National Assessment on Adolescent Pregnancies in Zimbabwe

June 2023

REPORT

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Acronyms

ABR	Adolescents Birth Rate
ACRWC	African Charter on the Rights and Welfare of the Child
AG	Adolescents Girls
ANC	Antenatal care
ASRH	Adolescent Sexual and Reproductive Health
BCF	Behavior Change Facilitator
CAs	Catchment Areas
CAPI	Computer-Assisted Personal Interview
CBO	Community Based Organization
CCW	Community Childcare worker
CSE	Comprehensive Sexuality Education
CSO	Civil Society Organization
DHS	Demographic and Health Survey
EAs	Enumeration Areas
ECD	Early Childhood Development
EMIS	Electronic Management Information System
FGD	Focus Group Discussion
FP	Family Planning
HRBA	Human Rights Based Approach
IDI	In-Depth interviews
KII	Key Informant Interviews
MCPR	Modern Contraceptive Prevalence Rate
MICS	Multiple Indicator Cluster Survey
MoHCC	Ministry of Health and Child Care
MoPSE	Ministry of Primary and Secondary Education
MoPSLSW	Ministry of Public Service, Labour, and Social Welfare
MRCZ	Medical Research Council of Zimbabwe
NGO	Non-Governmental Organization
PPS	Probability Proportional to Size
SRH	Sexual Reproductive health
TFR	Total Fertility Rate
UN	United Nations
UNCRC	United Convention on the Rights of the Child
UNESCO	The United Nations Educational, Scientific and Cultural Organization
UNFPA	The United Nations Population Fund,
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization
YAS	Youth Adult Survey

Glossary

Abortion	Spontaneous of induced termination of a pregnancy, usually before the embryo or fetus is capable of independent life. Unsafe abortion is a procedure for terminating pregnancy performed by persons lacking the necessary skills or in an environment that is not in conformity with minimal medical standards or both.
Adolescent	Any persons aged between 10 and 19 years. Very young adolescents are defined as those aged between 10 and 14 years and older adolescents as those aged between 15 and 19 years. Data presented in this report is age-disaggregated according to these two categories.
Adolescent pregnancy	The occurrence of pregnancy in girls aged 10–19 years.
Adolescents Sexual and Reproductive Health Policy aim	to promote adoption of safer sexual and reproductive health practices among young people; 2) to increase availability, access, and utilization of friendly SRH services by young people; 3) to create a safe and supportive environment for addressing SRH issues for young people; and 4) to strengthen coordination and partnerships for evidence based on ASRH programming.
Age Appropriate	A developmental concept whereby certain activities, information or services may be deemed appropriate or inappropriate for a particular age or level of development.
Child	any person below the age of 18 years
Child Abuse	Child maltreatment, sometimes referred to as child abuse and neglect, includes all forms of physical and emotional ill-treatment, sexual abuse, neglect, and exploitation that results in actual or potential harm to the child's health, development, or dignity. Within this broad definition, five sub-types can be distinguished – physical abuse, sexual abuse, neglect and negligent treatment, emotional abuse, and exploitation.
Child Marriage	Marriage is a legally and socially sanctioned union, usually between a man and a woman, that is regulated by laws, rules, customs, beliefs and child marriage is any formal marriage or informal union between a child under the age of 18 and an adult or another child.
Contraception	The intentional prevention of conception through the use of various devices, sexual practices, chemicals, drugs, or surgical procedures.
Education Policy	The principles and policy decisions that influence the field of education as well as the collection of laws and rules that govern the operation of education systems.
Intimate Partner Violence	Abuse or aggression that occurs in a romantic relationship.
Gender	"Socially constructed characteristics of women and men, such as norms, roles, and relationships of and between groups of women and men. It varies from society to society and can be changed." WHO Feb 7, 2018. Gender is an important concept in basic gender analysis that helps deepen understanding about social relations as an entry point to sustainable change through development.

Marginalized and Vulnerable Adolescents	Adolescents at high risk of lacking adequate care and protection such as orphans and children living on the streets as well as adolescents with disabilities, adolescents with HIV, adolescents who are sexually exploited, adolescents living below poverty line, and children affected by disaster.
Mixed method	A procedure for collecting, analyzing, and 'mixing' both quantitative and qualitative research and methods in a single study to understand a research problem.
People With Disabilities	Any person with physical, sensory, mental, psychological or any other impairment, condition or illness that has, or is perceived by significant sectors of the community to have a substantial or long- term effect on their ability to carry out ordinary day-to-day activities.
Public Health Act	Legal framework for the protection of public health.
Sexual And Reproductive Health	The state of complete physical, mental, and social well-being of an individual in all matters relating to the reproductive system and its processes and functions but not merely the absence of disease or infirmity. It also includes sexual health, the purpose of which is the enhancement of life and personal relations and not merely counseling and care related to reproduction and STI
Sexuality	The total expression of who we are as human beings. It encompasses one's whole psychological development, that is values, mental attitudes, physical appearances, beliefs, emotions, likes and dislikes, one's spiritual self and all the ways in which one has been socialized
Sexual Exploitation	Actual or attempted abuse of someone's position of vulnerability, differential power or trust to obtain sexual favors, including but not only, by offering money or other social, economic or political advantages. It includes trafficking and prostitution.

Acknowledgements

We would like to acknowledge the tremendous support and technical guidance from the following ministries:

- Ministry of Public Service, Labour, and Social Welfare (MoPSLSW),
- Ministry of Health and Child Care (MoHCC), and
- Ministry of Primary and Secondary Education (MoPSE).

We extend our gratitude to the MoPSLSW Provincial Social Development Officers (PSDOs) and District Social Development Officers (DSDOs) who assisted with sensitizing the relevant government department about the assessment and facilitated with community entry. We greatly appreciate the Community Childcare workers (CCW) who worked tirelessly in identifying eligible adolescents in the sample enumeration areas and assisted community entry at ward and village levels.

Our deep gratitude and appreciation go to the adolescent girls and boys, young men and women, parents/caregivers, community cadres, community leaders, and key stakeholders who participated in the study. Thank you for allowing us to have a better understanding of the impact of adolescent pregnancy and your lived experiences.

We are very grateful to the field teams who worked very hard in hard-to-reach remote areas with bad terrain and weather conditions to collect data.

We acknowledge technical support from Plan International, Zimbabwe National Family Planning Council and Zimbabwe National Statistics Agency. We also acknowledge funding and technical support from UNICEF Zimbabwe, UNFPA, UNESCO, and WHO.

This report was prepared by the Centre for Sexual Health and HIV/AIDS Research team. We acknowledge the following people; Dr Zivai Mupambireyi, Professor Frances Cowan, Concilia Mutasa, Edward Matsikire, Galven Maringwa, Jetina Tsvaki and all the research assistants.

EXECUTIVE SUMMARY

Executive Summary

Background

This report highlights key findings from the national assessment of adolescent pregnancy in Zimbabwe. The study was conducted to determine the prevalence of adolescent pregnancy in Zimbabwe and to identify root causes leading to adolescent pregnancy particularly in the wake of Covid-19. One of the objectives of the study was to develop detailed profiles of a cohort of adolescents who experienced pregnancy before the age of 20, to provide a deeper understanding of their experiences and needs and map the much-needed support to tackle adolescent pregnancy and support adolescents who fall pregnant.

Methodology

The national assessment used both primary and secondary data analysis. Primary data used a mixed method cross sectional survey conducted among 1,418 adolescent girls aged 10-19 years in 6 out of the 10 provinces in Zimbabwe. Six provinces were purposively selected to include four provinces with the highest adolescent birth rate (ABR) in Zimbabwe, and two provinces with the lowest ABR. Catchment (CAs) and Enumeration Areas (EAs) were randomly selected. Adolescent girls completed an interviewer administered structured interview. Focus group discussion (FGDs), in-depth interviews and key informant interviews were also conducted with adolescents, parents and key stakeholders. Quantitative data was analyzed using Stata 17.0 and qualitative data was analyzed using thematic and constant comparison analytical approaches.

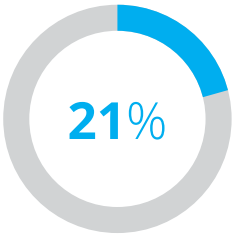
Secondary data analysis included literature review and analysis of 8 Antenatal care (ANC), maternal and infant HIV care indicators from the Ministry of Health and Child Care's District Health Information System (DHIS-2) from January 2019 to December 2022.

The study was approved by the three relevant line ministries and ethical clearance was granted by the Medical Research Council of Zimbabwe (MRCZ/A/2932). Participants provided written informed consent/assent and parental consent for all participants below that age of 18 years.

Key findings

Secondary data analysis

An estimated 1,706,946 ANC bookings were made in 1,560 health care facilities captured in the DHIS- 2 platform from 2019-2022 among women of childbearing aged 10 years and above. Of these, 21% were among adolescents aged 10-19 years. A total of 1532 maternal deaths were recorded and of these 25% were among adolescent and young women under 24 years (data was not disaggregated to reflect the 10-19 years category). Of the estimated 50,957 pregnant women newly testing HIV positive, 0.1% were among adolescents aged 10-14 years, 15% among the 15-19 years, 29% among the 20-24 years, 25% among the 25-29 years, 18% among the 30-34 years, 11% among the 35-39 years, and 3% among the 40 years and above age group. 2021 had the highest number of pregnant adolescent girls aged 10-14 years



of ANC booking from 2019-2022 were among adolescents aged **10-19 years.**

1532 maternal death recorded over the same period.

Adolescent pregnancy prevalence rate was

testing HIV positive compared to all the other years. About 0.2% of adolescents aged 10-14 years old newly tested HIV positive in 2021 compared to 0.04% in 2019, 0.1% in 2020, and 0.04% in 2022.

Out of the 177769 HIV exposed infants a total of 4021 (2.3%) were infected with HIV during the four years. 2019 had the highest number of infants testing HIV positive compared all the COVID- 19 years. The total number of infants infected with HIV fell from 33% in 2019 (pre-COVID-19) to 24% in 2020,2021 and 19% in 2022. Of the 4021 infants who seroconverted 3733 were initiated on ART and 288 were missed. The total number of infants initiated on ART fell from 34% in 2019 (pre-COVID-19) to 22% in 2020, 26% in 2021 and 18% in 2022 (COVID-19 phase).

Survey findings

Adolescent pregnancy prevalence

Adolescent pregnancy prevalence was 23.7% (337/1418) for adolescents aged between 10 -19 years. Among the 337 pregnant adolescences, 4.0% (20) had disabilities. The analysis of adolescent pregnancy prevalence showed that 0.9% of 10–14-year-olds (4/567) and 41.2% of 15–19-year-olds (333/851) were pregnant. The prevalence of pregnancy differed significantly between the two age groups, with older adolescents (15-19 years old) being 71.2 times more likely to be pregnant than very young adolescents (10–14-year-olds).

There was also significant difference in pregnancy prevalence between religions (p = 0.012) with the Protestant 14.5%, Pentecostal 15.8%, Apostolic 31.5% and other (African Tradition Religion, Muslim, and no religion) 34.5%. When compared to those who practiced Protestantism, adolescents who practiced other religions were 2.79 times more likely to become pregnant, while those who practiced Apostolic faith were 1.98 times more likely, and those who practiced Pentecostalism were 1.15 times more likely to become pregnant.

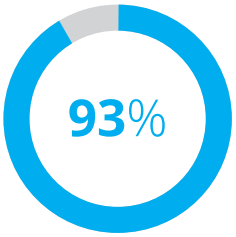
Our analysis found a statistically significant association between age, knowledge of SRHR, condom use and adolescent pregnancy. There was evidence that older adolescents (15 – 19) year olds had statistically significant higher pregnancy prevalence of 82.3% whilst very young adolescents 41.8% ($p<0.001$). The older adolescents were 5.85 times more likely to be pregnant than the very young adolescents. Adolescents who did not use condoms were 3.90 times more likely to be pregnant than those who used condoms.

Sexual activity

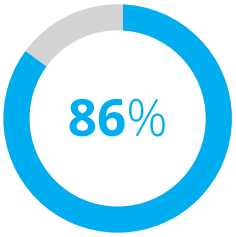
The study found that 30% of the adolescent girls were sexually active. Being sexually active increased with age with only 1% (15) very young adolescents reported being sexually active compared to 29% older adolescents. The median age at sexual debut was 16 years, the middle 50% lied between 15 and 17 years. Approximately 31% (134) reported to have had forced sex on their first sexual encounter. Only 104 managed to respond to the question on whether they reported to the police or not.

16 year was the mean age at first sex.

forced sex at first sexual encounter.



adolescents had a health facility assisted delivery.



adolescents utilized facility-based ANC.

Economic decline and poverty are the main drivers of **adolescent pregnancy.**

Of these, 85% (95) reported to the police. Among those who reported to the police, 74% reported that no action was taken by the responsible authorities, 24% reported that court cases were pending, withdrawn, or dropped by the courts for insufficient evidence and 2% had the perpetrators prosecuted. Approximately 75% (315) of the first sexual encounter was with boyfriends, and only 23% (97) with husbands, 1.5% (10) with strangers, 0.8% (6) with relatives, and 0.1% (2) with casual partners. Qualitative interviews with a subset of adolescents who became pregnant because of sexual abuse highlighted that only two adolescents accessed post-rape care services including trauma counseling and HIV testing services. This finding points to gender-based violence and abuse as contributing to adolescent pregnancy.

