% (2)
	Lack of medical equipment	1.6% (1)	0% (0)	0% (0)	3.1% (1)
	Total	37	8	8	21

Overall, the main barrier indicated by 85.2% of all respondents was attributed to the poor quality of RH services provided at the public health facilities. A KI Health office general director indicated, *“Yes, there are financial, geographical, transportation barriers. But, even if they had money and transportation and went to the health facility, they will not be able to find all the reproductive health services they needed, especially medicines, childbirth, diagnostic tests, advice, and privacy.”* Also, a community volunteer in one FGD added, *“Irregular presence of doctors, overcrowding in health centers, disrespectful treatment from health providers combined with low health awareness in our society and poor financial conditions were barriers facing women.”* A male in another FGD said, *“mistreatment, disrespect, and abuse by health staff were reasons for poor RH services that prevent women to use public health facilities.”*

Discussion:

This situation analysis, applying the mixed-method design, is the first in Yemen to comprehensively assess the reproductive health for adolescent girls and women aged 10-49 years from both the demand and supply sides. It serves as a baseline data for measuring the progress. The focus on the demand side covered the different RH needs among the adolescent girls and women, their care-seeking behaviour, and barriers for accessing the available RH services. On the supply side, the focus was on assessing the readiness of the health facilities in the provision of RH services by exploring the availability of different resources, such as infrastructure, human resources, supply of emergency RH kits, and RH available services.

Yemen now is in the sixth year of its armed conflict, which has led to the displacement of a large number of its population, in addition to the increase in unemployment and poverty, and a precarious public health system, as nearly 50% of the health facilities remain functional. Moreover, the quality of services has significantly decreased due to shortages of health care providers who have either fled or are working most of their time in private health facilities for economic reasons. In addition, private health facilities have proliferated and pulled in the health specialists. This situation has deeply impacted RH for adolescent girls and women.

1- Child marriage and early pregnancy:

Child marriage (marriage below the age of 18) is often accompanied by early pregnancy (before the age of 20 years) and it presents a significant health problem for adolescent girls often meaning the end of a girl's education and vocational opportunities. This study has found that 19.1% of girls aged 15-19 years were married, which is almost the same as that found by the Yemen-NHDS 2013 (17.1%). Our study reported higher prevalence of child marriage and teenage pregnancy. It also showed an increase of child marriage among adolescent girls aged 15-19 years, since the breakout of the armed conflict and was compared with the results of Yemen NHDS-2013 from 3.3% to 14.0%. Similarly, teenage pregnancy has increased from 10.7% to 14%. According to a UNICEF qualitative study in Yemen, child marriage has been increasing among girls 15-19 years due to socioeconomic insecurity as a result of the war and displacement of the population¹⁷. Our assessment support results of previous studies that show that girls in conflict areas are more vulnerable to child marriage because it perceived as a tool that protect them from the threats of sexual violence or enable them to get access to financial resources for their family^{18,19}. Our study also showed that rates of preterm deliveries and stillbirths were higher among girls (21.4% and 7.1%) compared to women aged 20-49 years (2.5% and 3.5%), which confirms that teenage pregnancy tend to increase the probability of having stillbirths and premature infants.²⁰

It is worth noting that Yemen currently lacks any legislation regulating the minimum age of marriage. The regulation under Article 15 of the Personal Status Law merely states that a marriage cannot be consummated until the woman is "ready," that is, by ready: has reached puberty. In 1999, a law regulating the minimum age of marriage for females at the age of 16 years was amended without specifying the minimum age of marriage. Unfortunately, neither the parliament nor the president took further steps to adopt the law. In January 2014, Yemen's National Dialogue Conference, a forum which was established to formulate a draft of a new constitution, recommended that the government set the minimum age for marriage at 18 years in accordance with the international standards. However, the political and war crisis in Yemen has paralysed parliamentary actions. It is time now to create policies to roll out child marriage

through extensive awareness at all levels and to revise, when possible, the marriage law, which was formulated just before the war broke out.

2- Maternal Continuum of Care (MCOC)

One of the strategies that has recently received attention to improve maternal health and reduce maternal morbidity and mortality is the continuum of maternal care²¹. It combines skilled ANC follow-up of at least 4 visits, skilled birth attendants at birth, and PNC of at least 2 visits. This study has used the pregnancies among respondents who have been pregnant and. We analysed the continuum of maternal care for reported pregnancies that were terminated after 27 weeks of pregnancy since the start of the war in March 2015. The analysis focused on: antenatal care provided by health professionals without specifying the number of visits (data not included), skilled birth attendants at birth irrespective of place of delivery, and postnatal care by health professional for at least 2 visits.

Findings in this study showed some good progress towards extending the coverage of ANC by health professional, SBA and PNC. 80% of the respondents indicated that they have had ANC follow-up during pregnancy; 61% had SBA during delivery even though home-deliveries were 59.3%, but nearly 41% were assisted by SBA, and 29% had PNC by health professionals. These results represent an important increase compared to figures reported in the Yemen-NDHS-2013 (60% ANC, 45% SBA, and 20% PNC). The progress made could be attributed to the backdrop of insecurity that started taking place in the last 3 months of 2016, for the first time since the war started 2015. In addition, the demand for services has surged in public health services that are managed or supported by international organizations, due to the high cost of care in private health facilities.²². But for the PNC, the increase was minimal compared with NDHS. However, only 20% of respondents have received all the three types of maternal care: SBA at ANC, childbirth, and PNC. In other words, 80% of pregnant respondents could access ANC, but about 20% did not continue on the pathway to receive skilled birth attendance. Further, about 61% of respondents who received antenatal care were attended by a skilled health provider at delivery. After delivery, a substantial number of them (68%) did not go on to receive postnatal care. This means that after receiving ANC, many women (about 60%) dropped out from the pathway of the continued care and did not have SBA or PNC. More dropouts have occurred between delivery and PNC than between ANC and the delivery period. The drop out of skilled birth attendance and postnatal care could be attributed to three reasons. The first reason is attributed to the limited quality of ANC provided in health facilities. It was perceived to be neither optimal nor focused, although almost all health facilities were providing ANC. Antenatal care usually represents an opportunity to deliver interventions for: improving maternal health, providing health education, encouraging skilled attendance at birth and PNC, and for using health facilities for emergency obstetric care, in addition to teaching women about danger signs of pregnancy complications. The second reason was attributed to the unavailability of childbirth services that operate at 24 hours in all the health centres assessed in this study. The third reason was the financial inaccessibility. The huge drop out in PNC could be due associated with the cultural traditions in Yemen, where a woman after childbirth is usually obliged to rest at home for 40 days. During that time, she is exempted from house duties, and is attended on and provided with good nutrient food to restore her strength.

Given this context, more efforts are needed to strengthen the capacity of midwives in PNC to focus on maternal and newborn care rather than utilize them in a broad range of primary health care, as are involved now. Also, it is crucial to institute MCOC as an indicator for maternal

health. More focus should be given to the quality of ANC to encourage the use of SBA and PNC. Furthermore, the study demonstrates that 14% of women did not receive any care. This also indicates the need for additional efforts, not only to improve the completion rates of the continuum of care, but also to reduce the number of women who do not receive any care. AlMaafer district had the lowest rate (16.8%) of respondents who had completed MCOC compared to AlSheikh Othman and Lawdar districts' respondents (23.5% and 22.4% respectively). This is because this district has limited RH health resources higher poverty rates. Therefore, more programme efforts have to be re-directed to this district.