Pregnancy experiences

The study found high uptake of maternal and child health services among adolescents regardless of age or disability which resonates with the high uptake of ANC (76.33%) and postnatal care (84.27%) reported nationally. About 93% of the adolescents had a health facility assisted delivery and 86% of the adolescents utilized antenatal care services in a health facility. Only 48% adolescents accessed ANC within the MoHCC recommended 12 weeks gestation age. Eighty nine percent attended a postnatal visit. Adolescents were able to access HIV and syphilis testing and early infant diagnosis for their infants 6 weeks post-delivery. Eighty percent of the infants were up to date with their scheduled immunizations and 99% of the adolescent mothers breastfed their infants. The median duration of breastfeeding was 10.5 months (interquartile range 4-16 months). Only 47% of the mothers reported exclusively breastfeeding their infants in the first six months of life. Fifty percent of the mothers introduced complementary foods ranging from porridge, sadza, maheu, tea, water and non-prescribed traditional medicine /herbs below six months. Breastfeeding was challenging for mothers. Some of the challenges included not knowing the correct breastfeeding position, producing insufficient milk, cracked nipples, lack of social support on breastfeeding, infants failing to suckle, and limited knowledge on how to regulate the breastfeeds.

Drivers of adolescent pregnancy

The prevailing economic recession which led to poverty, unemployment, depletion of family saving, falling prices of their agricultural produce and migration of parents and caregivers has been cited as key drivers of adolescent pregnancy. The upsurge in parental migration has undermined family structures leaving children alone or under the care of de facto caregivers thereby increasing children's vulnerability to risky sexual behavior and sexual abuse. Lack of parental care and supervision because of parents/caregivers' long working hours and prolonged absence from home has fueled adolescent pregnancies through consensual sex, transactional sex and sexual abuse. The economic decline has also resulted in the need for children to supplement their parents or caregiver's income. Adolescents have been driven into artisanal gold panning, vending, or working as housemaids which has increased their vulnerability to early engagement in risky sexual behavior, drug and substance buse and dropping out of school among other social ills.

Early exposure to pornographic and sexually oriented materials through increased and unrestricted access to cellphone is an emerging key driver of adolescent pregnancy. Drugs and substance use was noted to be affecting adolescents and

Adolescent girls' **sexual partners** are **former schoolmates and unemployed neighbours.**

Increased proliferation of cell 'phones an opportunity for sharing pregnancy prevention information, CSE a promising intervention if well resourced

Childcare responsibilities, lack of financial support and fear of stigma are key barrier to school re-entry.

young people regardless of age, gender, and location. Parties such as the 'Vuzu' or school leavers parties came out strongly as high-risk events where adolescents were consciously or unconsciously initiated on drugs. Drugs and substance use was cited as making adolescents high and thereby limiting their capacity to negotiate for safer sex or and access and uptake of SRHR services. Prohibition of corporal punishment within the schools, limited parent- child communication on SRHR, limited youth recreational facilities, Covid-19 pandemic, and social and religious norms were among the key adolescent pregnancy drivers.

Detailed profiles of the pregnant and adolescent mothers

Detailed profiles of adolescent mothers were recorded to capture their contexts, lived experiences and available support and gaps. The study found that pregnant and adolescent mothers were found in all geographical locations but mostly concentrated in rural areas, mining and farming communities, and were more likely to be from single parent households or staying with non-biological parents. Adolescents either voluntarily engaged in sex or were coerced by their partners while very few were sexually abused. Interviewed pregnant and adolescent mothers were all out of school and had incomplete secondary education. Pregnant adolescents were linked to available health and social protection services. Counselling and rehabilitation, educational subsidies, food, and free medical assistance for conditions not managed at the local health facilities were some of the accessed social services.

Profiles and role of the adolescents' sexual partners/father of the babies

Interviews with pregnant and adolescent mothers highlighted that their sexual partners were mostly their former schoolmates or unemployed young men in their communities who were also being looked after by their parents or close relatives. Sixty-eight percent of the pregnant and adolescent mothers reported that they have a good relationship with their partners who impregnated (242 are married). Twenty-four percent reported relationship dissolution at pregnancy notification and 2.6% were not aware of the whereabouts of their partners as they ran away after being told about the pregnancy. Most (74%) of the adolescents reported receiving emotional, financial, and social support from their partners with financial support being the most cited form of support (96%).

Opportunities for pregnancy prevention

Enabling policy and legal framework that promote access to CSE, health promotion and favorable SRHR outcomes set a conducive environment for pregnancy prevention if consistently enforced. The introduction of the CSE for both in and out of school adolescent presents a great opportunity for teaching of cognitive, emotional, physical and social aspects of sexuality thereby equipping adolescents with skills to make informed decisions about their health including sexual health and pregnancy prevention. The success of the CSE has however been limited by lack of financial resources for consistently implementation in both urban and rural communities and schools in Zimbabwe. The introduction of community radios, increased proliferation of cell- phones and roping in of traditional and religious leaders presents a great opportunity for multi-intervention pregnancy prevention programming. Community radios and cell phones can be used for tailored information dissemination on SRHR while leaders can be used to fight harmful practices such as child marriages which have been shown to contribute to adolescent pregnancies.

Legal and Policy review

Several policies and legislation were reviewed to unpack current provisions, implementation, and gaps.

Marriage Act

In 2016, a landmark ruling outlawed child marriages in Zimbabwe and set out 18 years as the legal age of marriage. Previously girls could be married at 16 years while boys could marry at 18 years. In December 2018, the First Lady of Zimbabwe launched the National Action Plan (NAP) and Communication Strategy on Ending Child Marriage. In 2022 the President of Zimbabwe signed into law 'the Marriage Act' which prohibited marriages of minors under the age of 18. This was in response to years of evidence-based advocacy on the need to put in place institutions, law and policies that guard against child marriages in the country. The study assessed adolescents' knowledge levels of the legal age of marriage and legal age of consent for sex. Out of the 1418 adolescent girls only 38 did not know about the legal age of marriage. About 135 adolescent girls were not aware of the legal age of consent for sex..

Despite this enabling legal and policy framework that clearly state that "no person shall be compelled to marry against their will" qualitative interviews highlighted that child marriages are highly prevalent in study communities. Although the Marriage Act aligns well with section 26(1) of the Constitution and the Domestic Violence Act to outlaw the pledging of girls and forced child marriages its enforcement has been very limited as some parents continue to pledge and force their children to get married below the age of 18 years.

Although the legal age of marriage has been reviewed upwards, one critical gap remains as the age of consent to sex is still 16 years. Even though the Zimbabwe's Constitutional Court ruled that the legal age of sexual consent be increased from 16 to 18 years in May 2022 this is yet to be signed into law making it difficult to prosecute anyone having sex with children. Related to age of consent to sex is also the age of consent to access SRHR services. Adolescents below the age of 16 years require parental consent to access SRHR services. The persistence of age restrictions on access to SRHR services will continue to limit adolescents' right to healthcare services.

School re-entry policy

Only 59% of the adolescents were aware of the provision to continue with school during or after pregnancy. Despite public awareness of the school re-entry policy only 3.3% of the adolescents remained or were retained in school after pregnancy while the majority had no intentions of returning to school. Childcare responsibilities, lack of financial support, and fear of stigma were some of the cited reasons for not wanting to go back to school. Parents and some community leaders had reservations regarding reintegration of the pregnant adolescents in schools. Parents feared that the reintegrated pregnant and adolescent mothers will negatively influence other adolescents and might result in more pregnancies in the schools. Addressing beliefs and attitudes that hinder pregnant and adolescent mothers' full integration in schools requires multi-sectoral interventions and practical support that goes beyond the education sector alone.

There is need for investments in fighting harmful social and gender norms. Policies need to go beyond simply 'allowing' return to school by addressing the supportive conditions required to enable adolescent girls to return to and stay in school. Interventions and education systems may need to intensify access to interim alternative non-formal routes to education for pregnant and adolescent mothers especially in rural areas, while the longer term norms, attitudes and supports are being addressed in formal mainstream schools. This requires gender-transformative programming to increase the confidence and voice of this often socially marginalized group as well as assure platforms for their engagement. Listening to pregnant and adolescent mothers becomes important to promote tailor individualized support and deliver responsive programming that are human, and adolescent centered. At national level this becomes important to inform the design of effective policy, legislation, and practice.

Recommendations on pregnancy prevention and response

Adolescent girls' agency building and strengthening family recommendations.

1. Empowering parents and guardians to become supportive and effective communicators on SRHR issues with their children including on sexual behavior and risk-reduction. The study highlighted limited parent child communication on several SRHR issues including pregnancy prevention, sex, sexuality and gender.

2. There is need to educate children on their rights and responsibilities as a way of developing well-rounded and responsible children, who respect others, think critically, and make informed decisions. Parents also need to be educated on children's rights so that they fully understand the provisions of children's rights especially around the abolishment of corporal punishment in schools.

3. Educating parents on the importance of establishing sound alternative caregiving arrangements when considering regional or international migration.

4. Equipping adolescents with information on drug and substance abuse before initiation especially around the negative consequences of drug and substance abuse on their health and wellbeing.

5. Educating adolescents on responsible use of technology as well as on the dangers of accessing harmful platforms that share pornographic or sexually oriented materials.

6. Educating parents or caregivers on the importance of adolescents' access to post-partum contraception to minimize repeat pregnancies.

7. Educating parents on the role of social protection services to increase uptake and minimize resistance and lack of cooperation from both parents and their pregnant or adolescent mothers.

Pregnancy management recommendations

12. Ensuring provision of mental health and psychosocial support throughout the pregnancy to adolescent girls who are survivors of gender based violence and abuse to

address trauma that comes with unintended pregnancy and motherhood.

13. Empowering health care workers and student nurses to provide tailored non-judgmental and non-stigmatizing antenatal care services to pregnant and adolescent mothers.

14. Intensifying knowledge on maternal nutrition and health during pregnancy to ensure good fetal growth and favorable birth outcomes. Routine ANC for pregnant adolescents should include discussions of diet and nutrition.

Prevention and response recommendations at community, school and Health facility level

8. Adaptation of a differentiated model of SRHR service provision for adolescents which is client centered and addresses known facility-based challenges. Differentiated models have been shown to work well in the provision of ART service among adolescents as these are delivered using community and facility peer-based models. This might entail age appropriate out of facility contraception provision to adolescents through peer led models.

9. Capitalizing on the increased proliferation of cell 'phones, community radios and social media platforms to accelerate the spread of age-appropriate information on contraceptive use and to scale up interventions to enhance adolescents' SRHR skills and agency including community, facility based and peer based education and mentorship programmes.

10. Enhancing the provision of in-schools CSE through the development of curriculum and materials and implementing capacity strengthening trainings to equip teachers and community-based facilitators with comprehensive SRHR information, CSE facilitation skills and on strategies to build life skills and confidence of adolescents.

11. Engaging community leaders as change agent and capacitating them with information on harmful social-cultural and religious norms to end harmful practices such as child marriages or prioritizing boys over girls' education.

12. Investing in fighting harmful social and gender norms through community sensitization and guidance to support pregnant and adolescent mothers to remain in or return to school as well as addressing structural barriers that hinder their full integration in schools.
13. Ensuring provision of mental health and psychosocial support throughout the pregnancy to adolescent girls who are survivors of gender based violence and abuse to address trauma that comes with unintended pregnancy and motherhood.

14. Empowering health care workers and student nurses to provide tailored non-judgmental and non-stigmatizing antenatal care services to pregnant and adolescent mothers.

15. Intensifying knowledge on maternal nutrition and health and infant and young child feeding practices to ensure pregnant and adolescent mothers have comprehensive and accurate information on ANC registration, early initiation of breastfeeding, exclusive breastfeeding, and introduction and management of complementary feeding to avoid late diagnosis of manageable conditions and malnutrition among infants born to adolescent mothers. Routine ANC for pregnant adolescents should include discussions on diet and nutrition.

16. Scaling-up of HIV testing and care service for adolescents as they are the most vulnerable to new HIV infections.

Prevention and response recommendations at policy level

17. Removing age restrictions and scaling up inclusive, age appropriate access to SRHR information and services and intensifying contraceptive use messaging among in and out of school adolescents. This should not exclude primary school going children on the pretext that they are not sexually active.

18. Advocating for government to increase domestic resources allocated to social protection, education, and health services to improve on the provision of essential services such as the social protection of children from sexual exploitation by artisanal miners or from child labor.

19. Enhancing access to non-formal education platforms in both rural and urban areas and addressing norms, attitudes that limit pregnant and adolescent mothers from accessing formal mainstream schools. Establishing and financially supporting community based infant day care to ensure adolescent mothers attend school knowing that their infants are well taken care of.

20. Reviewing the provision of guidance and counselling and life skills education as compulsory taught learning areas.

21. Investing in life skills development and economic empowerment activities for out of school adolescents and

young people regardless of gender to reduce idleness, and as a way of holistically addressing their information and economic vulnerabilities that put adolescents and young people at risk of early and unplanned pregnancies.

Conclusion

The findings show that adolescent pregnancy is a social and health problem that affects already vulnerable adolescents who reside mostly in rural areas, in child headed households, or staying with non-biological parents. Factors associated with adolescent pregnancy included age, residence status, and staying with non-biological parents among other reasons. The study identified several pathways to adolescent pregnancy which included early exposure to pornographic material caused by increased access to cell 'phones among adolescents, drug and substance use, and economic challenges that have seen parents migrating to neighboring countries in search of employment opportunities. Most of the pregnancies were unintended, highlighting limited knowledge on conception and pregnancy prevention among adolescents. The findings point to the need for government and its related partners to invest in interventions that counter some of the identified pathways to adolescent pregnancy. There is need to capitalize on the available opportunities for pregnancy prevention.

Photo credit: Zivai Mupambireyi/CeSHHAR Zimbabwe

Introduction

Adolescent pregnancy is a global public health, social and economic problem that affects mostly poorer and marginalized communities in both developed and developing countries (1). In 2021, an estimated 21 million girls aged 15–19 years in developing countries became pregnant and of these approximately 13.3 million of them gave birth [1]. Although a decline in adolescent birth rates (ABR) has been observed globally, sub-Saharan Africa (SSA) remains the highest among all regions, at 101 births per 1,000 women aged 15 to 19 years, twice the global average in 2021[2,3]. The estimated actual number of births among 15–19-year-olds was 6 114 000 and 332 000 among very young adolescents (VYA) aged 10–14 years in SSA in 2021 [2].