3- Unintended pregnancies and Family planning

According to the Centres for Disease Control and Prevention, an unintended pregnancy is “a pregnancy that is mistimed, unplanned, or unwanted at the time of conception.”²³ Unintended pregnancy is significantly associated with complications during pregnancy.²⁴ Family planning, as one of the four pillars of safe motherhood, reduces the chances of unwanted pregnancy its associated complications including the risks of having an unsafe abortion. Findings from this assessment showed an increase in unintended pregnancies from 27% in 2016-2018 to 40% in 2019. Delineation in the process of negotiation for the procurement and release of contraceptives from ports was the main reason why many public health facilities suffered from stockouts in 2019 for contraceptives' methods. The Yemen NHDS-2013 reported 35% of unintended pregnancies. On the other hand, the use of for modern family planning methods in this study was 49.3%, which was higher than the 29.2% reported use in Yemen NHDS-2013. 37% of current users could afford to obtain their contraceptive methods from private institutions. Women in AlMaafer district, which was socioeconomically the poorest district, had the largest proportion (54.8%) of unintended pregnancies during the survey and the lowest current use of modern contraceptives (41.6%). Maintaining a regular supply of contraceptives as well as private counselling on family planning to empower women for choosing the contraceptive methods they prefer is crucial to prevent unwanted pregnancies. Training of staff on long-acting contraceptives, such as IUD and implant insertion & removal, is needed (task shifting) in order to qualify the midwives and the needs of women, because of the severe shortage of female doctors coupled with unavailability of effective referral system in public health facilities.

4- Variation of Caesarean Section rates across districts

This study has also observed that the caesarean section rate among respondents in AlSheikh Othman district was threefold the rates reported among respondents in AlMaafer district (15.7% versus 5.6%). This could be attributed to several factors. First increase in CS rates is often associated with advanced maternal age. However, the study showed that mothers who were 35 and older had a higher overall prevalence of maternal health conditions and obstetrical complications as well as higher CS rates compared to mothers aged 20 to 34 years with the same health condition(s) or obstetrical complication(s).²⁵ In our study, the women respondents in AlSheikh Othman composed of 51% of older adult women (age 35-49 years) compared to 34% of women respondents in AlMaafer women. Another reason, AlSheikh Othman is an urban area with better socioeconomic status, had more opportunities to access comprehensive EmOC and were better educated to have CS on demand. However, AlMaafer district is peri-urban/rural with very limited C-EmOC, as explored in this study, and there was extremely poor availability of resources in public health facilities, even the majority of CSs (86%) in this district were done in private health facilities. Moreover, the high poverty among women in AlMaafer district- where 73% of them relied on daily-wages and relief as a main

source of family expenditure, has prevented them from going to private health facilities due to the high cost of their services. Anyhow, the rate of CSs in AlMaafer was within the acceptable standard rate recommended by WHO (5%-15%).²⁶

5- Other related RH issues:

a) Menstrual health

More than 80% of menstruating adolescent girls and women in this assessment used only sanitary pads. This due to the availability of affordable sanitary pads in the country. Severe dysmenorrhoea is a common health problem among girls and women and was reported by 50% of respondents. Among which, 66% indicated using medications for pain relief. Women were more likely to consult with health workers (18%) than girls (6%). The use of herbal medicine for pain management was not prevalent (6%) across the three districts. Studies show an overall prevalence of severe dysmenorrhea between 2%-29% and is usually associated with distress.²⁷ In this study, severe pain was high (51%). This could be due to the distress generated from armed conflict. The observed rates as well are in accordance with the findings observed in other conflict settings, such for example among Syrian refugees, where about 52% of females had severe dysmenorrhea.²⁸ Anxiety, emotional instability, and stress are also associated with increased production of uterine prostaglandins. This results in stimulating myometrial contractions and ischaemia. It has also been found that women with severe dysmenorrhoea have higher levels of prostaglandins in their menstrual fluid.²⁹

b) Abortions

This study has found high rates in reported abortion. Nearly one in four respondents had experienced an abortion. Among them, 7.8% had had repeated abortions during the last five years and 77.6% of the respondents had experienced abortion-related complications. Induced abortion in Yemen is forbidden and is only allowed in cases to save the mother's life. Therefore, it was impossible to determine in this assessment whether the reported abortions were spontaneous or unsafely induced. No recent data, beyond our study, on abortion exist in Yemen. According to one study in Libya, increased rates of abortion were significantly with the ongoing war. This was also associated with increased stress levels faced by women during pregnancy.³⁰

c) Reproductive Tract Infections (RTIs) and Intimate Partner Violence (IPV)

One out four girls and two out of three women self-reported to have had at least one RTIs-related symptom during the last six months prior to the assessment. The majority of girls (54%) and 36% of women did not seek care to treat their illnesses. These rates were higher than those reported by the Yemen NHDS 2013 that were around 22%. These increase rates could be attributed to the availability of RTIs-related services in the health facilities. Only 30% (the 3 hospitals and 1 HC) provided RTIs-related treatment, and HIV/AIDs testing was only available in two hospitals. The majority of respondents (53%) who sought care for their RTIs-related symptom received the treatment from private health facilities.

8.3% of the respondents in this study reported have been exposed to IPV, within the last five years. The participants in the qualitative indicated an increase in IPV and associated this increase with increased unemployment and poverty among families. There is no data that accurately quantify IPV incidence in Yemen. The Yemen NHDS-2013 data found that 48% of women aged 15-49 years perceive wife beating to be acceptable, in at least one of the following scenarios: if she burns the food; if she argues with the husband; if the wife goes out

without her husband's consent; and/or if she neglects her children. Based on this, we perceive the reports rates of IPV in our estimate to be underestimated. Moreover, in our study, GBV management care and provision of the needed health services provision was available in only one hospital of the 13 public health facilities assessed. Further, over 90% of girls and women in this assessment supported the provision of GBV services in public health facilities.

d) Complications during pregnancy

Life-threatening complications during pregnancy include pregnancies with bleeding, fever, headache/blurred vision, Edema, less/no movement of the foetus, anaemia, and pregnancy associated with diseases). In our assessment 34% of the girls and women reported experiencing complications during their most recent pregnancy i.e., in the last five years prior to this assessment. This figure is higher than that set by WHO standard of pregnancy complications of 15% of all pregnant women.³¹ The majority of pregnant women with complications (over 50%) in this assessment sought care from private health facilities, with the care seeking rates to be lowest in AlMaafer district, due to poor availability of full packages of basic EmOC services in public health facilities, where only one of 13 assessed public health facilities (one hospital) provided this service.

Armed conflict poses adverse and irreversible impacts on health systems and the health of the population, particularly for girls and women.³² The harm done to girls and women in the context of this conflict is significant, especially when rates are compared to the baselines before the war. A strong association exist between conflict and gender-based violence on one hand and intimate partner violence as well as increase in pregnancy related complications such as bleeding and infections. The rates observed in this assessment clearly demonstrate a similar pattern. Also, armed conflicts increase the risk of girls and women to RTIs due to poor access to health care and testing.^{33,34,35} In conflicts, women face immense distress and moral degradation due to the conflict and displacement, diminished personal security, increased rates of GBV, and increased rates of psychological trauma due to loss and death of family members, increasing poverty and financial pressures, the need to replace their roles of men, and the break-down of social cohesion. This intense distress had significant impact on the health of girls and women including that of RH. According to Yemen NHDS-2103, 32% of women were malnourished, 78% were anaemic (among which, 49% had moderate anaemia and 9% had severe anaemia, and they had increased rates of malaria and poor access to health care facilities. The conflict further increases their vulnerability to further weaken a woman's reproductive health and exposes them to complications.