In Zimbabwe the Adolescent Birth Rate (ABR) remains high at 108 live births per 1000 women aged 15-19 years against a national target of 100 by 2022 and a global average of 44 [4]. Zimbabwe has witnessed a downward trend in adolescent fertility rate since 2010 associated with the introduction of youth friendly health services and an increase in ASRHR interventions in schools, communities and health facilities. Interventions such as those that increased the demand and uptake of modern contraceptive use, ending child marriages and improving parent child communication were introduced among other interventions with notable success [5-7]. Although strides have been made in reducing adolescent fertility, the emergence of COVID 19 pandemic in 2020 was associated with an increase in prevalence of adolescent pregnancies [5]. Adolescent girls aged 10-19 years accounted for the 16% (69 335) of the 439 45 live births recorded in the 12 months preceding the 2020 census [6]. Since the onset of COVID-19 media reports state that Zimbabwe recorded an upsurge in adolescent pregnancy which frustrated concerted efforts towards achieving the national 2022 target [5]. The COVID-19-related containment measures, including prolonged school closure, raise concerns about the SRH and longer-term schooling outcomes of vulnerable adolescents. School closures may have inadvertently intensified barriers to education and SRH vulnerabilities, increasing the likelihood of adolescent girls' engagement in risky sexual behavior and increased risk of pregnancy, sexual violence, and exploitation.

There are huge disparities in the distribution of adolescent pregnancy by geographic location across Zimbabwe, and substantial differentials exist between rural areas (ABR of 136) and urban areas (ABR 62), and across provinces [7]. About 10.3% adolescent girls in urban areas began childbearing compared to 27.2% in rural areas, while 33.6% of children from the poorest wealth quintile started childbearing as compared to 6.1 % from the highest wealth quintile [7]. Matabeleland and Mashonaland provinces continue to be the most affected provinces (table 1) [7].

Since the onset of COVID-19 media reports state that Zimbabwe recorded an upsurge in adolescent pregnancy which frustrated concerted efforts towards achieving the national 2022 target

The national adolescent pregnancy prevalence is at

Table 1: Adolescent birth rate, TFR, mCPR and unmet FP needs by residence, province, education, and wealth quintile.

	ABR[1] 15-19 years	TFR[2] 15-19 years	mCPR 15-19 years	Unmet FP need
Total	108	3.9	66%	8.6%
National target (2020)[3]	99		68%	6.5%
Urban	62	3.0	70.7%	6.7%
Rural	136	4.5	63.2%	8.7%
Mash Central	150	4.3	65.2%	6.9%
Mash East	89	4.1	69.1%	6.9%
Mash West	136	4.4	71.0%	5.8%
Mat North	161	4.2	66.3%	9.8%
Mat South	138	3.7	59.7%	13.3%
Manicaland	97	4.3	56.7%	8.3%
Masvingo	126	4.3	60.5%	10.3%
Midlands	115	3.9	67.2%	8.5%
Harare	56	3.0	70.4%	6.7%
Bulawayo	57	2.6	70.8%	6.7%
No education	No data	No data	49.3%	18.3%
Primary education	175	5.3	60.7%	11.4%
Post Sec education	21	2.4	75.4%	3.7%
Poorest	175	5.3	61.8%	12.0%
Richest	39	2.6	72.3%	4.8%

Evidence has also shown how poverty leads adolescents to engage in sexual relations with older men to meet their basic needs [8]. Lower levels of education, rural residence and poverty have been cited as contributing to the higher levels of total fertility rate (TFR) and ABR in Zimbabwe, whilst lower age group (15-19) is most strongly associated with poorer outcomes in modern Contraceptive Prevalence Rate (Mcpr)[4] and family planning (FP)[5] unmet need [9] Mcpr use is suboptimal in both married and unmarried sexually active adolescents (15-19) at 44.9% and 38.7% despite the introduction of youth friendly corners [9,10].

Theoretical framework

Empirical research has depicted adolescent pregnancy as a complex and multidimensional process where individual, interpersonal, institutional, community, and policy levels interact [11]. At the most proximal level of the model is the individual whose behavior is influenced by personal knowledge, beliefs, and attitudes. The second layer of the framework signifies interpersonal factors such as formal and informal social networks and social support systems including relationship with family, peers, teachers, and health workers. The next layer shows community-level factors such as institutions and resources that embody likely sources of communication and support. The fourth layer represents organizational systems, characteristics and norms, and rules and regulations that constrain individual behavior. The outermost layer signifies national policies, strategies and guidelines, mass media and cultural factors that shape the extent to which there are rural or urban, social economic disparities in access to health.

The social ecological model does not diminish the role of individual agency but rather emphasizes how adolescents' sexual behavior is shaped by the influential nature of social relationships, which we term relational agency (the restricted

[1]Adolescent Birth Rate
[2]Total fertility rate
[3]National target is inclusive of rural and urban population.
[4]Mcpr- Modern Contraceptive Prevalence Rate
[5]FP- Family planning

agency which an adolescent has which is framed by their relationships), and structural conditions which exist in the wider contexts of physical, social, economic, and political environments that adolescents are embedded [11]. It is important to understand how each level independently influences adolescent pregnancy, but also how they are interconnected and bidirectionally influence one another. Many of the factors that increase the odds of adolescent pregnancy do not function independently but are the result of multiple layers e.g., staying in a rural setting has implications on access SRHR information and services, educational prospects and poverty. The social ecological model provides a useful framework for understanding the interplay of the psychological, sociological, and environmental factors on the behavior on individuals. This national assessment draws on this model to build a body of knowledge on the magnitude of adolescent pregnancy, root causes and prevention strategies in Zimbabwe.

Objectives of the national assessment

The overall objective of this assessment was to determine the character and scale of the problem of adolescent pregnancies in Zimbabwe and offer policy and practice recommendations to curb adolescent pregnancy.

Specific objectives

a. To examine literature to establish data and trends in adolescent pregnancy over the last five years.

b. To identify and examine factors leading to adolescent pregnancies among different sub-groups, location and source perspectives from boys, parents and traditional and religious leaders and others.

c. To examine how the Covid19 pandemic has influenced adolescent pregnancies.

d. To develop comprehensive and detailed profiles of a sub-set of participants who experienced adolescent pregnancy, expounding on who they are, where they are, and analyze what effect, if any, the individual, community, school and contextual factors had on their pregnancy, did they know their HIV status before pregnancy, and were they tested during pregnancy and/or after and determine their current HIV status (considering confidentiality – can check child health card).

e. To identify differences, if any, in trends and factors affecting pregnancies, including by age, geographic location, socio-economic status and disability status if feasible.

f. To examine what opportunities are available to adolescents to prevent pregnancies.

g. To examine the post-pregnancy experiences of adolescents, and of their children, including growth monitoring, school re-entry, Infant and Young Child Feeding practices and Early Infant Diagnosis for those HIV exposed. Source perspectives of boys, parents and community leaders and others.

h. To identify and profile government, civil society and commercial organizations and individuals offering preventive and mitigation programs and interventions.

i. To review current policies and laws to identify strengths and weaknesses to inform programming.

j. To make strategic policy and practice recommendations that more adequately respond to the diverse needs of adolescents and will guide the design of programs to reduce adolescent pregnancies in Zimbabwe.

Literature Review

This section outlines a brief collation of existing regional and in-country evidence on adolescent pregnancy prevalence, factors associated with adolescent pregnancy and effects of adolescent pregnancy.

Trends in adolescents' pregnancy

dolescent pregnancy remains a significant public health challenge and a developmental setback especially in Sub-Saharan Africa (SSA) where very high rates have been reported resulting in significant morbidity and mortality [2]. The estimated ABR rate in South Asia in 2015 – 2020 was 26 per 1000 girls aged 15-19 years, compared to 104 per 1000 girls aged 15-19 years in Sub-Saharan Africa. (Fig 1 below) [12].

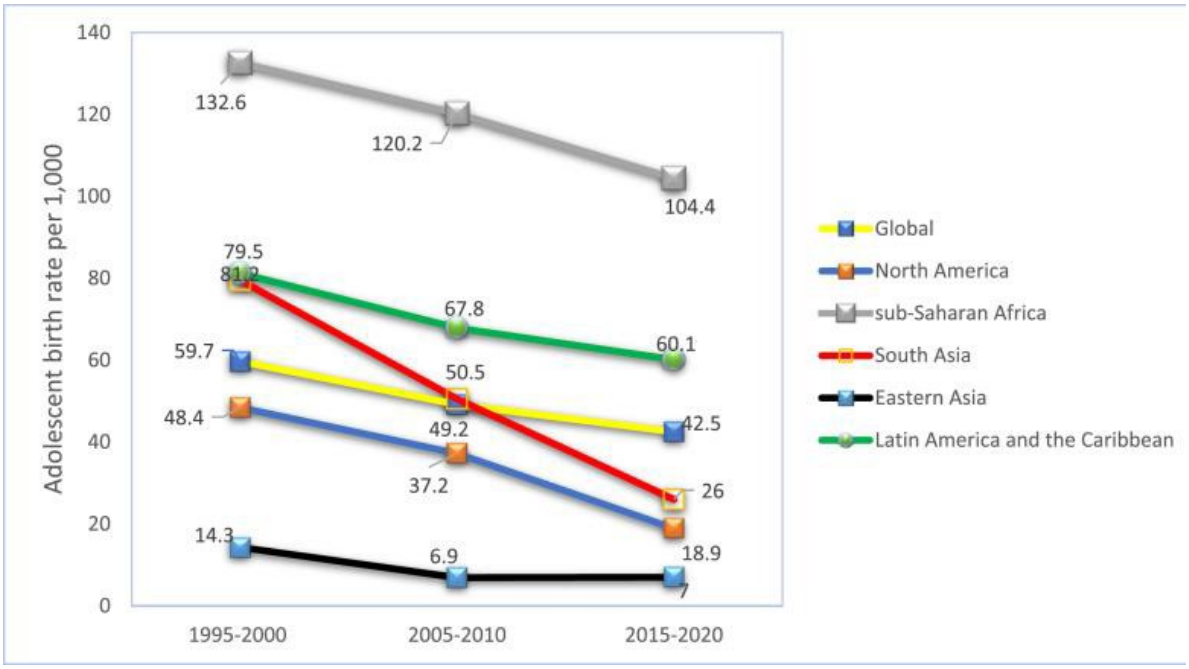


Figure 1: Global and regional trends of adolescent birth rates, 1990 – 2000 to 2015 – 2020 (source Chandra-Mouli V, Akwara E. 2020).

Regional comparative analysis highlighted that high ABR is not unique to poverty-stricken countries but was also a challenge in stable high economies in SSA mainly because of uneven distribution of wealth among high economies. For example, in 2021 Nigeria's ABR was at 106 per 1000 and Liberia at 128 per 1000 while Ghana (low economy) had ABR of 78 per 1000 live births [13].

Trends in Contraceptives use

Several studies in Sub-Saharan Africa have reported a consistently low uptake of modern contraceptives among the 10-19 year old adolescents, contributing to the high burden of maternal mortality. Globally, it is estimated that approximately 257 million women are currently not using any method of contraception despite their desire to prevent pregnancy [14]. The overall prevalence of contraceptive use among adolescent girls and young women in SSA in 2020 was estimated to be 24.7% [15]. The prevalence of contraceptive use was highest in Southern Africa (52.3%) and lowest in West Africa (5.4%) [15]. By country, the Chad Republic recorded the lowest prevalence of contraceptive use (5.1%) while Lesotho recorded the highest with 59.2%, Zimbabwe was the third highest with 50/7% [15]. AGYW were more likely to use modern contraception if they were aged between 20-24 years, staying in urban areas or from communities with high literacy levels or had access to mass media [15].

In addition to low uptake of modern contraceptives adolescent girls in sub-Saharan Africa, consistent use of condoms is low resulting in high STI and adolescent pregnancy [16]. Gender inequalities, social norms, restrictive masculinity, limited access and knowledge and unwillingness to use condoms were some of the key barriers to condom use [16]. Evidence points to the need for multilevel approaches that addresses both structural and behavioral factors targeting both males and females when designing condom use interventions for adolescents.

Key drivers of adolescent pregnancy

Inadequate access to services tailored to young people

Globally, adolescents face barriers in accessing SRHR services as most services are not tailored to meet their needs [17-19]. In sub-Saharan Africa, SRHR needs of adolescents are often underserved and underestimated. Limited access and use of contraceptives and condoms is among the key drivers of adolescent pregnancy [20]. Studies have shown that services

provided by health care workers are neither available nor accessible at the times that suit adolescents, especially when emergency contraceptives are needed [21].

Health care workers lack of willingness to acknowledge adolescents' sexual health needs, a lack of knowledge and skills to respond to the specific needs of adolescents, and a judgmental and disrespectful attitude have also been cited as contributing to adolescent pregnancy [20]. Health facilities often lack adequate and skilled staff to attend to adolescents who need reproductive health services [22]. Long waiting time and lack of privacy discourage adolescents from visiting health facilities for services [19,20]. Adolescents' access to contraception is further limited by restrictive laws and policies based on age or marital status [12]. While Zimbabwe boasts of high contraceptive use among its married population, such services are less available outside the urban settings and are not readily accessible to young unmarried men and women [23, 24]. Adolescents in Zimbabwe are often only offered contraceptives after they have had their first pregnancy due to social stigma, lack of knowledge of adolescent sexuality and prevention of pregnancy and myths and misconceptions that contraception make one infertile if they do not have a baby already [24]. Access to reproductive health services such as contraceptives is critical in avoiding adolescent pregnancies.