5- Barriers on RH care seeking:

The study identified various barriers to seeking and accessing RH services. The armed conflict for five years in Yemen has produced enduring political instability, high inflation, as well as created severe levels of homelessness, displacement, unemployment, and poverty. Consequently, the financial barrier was the main obstacle in seeking timely and needed RH care and services among respondents in this study. The respondents clearly indicated that could not afford transportation costs, services' fees, supplies, and medicines. This was followed by the limited RH awareness, specifically among adolescent girls, about various issues such as family planning (31% lacked any knowledge), RTIs (50% lacked any knowledge), HIV/AIDs (46% lacked any knowledge), gender-based violence (21.6% lacked any knowledge), as well as limited knowledge on how to access RH services. Our findings are similar to those reported elsewhere. This study showed that the limited provision of adequate

health information was attributed to inadequate human resources, workload, and inadequate funding. This resulted that health education activities were ad hoc, and often relied on volunteers to educate women on reproductive health matters. The mass media approaches previously used for health education and promotion were no longer utilized due to the conflict impacts, thus, resulting in poor coverage of RH health information.³⁶ Our findings also showed critical gaps in public health facility readiness and health workers preparedness to provide quality RH services. The assessed health facilities all lacked regular supply drugs and contraceptives. Many of the health facilities did not even have the minimum resources to provide the basic and essential RH services. This was especially true in Lawdar and AlMaafer districts. Women also expressed that disrespectful treatment or lack of interest by the health care providers in public health facilities as well as lack of privacy and confidentiality. Other barriers associated as well with the low uptake of RH services included: lack of family support, cultural and beliefs, and physical inaccessibility. These last three barriers were more pronounced in Lawdar and AlMaafer districts compared to AISheikh Othman, since higher proportion of women in these two districts lived in scattered areas with difficult roads. This often led them to solely rely on their husbands to provide money and on male family members to escort them to access RH services.

Based on these findings, cost-effective interventions are needed for both the demand and supply-side strategies, to enhance utilization and provision of comprehensive RH care. Supply-side interventions should focus on improving the quality and quantity of the services provided, through health system strengthening combined with proper training of health workers. Facility-based initiatives, such as quality improvement programs that focus on effective engagement of community leaders and female members have to be initiated and developed early on during the planning and implementation phases. This is instrumental for decision-making and programs' sustainability. Demand-side interventions focus on increasing service utilization by influencing the health behaviours of individuals and communities through mobilizing the entire community, including males. This study showed that girls and women were more likely to consult their relatives, neighbours, and friends as opposed to health workers. This recap the importance of educating entire communities on the RH benefits and services. Also, it is important to engage and improve the male's knowledge and understanding of reproductive health, especially that men in Yemen are the sole decision makers in three out of four families. These combined efforts could help impeding cultural-beliefs barriers and improve family support.

6- Main common findings between the quantitative and qualitative results:

To gain in-depth understanding and precise validation on RH issues in Yemen, this study was carried out using a mixed-methods design, the qualitative and the quantitative methods. Both components were conducted concurrently and analysed independently. The most frequent RH problems appearing in the quantitative and qualitative findings were early marriage and pregnancy, pregnancy-related complications including abortions, RTIs and the intimate partner violence (IPV). The qualitative part also included anaemia, puerperal sepsis, and high fertility as major problems. Probing both methods also revealed congruence along the available RH services (the supply side). All qualitative interviewers mentioned shortages of necessary equipment and supplies, lack of full RH service packages in the majority of the health facilities, inadequate of qualified and responsible healthcare workers, and lack of RH systems were the most important findings as reflected with the assessment of health facilities and poor RH services utilisation from the demand side (women and girls). The findings of the survey and

qualitative interviews and discussions were largely similar in that financial constraints, lack of awareness on RH services benefits, poor quality of RH services RH including providers' miscommunication were the three main barriers for girls and women to seek RH care services. Though not many women in the quantitative part mentioned on social and cultural misconception, scarcity and high transportation cost, and lack of family support particularly husbands as barriers, the majority of KIs and FGDs participants stressed on these three factors as major constraints for uptake of RH services. Regarding the IPV, the qualitative part revealed factors related to supply and demand side factors (unavailability of services and providers training on GBV, fear of women IPV victims to report due to denigration from their communities, and male dominant on women's behaviour due to the religious misconception "*Men are the protectors and maintainers of women.*")

In general, the qualitative part provided comprehensive understanding of the factors that contributed to girls' women's behaviour. However, the findings from the survey (quantitative) were generally consistent with findings from the KIs and FGDs interviews, and this ensures the validity of this study findings.