Adolescents are known to be especially vulnerable to adverse SRHR outcomes, often because they do not have the skills or confidence to negotiate safe relationships or protect themselves [25,26]. They may lack the capacity to resist peer pressure from their boyfriends and social networks to engage in sexual intercourse, and many girls become pregnant or get infected with sexually transmitted diseases and HIV/AIDS [27]. Adolescents face substantial knowledge gaps and misconceptions on where to obtain contraceptives and lack the agency or autonomy to ensure their correct and consistent use [12, 28]. They are less likely to visit health services, especially if they are embarrassed about admitting their sexual activity [29]. This is often intensified by inadequate comprehensive sexuality education at home, in schools or in the community. Studies have shown that parents are not comfortable talking to their daughters about sex and sexuality [30]. Lack of sex education and parental guidance predispose young women to adolescent pregnancy.

Substance use

Substance use among adolescents increases the risk of unplanned pregnancies, which can in turn increase the risk of fetal exposure to addictive substances [31]. Adolescents who use tobacco, alcohol, marijuana or other drugs are more likely to be sexually active, to engage in risky sexual behaviors such as contraceptive misuse, multiple sexual partners, and STI acquisition and be exposed to non- consensual sex and partner violence resulting in poor fertility outcomes including unintended pregnancy, compared with peers who do not use substances [31, 32]. In the past five years, Zimbabwe has witnessed a growing substance use epidemic among adolescents and young people aged 10-24 years [33-34]. The upsurge of substance use through non-injecting routes such as smoking, snorting and swallowing has the potential to aggravate the HIV epidemic and reverse the significant achievements made over the years in improving adolescent SRHR outcomes. The impact of the emerging non-injection substance use epidemic on adolescent SRHR outcomes especially on unintended pregnancy is not known.

Early/forced marriage, coercion or sexual violence

Child marriages have been described as both a cause and consequence of adolescent pregnancy [35]. In Sub–Saharan Africa, pregnancy may precede marriage, and act as a trigger for child marriage [36]. Zimbabwe is classified among 41 countries globally and 20 countries in Africa with high rates of child marriages. In Zimbabwe child marriages prevalence rate is estimated to be at 33%, slightly higher than the global average of 29%. Statistics on child marriage are not only alarming but also suggest that the practice continues unabated despite years of evidence-based advocacy [37]. This is especially concerning because many such marriages are often unreported or unregistered, especially in rural areas. Therefore, the real extent of the problem might still be unknown. Child marriages remain an acceptable norm in some religious or cultural groups in Zimbabwe, and adolescent fertility rates are generally higher in provinces where child marriage is prevalent, for example Mashonaland Central [36]. Marrying off girls to older men in the Apostolic church is considered acceptable, and it is part of the religious norms and practices [38].

Global organizations and development partners such as UNICEF, UNFPA, Plan International, World Vision and Girls not Brides have been working with many governments to end child marriages. Specific to Zimbabwe, platforms such as Girl Child Network and Childline have been used to raise awareness of the extent of child marriages [37]. In 2016, a landmark ruling outlawed child marriages in Zimbabwe and set out 18 years as the legal age of marriage. Previously girls could be married at 16 years while boys could marry at 18 years [39]. In December 2018, of First Lady of Zimbabwe launched the National Action

Plan (NAP) and Communication Strategy on Ending Child Marriage. In 2022 the President of Zimbabwe signed into law 'the Marriage Act' which prohibit the marriages of minors under the age of 18 years. This was in response to years of evidence-based advocacy on the need to put in place institutions, laws and policies that guard against child marriages in the country.

Adolescent pregnancy also results from coercion and or sexual violence, particularly by older men [8]. Globally, close to 15 million adolescent girls aged 15-19 years have experienced forced sexual intercourse or other sexual acts at some point in their life [39]. Several studies in Sub-Saharan Africa show that the first sexual experience of girls is often unwelcome and forced [40]. For many girls, sexual abuse leads to unwanted pregnancy as adolescent girls who have been forced into sex are less likely to have the opportunity or choice to use contraceptives [40]. Growing evidence shows that in many instances girls are at greatest risk of exposure to sexual violence within the context of close relationships such as those with family, friends, and intimate partners [41]. Younger girls are at risk of sexual violence because they are perceived to be HIV free and are the preferred sexual partners of older men, placing them at a greater risk of pregnancy than much older women [40]. The situation is further compounded by the gender disparities between men and women at both societal and personal levels which results in unequal power relations in favor of men [42]. This imbalance pre-determines sexual abuse, coercion, and pressure from partners, consequently leading to adolescent pregnancies.

Consequences of adolescent pregnancy

Adolescent pregnancies are associated with numerous adverse health, educational, social, and economic outcomes for the mothers and their babies [43]. Several studies have shown that early adolescent pregnancies increase the incidence of HIV among adolescent girls [44]. The higher risk is associated with sexual risk behaviors such as increased number of sexual partners over time and intergenerational sexual partnership [43]. Older men are more likely to have multiple partnerships, thus increasing their chances of contracting and spreading HIV to their partners. Growing evidence also shows that men who have sex with adolescents engage in higher levels of risky sexual behavior than other men of the same age group [43].

Adolescent maternal mortality and morbidity represent a substantial public health problem at the global level [35]. Pregnancy and childbirth complications are the leading cause of death among girls aged 15-19 years globally, with developing countries accounting for 99% of global maternal deaths of women aged 15-49 years [45]. Adolescents who are 15-19 years of age are twice as likely to die during pregnancy or childbirth compared to women over 20 years of age, and adolescents less than 15 years of age are five times more likely to die during pregnancy or childbirth [45]. Mothers below 19 years face higher risks of eclampsia, puerperal endometritis, systemic infections, subsequent incontinence, and perineal tears during delivery than women aged 20-24 years [47,48]. Babies born to mothers under 20 years of age face higher risks of low birth weight, preterm delivery, higher neonatal mortality and a high risk of malnourishment and poor development [47]. Infant and child mortality is also highest among children born to adolescent mothers.

For many adolescents, pregnancy and childbirth are neither planned, nor wanted. In countries where abortion is prohibited or highly restricted, some adolescents resort to unsafe abortions, putting their health and lives at risk. Some 3.9 million unsafe abortions occur each year among girls aged 15-19 in the developing region, contributing to maternal mortality, morbidity, and lasting health problems [35].

Childbearing in adolescence can also have negative social and economic effects on the girls, their families, and communities [49]. Pregnant adolescents may experience stigma, social isolation, poor social support, intimate partner violence and maternal depression [47]. Adolescents who give birth are twice as likely to experience post-partum depression as their adult counterparts [49] and are at risk of common mental disorders such as depressions, anxiety, suicidal ideation and post-traumatic stress disorder [50-52]. In additional pregnant adolescents are more likely to experience psychological problems such as feeling guilty and loneliness [51]. Adolescent pregnancy and childbearing often lead girls to drop out of school, and thereby delay or jeopardize their educational goals [47]. Based on their subsequent lower education attainment, they may have limited employment opportunities and their children may not access education thereby perpetuating cycles of poverty. At a national level this can potentially reduce annual incomes which might be a significant economic cost.

Legal and administrative framework for child protection

Zimbabwe has ratified most international and regional child rights instruments including the United Convention on the Rights of the Child (UNCRC), African Charter on the Rights and Welfare of the Child (ACRWC) and many other related child rights instruments [53]. At a national level, Zimbabwe has a progressive Constitution epitomized by Section 81 which is a

Bill of Children's Rights, and the Children's Act Chapter 5; 06. Several policies and legislations have been put in place to address adolescent girls' vulnerabilities, some of which indirectly address adolescent pregnancy. Such legislation includes the Adolescent Sexual and Reproductive Health policy, Marriage Act: 5.11 (age at marriage, age of consent for marriage) and the Public Health Act:15.09 (age of consent to access SRHR services) and the Education Amendment Act:2020 which has been amended to allow pregnant adolescents girls to attend school.

National polices have important implications for adolescent pregnancies, although well-meaning some policies have unintended consequences. For example, the Zimbabwe Public Health Act restricts children under the age of 16 from accessing SRHR services such as contraceptives and emergency family planning pills because they are below the age of consent [53]. Age of consent laws serve as a means of protecting adolescents against sexual exploitation, but do not guarantee abstinence [54]. The combination of restrictive social norms and age of consent laws makes it difficult for adolescents to access SRHR services [55]. Comprehensive and enabling national policies that feed into sound strategies for implementation and monitoring are important to enable adolescents' access to SRHR information and services.

Childbearing in adolescence can also have negative social and economic effects on the girls, their families, and communities

Photo credit: Concilia Mutasa/ceSHHAR Zimbabwe

Methodology

Secondary data analysis

National level data on 8 ANC related indicators were extracted from the Ministry of Health and Child Care's District Health Information System (DHIS-2) from January 2019 to December 2022. DHIS-2 captures aggregated data for all 1,560 health care facilities in Zimbabwe which provide ANC services. We compared the rates of adolescent pregnancy over 4 years as well as comparing rates by province across all age groups. The data reflected the number of ANC bookings in the public sector accounting for 95 % of all the deliveries in Zimbabwe and exclude bookings in the private sector.

Primary data collection

A mixed-methods approach (quantitative and qualitative interviews) was used to collect data in six out of the 10 provinces in Zimbabwe from November to December 2022.

Cross Sectional Survey

A cross sectional population-based survey was conducted with adolescent girls aged 10-19 years. They completed a structured questionnaire administered through Computer-assisted Personal Interviewing (CAPI). The questionnaire was structured around nine areas: (1) SRHR knowledge and access, (2) sexual behavior, (3) antenatal care, (4) infant nutrition and growth, (5) parenting experiences, (6) mental

health and experiences of violence, (7) education, (8) alcohol and substance use, and (9) menstrual health.

Sampling

Provinces listed in Table 2 were stratified into high and low adolescent pregnancy burden according to the MICS 2019 findings. The top four high burden provinces (Mashonaland Central, Mashonaland West, Masvingo, and Matabeleland North) and two low burden provinces (Bulawayo and Harare) were purposively selected. The sampled provinces included two of the four largest cities in Zimbabwe, rural communities and both major ethnic groups in Zimbabwe (i.e., Shona and Ndebele).

Twenty-five districts were randomly selected from the six provinces. A list containing all the health care facilities offering antenatal services was drawn from the MoHCC database for the 25 selected districts. We then randomly selected clinic within each district as primary sampling units (PSUs). We then shared the list of the randomly selected clinics with the Zimbabwe National Statistics Agency (Zimstats) who then generated a list of all the enumeration areas (EAs) within each clinic catchment area. Within each catchment area we then randomly selected several census EAs proportionate to size of the catchment area for inclusion in the assessment. Zimstats provided enumeration maps for the randomly selected EAs. Villages falling in the catchment areas of selected health facilities were identified, along with the CCWs from each village. In Zimbabwe, CCW is a cadre selected at the community level from village Child Protection Committees (child protection structures) to identify and support vulnerable children within their communities. The majority of CCWs double as village health workers and are therefore knowledgeable about various health and social issues within their communities including the number of pregnant adolescents or those that have recently given birth. Hence, the CCWs were ideally positioned to assist the data collection team with the listing of all eligible adolescents. A targeted sampling strategy was implemented using information supplied by CCWs. Survey teams used enumeration area maps to visit households with adolescents identified by CCWs in the EAs within a health facility catchment area. They recorded the number of eligible adolescent girls (10-19 years) for inclusion in the survey and conducted a short screening survey. Depending on the number of adolescent girls in a particular EA the survey teams either enrolled all adolescent girls or systematically selected. Adolescents who experienced pregnancy or with disabilities were purposively recruited.

Photo credit: Condita Mutasa/CeSHHAR Zimbabwe

Sample size

To ensure a sufficient level of precision of the assessment results, the sample size was calculated assuming that the total number of adolescent girls aged 10-19 in the six selected provinces is 350,447 according to the 2012 National census and that the national prevalence of adolescent pregnancy is currently 22% (95% CI 20-24) (4). Assuming a confidence level of 95%, and a relative standard error of 5, these conditions yielded a minimum representative sample size of 1,413 adolescent girls.

Adolescents were categorized by their age group (10-14 and 15-19 years). Assuming an average of 12 adolescent girls per EA (ZIMSTAT 2012), a total of 118 EAs were surveyed (Table 2).

Sample allocation

The total calculated sample size was distributed using PPS sampling informed by the number of adolescents aged 10-19 years per district as shown in Table 2.

Table 2: Allocation of the sample into 25 districts using probability proportional to size.

Provinces	Districts	Adolescent girls 10-19 years 2012 national population census (n=350447)	Number of CAs Sampled	Number of EAs sampled	Number of adolescent girls never been pregnant surveyed	Number of Adolescent girls ever been pregnant surveyed	Total number of adolescent girls recruited
Mashonaland Central	Mbire	9485	2	3	23	15	38
	Rushinga	8478	2	3	20	14	34
	Mt Darwin	24861	4	8	60	40	100
	Shamva	14140	3	5	34	23	57
	Bindura	19374	4	7	47	31	78
Mashonaland West	Hurungwe	19080	4	6	46	31	77
	Chegutu	16478	1	6	39	27	66
	Makonde	8822	2	3	22	14	36
	Sanyati	5573	1	2	13	9	22
	Zvimba	15179	3	5	37	24	61
Matabeleland North	Tsholotsho	7836	2	3	19	13	32
	Nkayi	7536	2	3	18	12	30
	Hwange	2397	1	1	6	5	11
	Umuguza	5367	1	2	13	9	22
	Lupane	6596	1	2	16	11	27
Masvingo	Masvingo	13933	3	5	34	22	56
	Chiredzi	17860	3	6	43	29	72
	Zaka	12566	2	4	31	20	51
	Mwenezi	11203	2	4	27	18	45
	Chivi	11271	2	4	27	18	45
Harare	Hopley	6347	1	2	16	10	26
	Chitungwiza	20894	4	7	50	34	84
	Epworth	9266	2	3	22	15	37
Bulawayo	Cowdry Park	37952	6	13	92	61	153
	Makokoba	37953	6	13	92	61	153
Total	**25**	**350447**	**64**	**118**	**847**	**566**	**1413**

Research teams visited each household in the EAs listing all eligible adolescents using a screening form. The screening form captured all girls that were born between December 2002 and October 2012. Only one adolescent was eligible per household.

Inclusion and exclusion criteria

Adolescent girls aged 10-19 years in the study communities were eligible regardless of whether they had experienced a pregnancy or not. Adolescents were included if they were able to provide informed consent/assent and parental consent if they were less than 18 years of age. Adolescent girls were excluded from the study if they were born outside the specified dates of birth, unwilling to participate and they were unable to provide written informed consent and assent and parental consent.

Qualitative data collection

To complement secondary data and quantitative survey data, we conducted qualitative interviews using in-depth interviews, focus group discussions and key informant interviews and conducted detailed case studies.

In-depth interviews

In-depth interviews were conducted with pregnant/adolescent mothers, their parents/primary caregivers, teachers and nurses. The interviews explored several issues including circumstances that led to pregnancy, their lived experiences during and after pregnancy, school enrolment and reception and health services accessed among other key issues. A subset of the 1,413 took part in the in-depth interviews. (Table 3).

Table 3: In-depth interviews sample

In-depth interview category	Number
Adolescent girls who experienced pregnancy	46 (10 case studies)
Parents or primary caregivers	46
Nurses	10
Teachers	10

Focus group discussions.

Focus group discussions were conducted in clinic CAs and were not restricted to EAs. Participants who included parents/caregivers; adolescent boys and young men, community leaders, and community- based service providers were purposively recruited with the help of CCWs. FGDs explored risk factors, social norms, opportunities for pregnancy prevention, lived experiences of falling pregnant and the social support needs of pregnant or adolescent mothers. Participatory tools were used to enhance participation among participants who were not verbally competent to express themselves, especially the very young adolescents.

Table 4: FGDs sample.

FGD Category	Number
Adolescent boys and young men (in and out of school)	6
Adolescent girls 10-14 years	6
Adolescent girls 15-19 years in school	6
Adolescent girls aged 15-19 years out of school	6
Adolescent girls with disabilities	6
Parents and care givers	6
Community and religious leaders	6
Community based cadres (VHWs, CCW, BCF)	6
Total	**48**

Key informant interviews

Key informant interviews were conducted with key stakeholders at the national, provincial, district, and ward level to understand their views on adolescent pregnancy. These included line ministries, Civil Society organizations and other key government partners.

Purposive maximum variation sampling approach was used to recruit all qualitative participants. Purposive maximum variation sampling is a non-probability sampling approach that selects a diverse range of participants based on characteristics of a population and the objective of the study. Purposive sampling approach is employed to ensure that the participants involved have a wide range of experiences, relevant to answering the research question, but also limit the scale of the data collection so that detailed analyses could be conducted considering finite resources.

Data management and analysis

Quantitative data

Quantitative data was collected using a remote data collection method based on the OpenDataKit. The questionnaires were upload on tablets responses were entered directly into the ODK platform and uploaded on the server which eliminated errors commonly encountered in manual data collection methods. Data cleaning, merging and analysis were conducted using Stata (Version 17.0, Stata Corp LLC, and College Station, TX). We applied survey sampling weights in Stata reweighting selected EAs and CAs to represent the broader populations of EAs and CAs in different provinces.

- **Stage 1 weighting:** Randomly selected health facilities CAs from within districts. For the CAs, we first established how many were in each district and then established how many were randomly selected. In each of the districts, we then divided the total number of CAs by the number of randomly selected CAs.

- **Stage 2 weighting:** Randomly selected EAs from within selected CAs. We used the same method as above to weight the EAs, dividing the total number of EAs by the total number randomly selected. The final weight is a product of the 2 weights that is the clinic CAs and the EAs. Data were weighted to account for sampling probabilities. The data was weighted to consider the probability of selection of the CAs and the probability of selection of the EAs within CAs.

Provinces were purposively selected – we cannot get a national picture and generalize the findings to the national, we can report on provincial level data. Descriptive univariate and bivariate analyses of the data were carried out. Logistic regression modelling was conducted to determine association with adolescent pregnancy.

Qualitative data

All audio-recorded qualitative data were transcribed and translated verbatim into English. Inductive thematic analysis of the transcripts to develop a coding framework was conducted by two experienced researchers. Data were uploaded, coded, and summarized using a qualitative software package (Nvivo 9.0, QSR International). Qualitative data were analyzed using thematic and constant comparison analytical approaches.

Ethical considerations

The study was approved by the three relevant line ministries and ethical clearance was granted by the Medical Research Council of Zimbabwe. A waiver was granted for the for the Research Council of Zimbabwe as the study used local funding and the Principal Investigator was a Zimbabwean national. All participants provided written informed consent/assent and parental consent for all participants below the age of 18 years. Pseudonyms are used throughout to protect participant's anonymity.

Findings

Secondary data analysis

Eight ANC, maternal and infant HIV care indicators shown in table 5 were described. The proportion of health care facilities reporting data to DHIS-2 was above 98% during early 2019, falling to 91% in December 2019 during the doctors' strike, but remained above 97% from 2020 to 2022. It is important to note that in 2019 (July/August) and in 2020 (June/September) healthcare workers were on strike which might have hampered reporting.

Antenatal care

Table 5: ANC and maternal and infant HIV care indicators analyzed.

Thematic area	Indicator
ANC	Number of women booking for ANC
	Number of maternal deaths recorded
	Number of women tested for syphilis for the first time in ANC
Maternal HIV care in ANC	Number of pregnant women booking for first ANC with an already diagnosed HIV status
	Number of pregnant women aged 10-14 years newly testing HIV positive
	Number of women testing HIV positive at first test in Labor and delivery
Infant HIV testing and care	Number of HIV exposed infants testing HIV positive
	Number of infants initiated on ART

An estimated 1,706,946 ANC bookings were made in 1,560 health care facilities captured in the DHIS- 2 platform across the study period (4 years, January 2019 to December 2022). Of these 0.2% (4,070) were among the age groups 10-14 years, 21% (355962) among 15-19 years, 28% (473475) among the 20-24 years, 21% (357,328) among the 25-29 and 30% (516,111) above 30 years. A total of 1532 maternal deaths were recorded and of these 376 (25%) were among adolescents and young women under 24 years (data not disaggregated to reflect the 10-19 years category). Figure 2 below shows the cumulative number of women booking for ANC in the past four years.

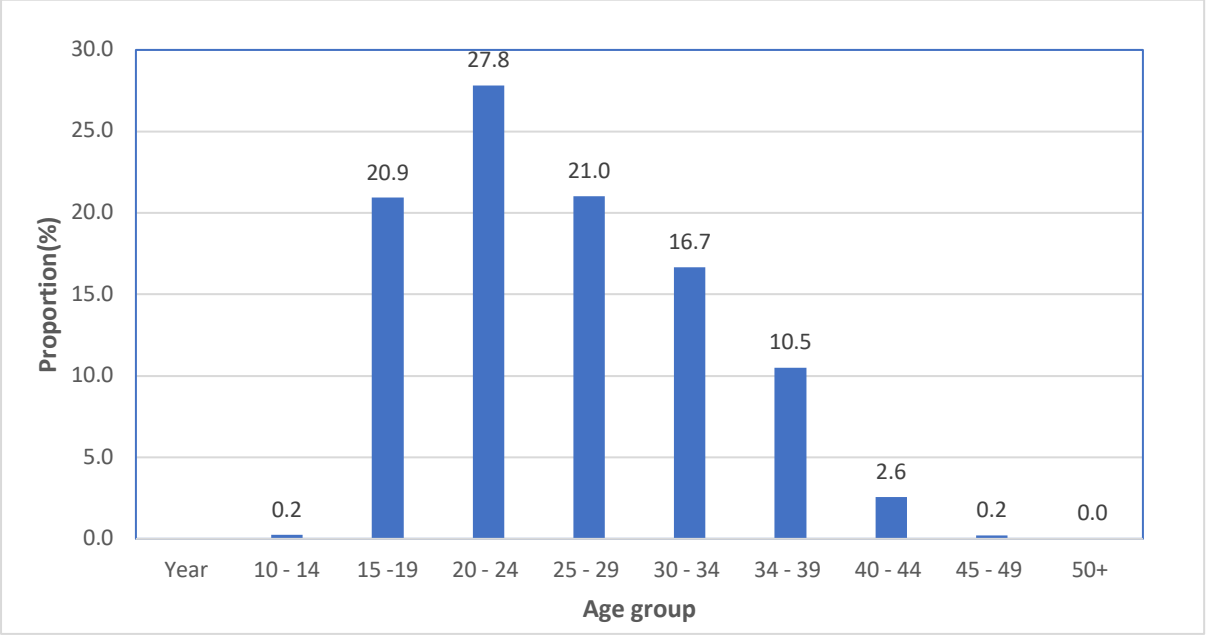


Figure 2: Pregnant women booking for ANC contact from 2019-2022.

Figure 3 below shows the number of pregnant women booking for ANC by year and age. Over the four-year period pregnancy was much more common among 15-19 year olds than among 10-14 year olds. The variation in proportion of all pregnancies that were among 10-14 year olds is shown in the inset.

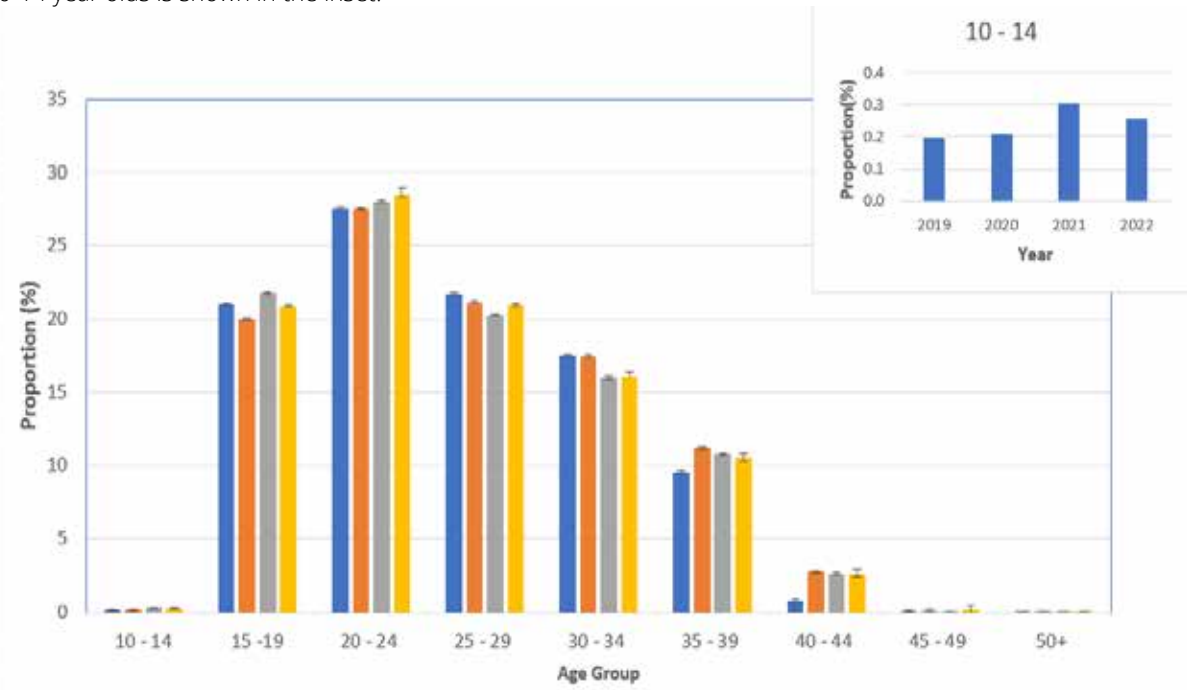


Figure 3: Percentage of all ANC booking by year and age group.

Among 10-14 year olds proportion of all ANC bookings that were among 10-14 year olds increased from 0.2% in 2020 to 0.3% in 2021. Among the 15-19 years the proportion of ANC bookings increased from 20% in 2020 to 21.7% in 2021. The increase is associated with the interruptions in the provision of SRHR, closure of schools and the reported increase in domestic violence because of the COVID-19 pandemic.

Table 6 shows the proportion of all ANC bookings among 10-14 year olds that occurred in each province by year. For some provinces such as Harare, Midlands, and Mat South the number of bookings increased during the COVID-19 phase when compared with pre-Covid-19 (2019). In some provinces such as Manicaland and Mat North the number of bookings decreased in 2020, increased in 2021 and then fell back to pre-pandemic levels in 2022. Rates varied by province with Harare and Bulawayo having a smaller proportion of all adolescent pregnancies than provinces with predominantly rural communities.

Table 6: Adolescent girls aged 10-14 years booking for ANC contact by province by year.

Year	2019	%(95%CI)	2020	%(95%CI)	2021	%(95%CI)	2022	%(95%CI)
Harare	16	1.7(1.0, 2.4)	24	2.5(1.6, 3.5)	80	5.8(4.5, 7.1)	71	8.9(7.0, 10.7)
Bulawayo	28	3.0(2.0, 4.0)	16	1.7(1.0, 2.4)	26	1.9(1.2, 2.6)	34	4.3(2.9, 5.6)
Midlands	106	11.4(9.3, 13.4)	132	13.8(11.9, 17.8)	170	12.3(10.6, 14.0)	65	8.1(6.4, 9.9)
Manicaland	134	14.4(12.3, 16.5)	114	12.0(10.0,13.9)	199	14.4(12.7, 16.1)	89	11.1(9.3, 12.9)
Masvingo	120	12.9(10.9, 14.9)	91	9.5(7.7, 11.3)	140	10.1(8.6, 11.7)	84	10.5(8.7, 12.3)
Mat North	118	12.7(10.6, 14.7)	109	11.4(9.5, 13.3)	173	12.6(10.9, 14.1)	103	12.9(11.0, 14.7)
Mat South	102	11.0(8.9, 13.0)	106	11.1(9.2, 13.0)	154	11.1(9.6, 12.7)	113	14.1(12.3, 16.0)
Mash East	90	9.7(7.8, 11.5)	101	10.6(8.8, 12.4)	139	10.1(8.5, 11.6)	88	11.0(9.2, 12.8)
Mash Central	110	11.8(9.8, 13.8)	109	11.4(9.5, 13.3)	148	10.7(9.2, 12.2)	75	9.4(7.7, 11.1)
Mash West	108	11.6(9.6, 13.6)	153	16.0(14.0, 18.0)	154	11.1(9.6, 12.7)	78	9.8(8.0, 11.5)
Total	**932**		**955**		**1383**		**800**	

Among the 15-19 year olds, the number of – pregnancies in Harare went from 13742 to 5437 andremained constant between 2019 and 2021 for some provinces then fell in 2022. For Mat North, Mat South, Mash East and Mash Central, there were increases in number of pregnancies from 2019 to 2021 and then decreases in 2022. Again, rates varied somewhat by provinces (Table 7 below).