Conclusion

The last six years of conflict in Yemen led to the destruction of public health facilities, shortening of medical supplies and equipment, blockage of contraceptives, limited access to and poor quality of RH services. Our situational analysis has identified a number of challenges that are specific to both demand and supply factors. The demand challenges included poverty combined with high out-of-pocket costs, low awareness of RH benefits and services, lack of family support in addition to cultural beliefs. On the other hand, the supply challenges included poor quality of RH services attributed to human resources shortages with imbalances in distribution of female specialized doctors and qualified midwives among and within the three districts. This was coupled with insufficient in-service training needed for available staff, poor infrastructure and unavailability of comprehensive RH services, irregular supply of medicines, contraceptives, and medical equipment. Other challenges also included absence of an effective referral system, weak community-based RH services, and lack of integration and coordination among the existent RH supportive organizations, although they were facilitators to access RH services especially in ANC and childbirth care in areas where these organizations were available. Effective adolescent-friendly RH services were totally unavailable. This prevailing situation was further impacted by COVID-19 pandemic. In April 2020, a national lockdown was imposed throughout the country, which led to disruption of available RH services at all levels of the health system (hospitals, health centers, PHCUs and community-based services); thus, impacting the continuation of essential health services. It is necessary to enable strengthen the damage health system in Yemen and equip health facilities to provide comprehensive RH services and to empower adolescent girls and women so that they can have access to comprehensive and qualified RH services that meet their RH needs and problems.

Recommendations

The findings of this assessment indicated that access to reproductive health services remains a big challenge face woman and tremendously among adolescent girls to meeting their reproductive health needs. It was found one-third of pregnancies and a quarter of childbirth were with life-threatening conditions that require medical care. 3 of 4 respondents, who had abortion, reported complication. 53% of respondents have experienced at least one RTIs-

related symptom within the six-months period. only 20% of respondents completed the full maternal continuum of care pathway. Nearly two- third of girls and women were not monitored during the postpartum period. Despite gains in family planning use still the informed choice was limited by a narrow range of Family planning methods in many health facilities, especially in AlMaafaer and Lawdar, and irregular supply that led to high rate of unwanted pregnancies (40%). Poor quality of care, unacceptable behaviour of services providers, and lack of awareness on available RH services and its benefits (severe among adolescent girls) combined with increased poverty were the common reasons that girls, women and their communities indicated for poor access, low demand, and underutilization of available RH services. The inadequate availability of RH services was due to shortages of skilled human resources and poor distribution, poor infrastructure to provide essential RH services combined with lack of referral system, in addition to user fees and out-of-pocket payments for needed medicines and laboratory tests increased the financial burden for girls and women that were poor to pay for services. The COVID-19 epidemic led to disruption of RH services at all levels. Therefore, the recommendations to improve RH status of women and adolescent girls include

- 1- Provision of comprehensive RH services with the following:

- Improving the quality of ANC that include education of all women about danger signs, possible complications, and where to seek help and treatment for existing conditions that might be aggravated by pregnancy, such as anaemia, non-communicable diseases etc.
- Promoting Skilled Birth Attendance at Home and in health facilities with ensuring availability of Emergency Obstetric Care in health facilities by upgrading existing infrastructure, trained staff, and service provision guidelines.
- Enhancing community-based postnatal by community midwives.
- Ensuring Access and regular supply to wide range of Family Planning methods and related Information and counselling services.
- Supporting safe postabortion care by training providers in manual vacuum aspiration (a safer and less expensive method).
- Establishing referral services system.
- Coordinating Reproductive Health Services and management of RTIs/HIV/AIDS and PMTCT services, focusing too on general information and education, improved health-seeking behavior for RTIs treatment.
- Instituting GBV program in public health facilities.