Table 7: Adolescent girls aged 15-19 years booking for ANC contact by province by year.

Year	2019	%(95%CI)	2020	% (95% CI)	2021	%(95%CI)	2022	%(95%CI)
Harare	13742	13.8(13.6, 14.0)	5437	5.9(5.7, 6.1)	7051	7.1(6.9, 7.3)	8495	13.2(12.9, 13.5)
Bulawayo	2519	2.5(2.4, 2.6)	2170	2.4(2.2, 2.4)	2363	2.4(2.2, 2.5)	2657	4.1(3.9, 4.3)
Midlands	12289	12.3(12.1, 12.5)	13899	15.1(14.8, 15.3)	13837	13.9(13.7, 14.1)	7758	12.1(11.8, 12.3)
Manicaland	12881	12.9(12.7, 13.1)	12706	13.8(13.6, 14.0)	13760	13.8(13.6, 14.0)	8377	13.0(12.7, 13.3)
Masvingo	10624	10.6(10.5, 10.9)	10029	10.9(10.7, 11.0)	11101	11.1(10.9, 11.4)	6362	9.9(9.6, 10.1)
Mat North	5948	6(5.8, 6.1)	6069	6.6(6.4, 6.8)	6539	6.6(6.4, 6.8)	3792	5.9(5.7, 6.1)
Mat South	6013	6.0(5.9, 6.2)	6045	6.6(6.4, 6.7)	6527	6.6(6.3, 6.8)	3894	6.0(5.8, 6.3)
Mash East	10897	10.9(10.8, 11.1)	11034	11.9(11.7, 12.2)	11604	11.7(11.4, 11.9)	7393	11.5(11.2, 11.8)
Mash Central	10694	10.7(10.5, 10.9)	11324	12.2(12.0, 12.5)	12251	12.3(12.1, 12.5)	6950	10.8(10.5, 11.1)
Mash West	14189	14.2(14.0, 14.4)	13511	14.7(14.4, 14.9)	14520	14.6(14.3, 14.8)	8711	13.5(12.3, 13.5)
Total	**99796**		**92224**		**99553**		**64389**	

Figure 4 shows the proportion of pregnant women who knew their HIV status at first ANC booking. 2021 had the highest proportion of adolescent's girls aged 10-14 years booking for ANC with an already diagnosed HIV compared to all the other years (2019-13, 2020-13, 2021-65, 2022-10) age groups. The numbers were consistent among the 15-19 years with a reduction in 2022 (2019 -1925, 2020-1758, 2021-1697, 2022-1270). The upsurge in 2021 among the 10-14 year might have been related to the COVID-19 as most children were out of school.

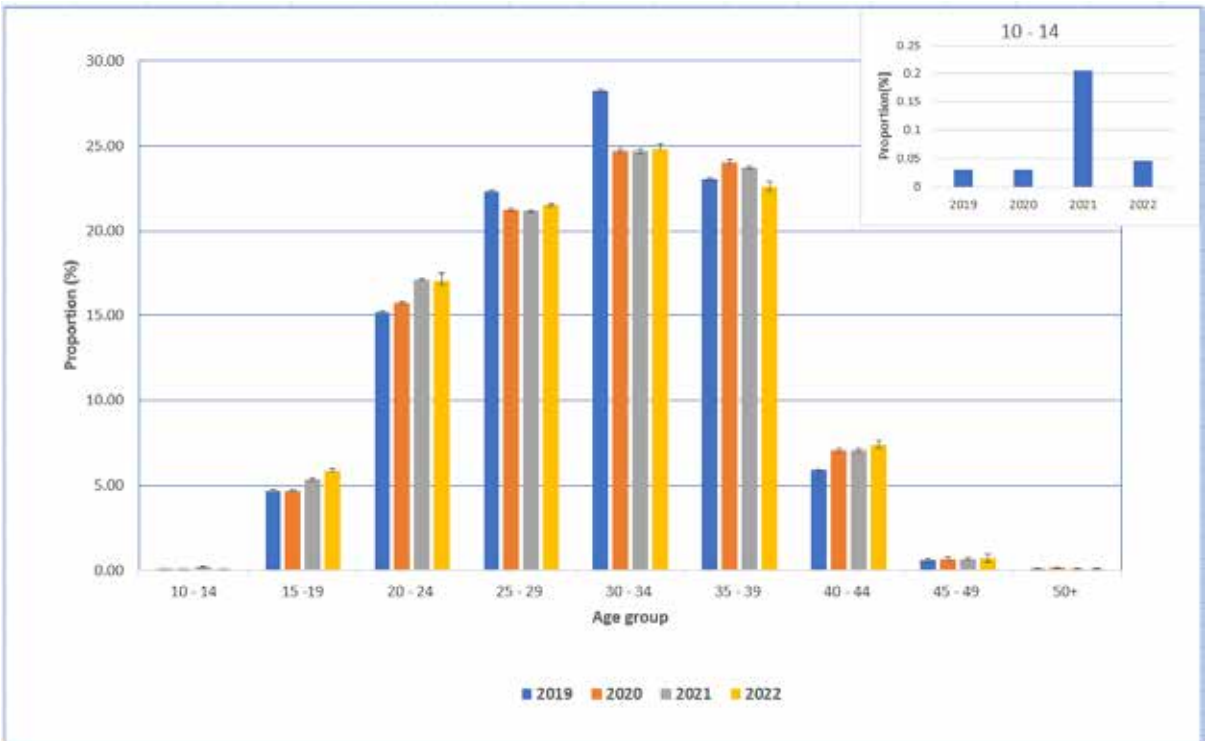


Figure 4: Percentage of pregnant women who were HIV positive at first ANC booking by year and age.

There were an estimated 50 957 pregnant women newly testing HIV positive in ANC from 2019-2022. Of these new HIV infections 0.1% were among adolescents aged 10-14 years, 15% among the 15-19 years, 29% among the 20-14 years, 25% among the 25-29 years, 18% among the 30-34 years, 11% among the 35-39 years, and 3% among the 40 years and above age group (figure 5 below).

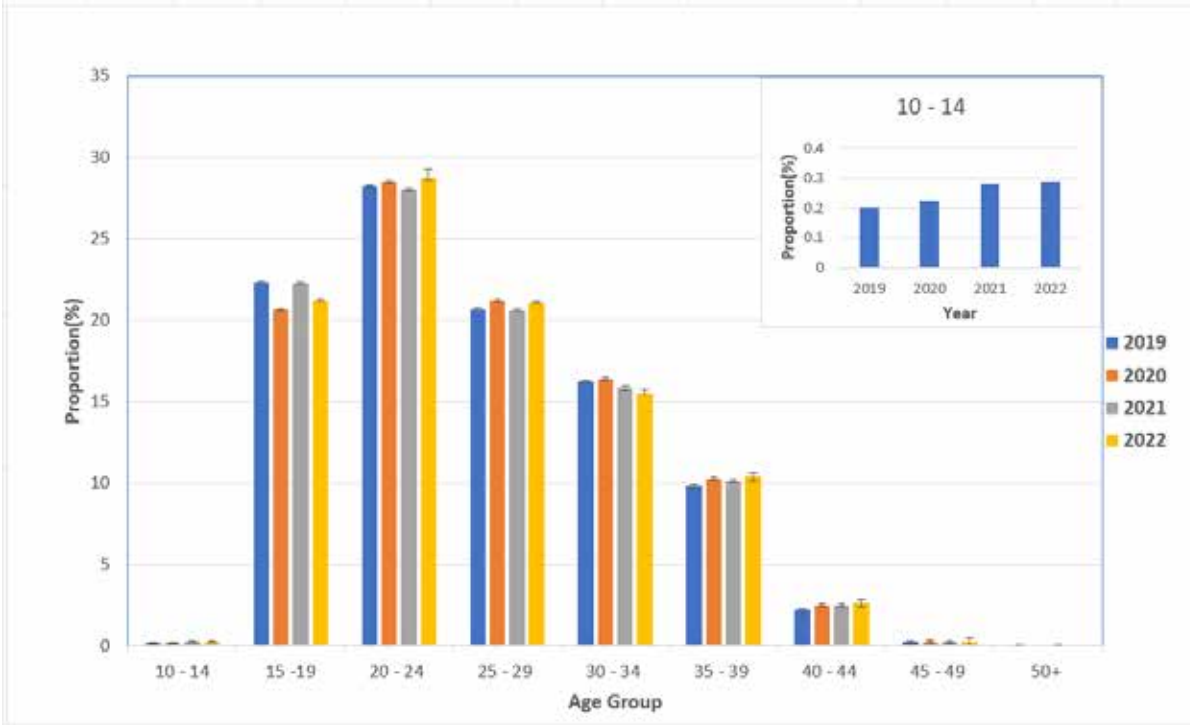


Figure 5: Percentage of pregnant women newly testing HIV positive in ANC by year.

There was a decline in the proportion of pregnant women newly testing positive in ANC in 2020 among the 15-19 year age group which then increased in 2021 and another surge in 2022.The decline might have been because of the COVID-19 and related measure which restricted movement.

Table 8 below shows the number of pregnant women aged 10-14 years newly testing HIV positive by year in ANC. HIV incidence remained very low among the 10-14 year in all the provinces.

Table 8: Number of pregnant adolescents aged 10-19 years newly testing HIV positive against ANC bookings by year.

Ages	2019	2020	2021	2022
10-14 years	6/932	12/955	25/1383	9/800
15-19 years	2231/99796	1829/92224	2071/99553	1361/64389

There was a decline in the number of pregnant women newly testing positive in ANC in 2020 among the 15-19 year age group which then increased in 2021 and another surge in 2022.The decline might have been because of the COVID-19 and related measure which might have disrupted provision of PMTCT services such as HIV testing.

Table 9 below shows the number of pregnant women aged 10-14 years newly testing HIV positive by year in ANC. For Harare, Mat South, Mash East, Mash Central and Mash West, there were increases in the proportion of adolescents who newly tested HIV positive in ANC from 2019 to 2020. Overall, there was an increase in the number of adolescents newly testing HIV positive from 2019 to 2021 and a decline in 2022.

Table 9: Pregnant women (15-19 years) newly testing HIV positive in ANC by year.

	2019		2020		2021		2022	
Province	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**
Harare	0	0.0	1	8.3	0	0.0	1	11.1
Bulawayo	1	16.7	0	0.0	2	8.0	0	0.0
Midlands	1	16.7	2	16.7	5	20.0	3	33.3
Manicaland	1	16.7	2	16.7	3	12.0	0	0.0
Masvingo	2	33.3	0	0.0	0	0.0	1	11.1
Mat North	1	16.7	0	0.0	8	32.0	2	22.2
Mat South	0	0.0	3	25.0	1	4.0	1	11.1
Mash East	0	0.0	2	16.7	4	16.0	1	11.1
Mash Central	0	0.0	1	8.3	1	4.0	0	0.0
Mash West	0	0.0	1	8.3	1	4.0	0	0.0
National	**6**	**100.0**	**12**	**100.0**	**25**	**100.0**	**9**	**100.0**

Mashonaland West, Mashonaland East and Harare had the highest proportion among pregnant women booking for ANC throughout the duration of the study ranging between 14.1% and 15.8%. Bulawayo had the lowest ever recorded HIV incidence with 3.0% being the highest recorded in the province over the years.

Table 10: Pregnant women (15-19 years) newly testing HIV positive in ANC by year.

	2019		2020		2021		2022	
Province	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**
Harare	352	15.8	149	8.1	140	6.8	193	14.2
Bulawayo	89	4.0	81	4.4	63	3.0	87	6.4
Midlands	323	14.5	246	13.4	347	16.8	175	12.9
Manicaland	202	9.1	179	9.8	220	10.6	139	10.2
Masvingo	213	9.5	176	9.6	176	8.5	86	6.3
Mat North	129	5.8	117	6.4	148	7.1	75	5.5
Mat South	182	8.2	162	8.9	196	9.5	125	9.2
Mash East	231	10.4	262	14.3	306	14.8	181	13.3
Mash Central	193	8.7	199	10.9	202	9.8	146	10.7
Mash West	317	14.2	258	14.1	273	13.2	154	11.3
National	**2231**	**100.0**	**1829**	**100.0**	**2071**	**100.0**	**1361**	**100.0**

There were 3632 mothers testing HIV positive at first test in labor. Of these, 0.2% were among women aged 10-14 years, 13.7% among the 15-19 years, 30% among the 20-24 years, 25% among the 25-29 years, and 30.9% among those aged 30 years and above. 2021 had the highest proportion of mothers aged 10-14 years testing for HIV for the first time in labor compared to all the other years.

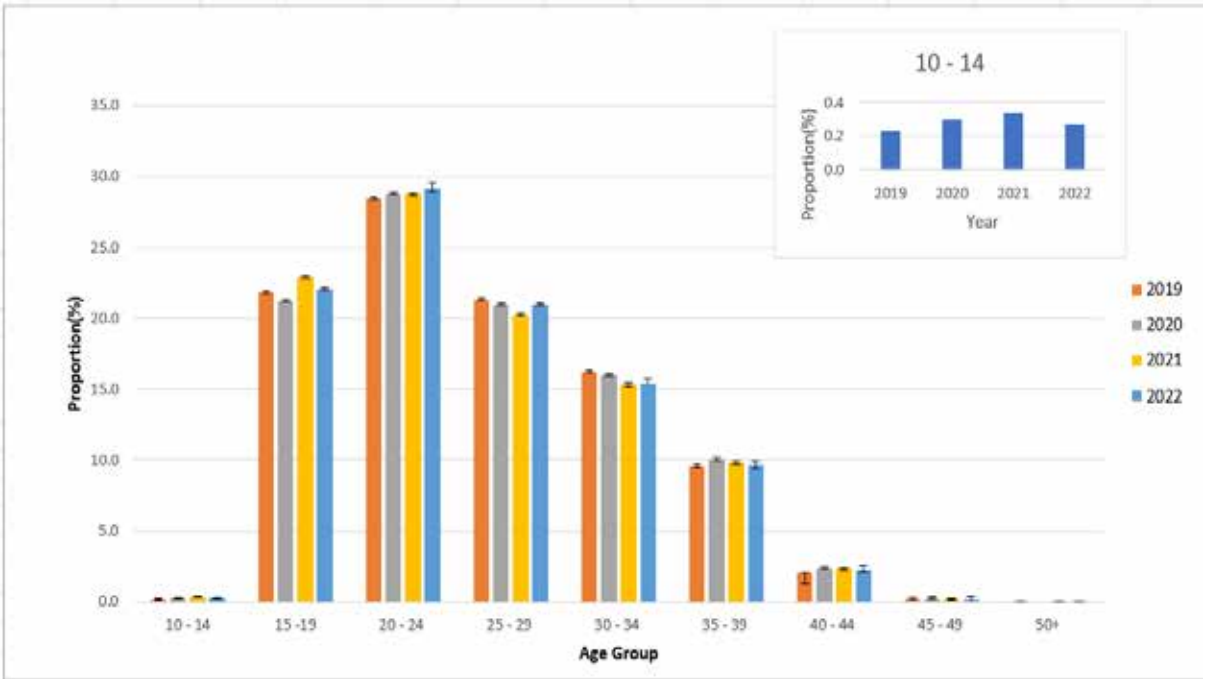


Figure 6: Percentage of pregnant women testing HIV positive at first test in labor and delivery by year.

Most pregnant women testing HIV positive at first test in labor was highest in 2021 among the 10-14 year and 15-19 year olds. In the 10-14 year age group, the least proportion testing HIV positive was in 2019 while the least among the 15-19 year age group was in 2020 – Figure 6 above.

We analyzed the total number of HIV positive women pre and post-delivery (combining three indicators; total Deliveries by HIV Positive women (include BBA, Home deliveries, Institutional deliveries; women testing HIV positive for the first-time within 24 months post-delivery and women testing HIV positive at retesting in post-delivery). A total of 177769 were recorded from 2019-2022. Of these 0.2% were among the 10-14 years, 9% among 15-19 years, 20% among young women aged 20-24 years, women aged 25-29 and 30-34 years all at 23%, women aged 34-39 years were at 19% while those 40years and above were at 6.4%.

Table 11 below shows the number of 2021 again recorded the highest number of adolescents aged 10-14 years who tested positive pre and post-delivery while 2019 had the highest numbers for all the other age groups. The numbers of women testing positive pre and post-delivery fell from 30% in 2019 to 26% in 2020, 27% in 2021 and 17% in 2022.

Table 11:Number of adolescent girls aged 10-19 years testing positive pre and post-delivery against ANC bookings by year

Ages	2019	2020	2021	2022
10-14 years	57/932	43/955	152/1383	68/800
15-19 years	4334/99796	3319/92224	5309/99553	2382/64389

With regards to pregnant women testing HIV pre and post-delivery, the majority tested in 2021 among the 10-14 year olds while the least tested in 2020. Among the 15-19 year olds, the highest proportion of testers tested in 2021 as well followed by 2019- see Figure 7 below.

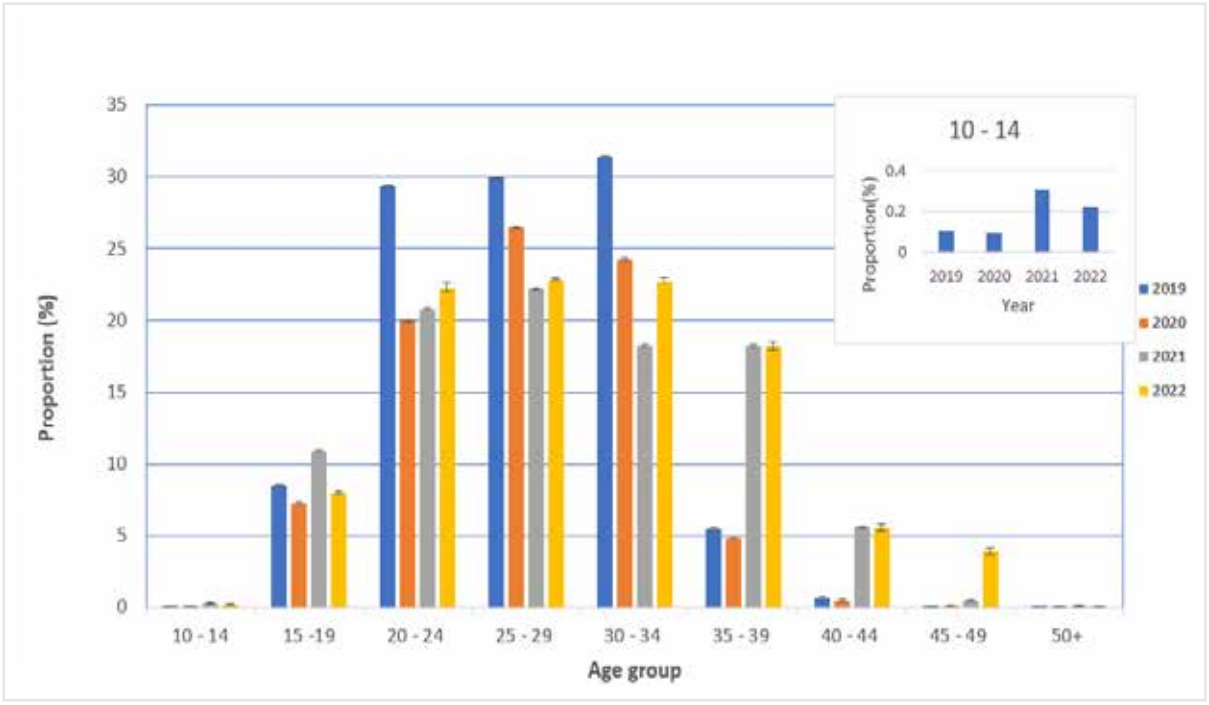


Figure 7: Pregnant women testing HIV pre and post-delivery by year and age.

There were an estimated 1,385,695 mothers tested for syphilis for the first time in ANC over 4 years. Of these 0.2% were among adolescents aged 10-14 years, 20.7% among adolescents aged 15-19 years, 27.6% among young women aged 20-24 years, 20.9% among women aged 25-29 years, and 30.3% among women 30 years and above. Among the 10-14 year olds, the proportion of women who tested for syphilis for the first time was in 2021, followed by 2022. Earlier years had the least proportions of women testing for syphilis. The highest proportion of women testing for syphilis among the 15-19 year olds was also in 2021. 2020 had the least proportion of women testing for syphilis among this age group (fig 8 below).

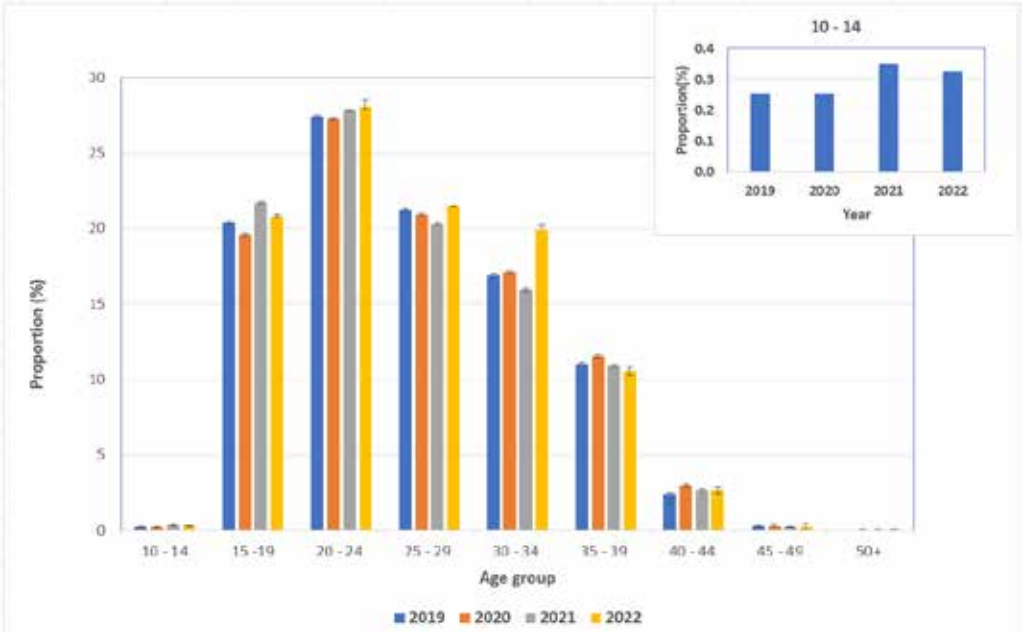


Figure 8: Percentage of women tested for syphilis for the first time in ANC by year and age.

HIV exposed infants

A total of 4021 infant were infected with HIV out of all the infants delivered by the 177769 HIV positive women during the four years. 2019 had the highest proportion of infants testing HIV positive compared all the COVID- 19 phase. Of the total HIV infections 10% were among infants aged below 72 hours, 26% aged 73 hours to 2 months, 40% aged 3-12 months and 24% aged 13-24 months. Most of the infections are occurring during breastfeeding. The proportion of infants with HIV fell from 33% in 2019 (pre-COVID-19) to 24% in 2020 and 2021 and 19% in 2022. Figure 9 show the total proportion of infants infected with HIV from 2019-2022 by age.

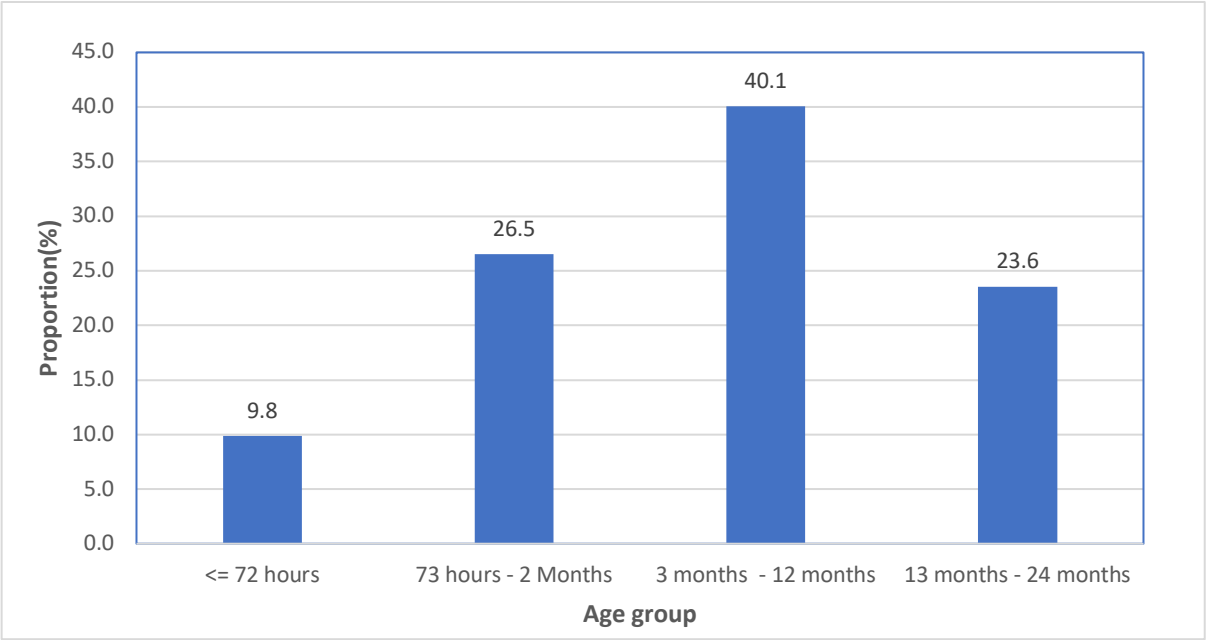


Figure 9: Infants infected with HIV from 2019-2020 by age.

Table 12 below shows that total number of infants infected with HIV infection nationally. 2019 had the highest number of infant seroconverting compared to all the other years. Most of the infections are occurring during breastfeeding at 3-12 months.

Table 12: Number of HIV Exposed Infants testing HIV positive by year and age .

Year	<= 72 hours	73 hrs - 2 months	3 - 12 months	13 - 24 months	Total
2019	116	369	552	293	1330
2020	87	237	428	200	952
2021	101	248	375	257	981
2022	92	213	256	197	758
Total	396	1067	1611	947	4021

Of the 4021 infants who seroconverted 3733 were initiated on ART and 288 were missed. Of the initiated infants, 10% were among infants aged 72 hours and below, 24% infants aged 73 hours -2 months, 40% aged 3-12 months and 27% aged 13-24 months (figure 11).