- 2- Establishing adolescent-friendly RH services that have qualified human resources and accessible RH services in public health facilities.

- 3- Adoption of policies to ensure sustainability of essential RH services in the context of COVID-19 pandemic, by ensuring availability of essential supplies, as well as adequate infection prevention and control capacities.

The effectiveness of these programs requires:

- a) Functional RH health system that makes the good quality of RH services available, accessible and affordable through:
 - addressing human resources shortage and training capacity for upgrading the skills of the providers,
 - revising the logistics & supply system,

- improving client-provider interactions,
 - Enhancing provider accountability such as adaptation of Maternal Continuum of Care indicator to measure maternal service delivery performance,
 - use of quality assurance approach,
 - Adopting financing schemes such as voucher-scheme
- b) Information, Education, and Communication (IEC) and Behavior Change Communication (BCC)
- Raising awareness on already available improved RH services and its benefits targeting the entire communities and utilizing all channels including mass media to promote behaviour change and improve health-seeking behaviour for RH services.
- c) Enhancing an effective collaboration between the Ministry of Public Health & Population and donors including INGOs (International Non-Governmental Organization) and local CSOs (civil society organizations) to enforce quality appraisals and improvements and consider exemption of service fees program at the public health facilities level, as well as community-based services. Addressing inequalities across governorates and districts in access to and quality of reproductive services is equally important to reduce disparities.

Challenges and Limitations

The most important challenge in this study was protecting the safety of researchers, due to the existing war and shooting that can unexpectedly and randomly be intensified. In order to mitigate these impacts, local researchers and teams were recruited from each district to carry out the respective data collection in their districts. This is believed to serve as the optimal protection scenario for their safety, since they know their local context best and are more likely to be trusted among their local communities during data collection. Another challenge was the sensitivity of certain RH topics that was addressed during data collection, such as gender-based violence. To try to mitigate this challenge, the data collection teams were carefully trained on how to interview respondents in private settings and maintain confidentiality, respect cultural and prevail social norms, as well as avoid and deal with conflict if it arises. Furthermore, another equally important challenge was that in some communities, such as in the Lawdar district in Abian governorate, women were not allowed to leave their homes without a male relative escort. Hence, it was essential to recruit qualified and trusted males in this study in such communities, especially during data collection with men. Finally, access to the records at the health facilities was time-consuming since each department had its own registry and health facilities lacked computerized systems. To be able to overcome this, the research team initiated introductory meetings with governorate and district health office directors to seek their approval and their facilitation to implement the research as well as to engage the higher concerned authorities beforehand.

It should be noted that This assessment was only limited to Aden and two contested areas. Although, it was not a national-based survey, the selection of these three sites with different geographical areas: urban, peri-urban and rural is believed to provide an

accurate representation and a snapshot of the prevailing RH situation and associated challenges in Yemen at large.

Dissemination

The findings from this situation analysis data are the first to provide a baseline data, to inform a better-grounded understanding of adolescent girls' and women's RH demands and needs in the selected three districts in Yemen since the war. The results will be disseminated at national, regional, as well as global levels to inform appropriate SRH service delivery and response. The analysis results will be fully coordinated and consulted with WHO, specifically with WHO country office in Yemen, the Department of Reproductive health, and the Global Health Cluster. This coordination is hoped to engage all relevant and concerned stakeholders, such as RHIAWG and other health cluster partners, to inform service delivery based on identified RH needs from both the demand and supply sides. Amongst the strategies that could be explored as driven by the analysis of this assessment, could be: updating and standardizing training packages for RH service providers coupled with respective capacity building of the health workforce at different levels to improve the management and delivery of integrated RH services, strengthening GBV programs, and orderly building of effective referral health systems, coupled with improving the availability, distribution, and update of the RH kits, etc.

Other dissemination formats will include publications in peer-reviewed journals and presentations in international scientific forums, conferences, and symposiums that will be done for regional and international audiences.

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