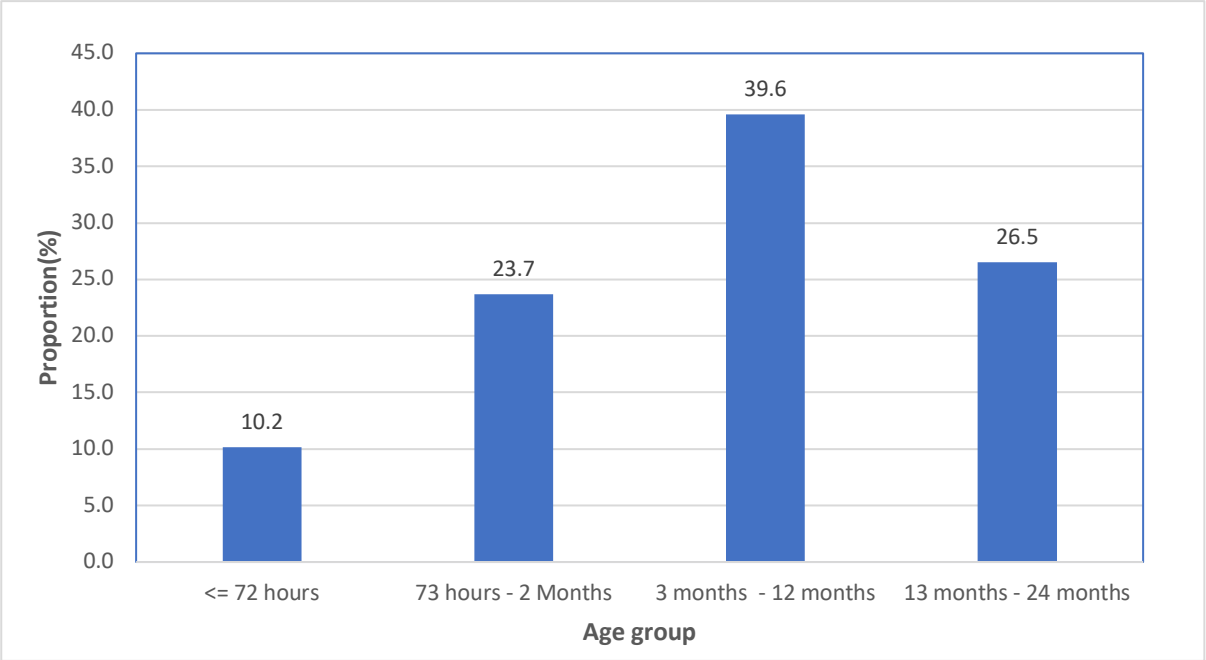


Figure 10: Infants initiated on ART from 2019-2022 by age.

Primary Data Collection Findings

Research targets and outputs

A total of 1,477 households with adolescent girls were approached, and of these, one adolescent was interviewed in 1,418 households visited, representing a 96% response rate. Fifty-nine households declined to participate (38 by parents or caregivers and 21 by adolescents themselves). Refusals were mainly from households with pregnant or adolescent mothers as they were afraid of being referred to Child Welfare by the CCWs who were assisting with identification of eligible households.

Demographic characteristics of adolescent girls

Of the 1,418 recruited adolescent girls, 40% (567) were aged 10-14 years while 60% (851) were aged 15-19 years. The median age of participants was 16 years. Only one adolescent identifies as a transgender and therefore no further analysis was done on gender. Among the adolescent girls recruited, 73.6% (1,035) were Shona speaking, 14.7% (270) Ndebele, and 11.7% (113) other ethnic tribes. Approximately 4.7% (66) of the total population were adolescents with disabilities, and of these, 26 were aged 10-14 years. Religion influences people's knowledge and practices which impacts on adolescents' uptake of SRHR services especially use of contraception. Most of the adolescent girls belonged to the Apostolic religion 49% (604), followed by Pentecostal churches 22% (362), Protestant churches 19% (304), and other religions 10% (148) as shown in table 13 below.

Of the 66 adolescents with disabilities, 44% (29) belonged to the Apostolic religion, 35% (23) were Pentecostal, 9% (6) were not religious, 8% (5) were Protestants, 3% (2) belonged to the African Traditional religion, and 2% (1) were Muslims (Table 13 below).

Table 13: Social demographic characteristics of adolescents aged 10-19 years.

Socio-Demographic Characteristics for adolescents aged between 10 and 19 years.							
	10 – 14 Years		**15 - 19 Years**		**10 – 19 Years**		**P Value**
	N = 567		**N = 851**		**N = 1418**		
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Province							
Bulawayo	139	3.0 (1.2 - 7.0)	166	2.4 (0.99 - 5.5)	305	2.6 (1.1 - 5.9)	0.043
Harare	46	2.7 (0.9 - 8.2)	102	3.5 (1.2 - 9.5)	148	3.2 (1.1 - 8.9)	
Mashonaland Central	116	14.1 (6.1 - 29.4)	193	16.1 (7.6 - 31.1)	309	15.3 (7.2 - 29.6)	
Mashonaland West	119	37.3 (17.7 - 62.3)	142	26.9 (12.3 - 49.1)	261	31.1 (14.9 - 53.8)	
Masvingo	112	28.0 (13.2 - 49.9)	156	26.0 (12.4 - 46.5)	268	26.8 (13.1 - 47.1)	
Matabeleland North	35	14.8 (5.4 - 34.6)	92	25.2 (10.2 - 49.9)	127	21.0 (8.2 - 44.1)	
Gender							
Cisgender Female	566	99.9 (99.5 - 100.0)	851	100.0	1417	100.0 (99.8 – 100.0)	0.243
Cisgender Male	1	0.1 (0.0 – 0.5)	0	0.0	1	0.0 (0.00 – 0.2)	
Marital status							
Single	564	99.5 (96.2 - 99.9)	571	66.3 (56.4 - 74.9)	1135	79.6 (71.9 - 85.6)	<0.001
Married	2	0.3 (0.0 - 2.5)	240	29.1 (21.5 - 38.1)	242	17.6 (12.3 - 24.5)	
Separated/Divorced/							
Widowed	1	0.2 (0.0 - 1.3)	40	4.6 (2.8 - 7.3)	41	2.8 (1.7 - 4.6)	
Disability status							
No	538	94.4 (91.8 - 96.3)	814	95.9 (93.2 - 97.5)	1352	95.3(93.2 - 96.8)	0.260
Yes	29	5.6 (3.7 - 8.2)	37	4.1 (2.5 - 6.8)	66	4.7 (3.2 - 6.8)	
Ethnicity							
Shona	425	79.9 (64.0 - 89.9)	610	69.4 (48.5 - 84.6)	1035	73.6 (54.5 - 86.7)	<0.001
Ndebele	103	12.9 (6.1 - 25.3)	167	15.9 (6.8 – 33.0)	270	14.7 (6.8 - 29.0)	
Venda, Tonga, Others	12	7.2 (2.6 - 18.5)	74	14.7 (4.2 – 40.0)	86	11.7 (3.6 - 31.9)	
Religion							
Christian Protestant	142	23.8 (16.8 - 32.7)	162	16.2 (11.9 - 21.6)	304	19.2 (14.0 - 25.8)	¸0.008
Christian Pentecostal	149	25.4 (20.0 - 31.8)	213	19.8 (14.5 - 26.5)	362	22.1 (17.3 - 27.7)	
Christian Apostolic	233	43.0 (33.9 - 52.5)	371	52.8 (42.1 - 63.3)	604	48.9 (39.6 - 58.2)	
Other (Muslims, ATR, No religion)	43	7.8 (4.4 - 13.3)	105	11.2 (7.7 - 16.1)	148	9.9 (6.7 - 14.2)	

Eighty percent (1,135) were single, 17% (242) were married, and 2.9 (41) were either divorced, separated, or widowed. 99% (281) of the married or divorced adolescents were aged 15-19 years compared to 0.8% (2) aged 10-14 years. Of the 242 married adolescents, 228 were in monogamous relationships, 12 were in polygamous relationships, and 2 did not know whether their husbands had other wives. Of the 66 adolescent girls with disabilities, the majority 79.6% (52) were single, 17.6 % (11) were married, and 2.8% (3) were divorced. Sixty-five percent of the married adolescents reported being married to partners within their age range with only 35% (54) being married to older partners with a 6–10-year age difference. Of the 11 married adolescents with disabilities, 10 were in monogamous relationships and one was in a polygamous relationship (Table 13 above).

Table 14 below presents the total number of adolescent girls recruited and their marital status for the six provinces.

Table 14: Numbers of recruited adolescents in the six provinces by marital status.

Province	Participants	Pregnancy Prevalence	Marital Status		
			Single	Married	Separated/ Divorced/ Widowed
	N	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
Bulawayo	305	12.1 (5.23 - 25.7)	95.1 (89.9 - 97.7)	3.6 (1.6 - 7.9)	1.3 (0.5 - 3.7)
Harare	148	26.5 (20.8 - 33.0)	74.3 (66.7 - 80.6)	20.23 (14.3 - 27.83)	5.5 (3.0 - 9.7)
Mashonaland Central	309	32.4 (21.7 - 45.3)	68.3 (53.6 - 80.0)	26.1 (15.6 - 40.3)	5.6 (3.9 - 8.1)
Mashonaland West	261	19.6 (10.0 - 34.9)	78.4 (59.2 - 90.1)	19.8 (8.9 - 38.4)	1.8 (0.8 - 4.3)
Masvingo	268	14.5 (7.9 - 25.1)	84.1 (71.8 - 91.6)	14.6 (7.6 - 26.1)	1.4 (0.5 - 3.8)
Matabeleland North	127	42.7 (39.8 - 45.6)	82.9 (59.4 - 94.2)	13.2 (4.8 - 31.5)	3.9 (1.2 - 11.9)
Total	1418	25.1 (18.7 - 32.7)	79.6 (71.9 -85.6)	17.6 (12.3 - 24.5)	2.8 (1.7 - 4.6)

Sixty-five percent of the married adolescents reported being married to partners within their age range with only 35% (54) being married to older partners with a 6–10-year age difference. Mashonaland Central and West had the highest number of married adolescents at 35% (85) and 26% (63) respectively. (Fig 11).

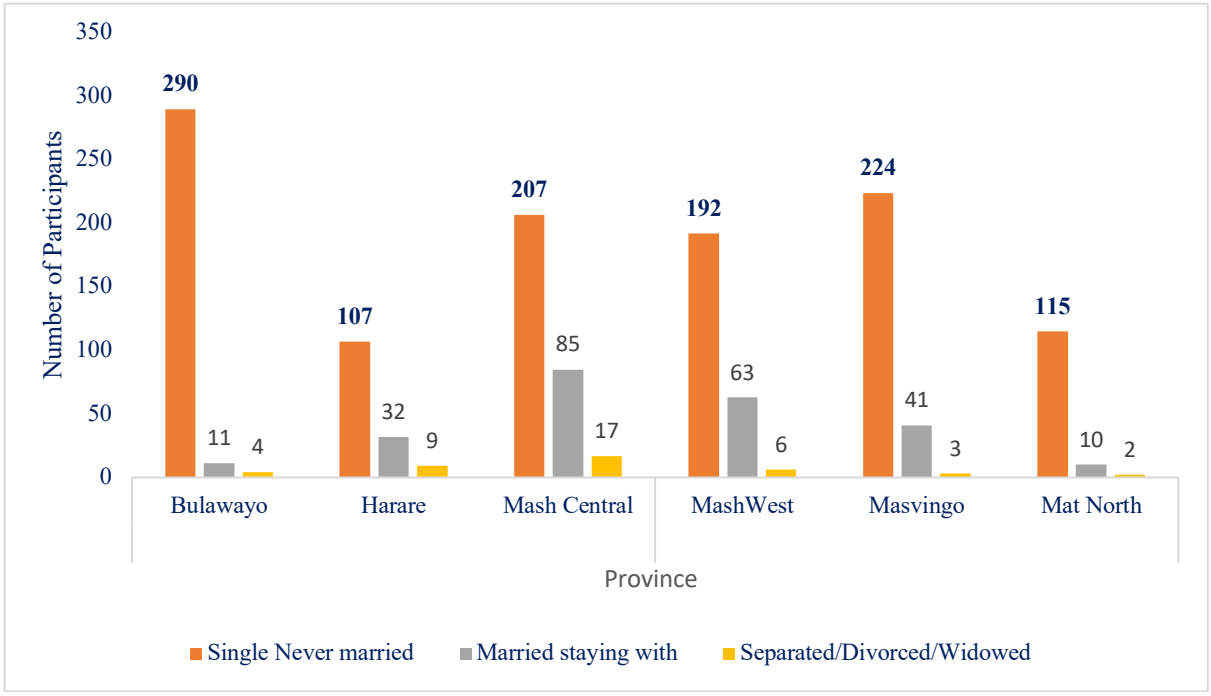


Figure 11: Marital status by province among adolescents aged 10-19 years.

Overall, sixty-three percent (901) were still in school, this varied by age, with very young girls more likely to still be in school. Among the adolescent girls still in school, 60% (541) were in primary school, and 40% (360) were in secondary school. Sixty-one percent (40) of the adolescent girls with disabilities were not in school and only 39% (26) were in school with most of the in-school being in primary school. There was a significance difference for school enrollment status between age groups ($p < 0.001$) (table 15 below).

Table 15: School enrolment status among adolescents aged 10-19 years.

School enrolment status among adolescents aged 10-19 years.							
	10 - 14-Years		**15 - 19-Years**		**10 - 19 Years**		**P values**
	N = 26		**N = 491**		**N = 517**		
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Still attending school							
No	26	4.0 (2.2 - 7.1)	491	59.1(48.9 - 68.5)	517	37.0 (28.6 - 46.4)	<0.001
Yes	541	96.0 (92.9 - 97.8)	360	40.9 (31.5 - 51.1)	901	63.0 (53.6 - 71.4)	
Level of education attained							
Primary/ No school	493	87.1 (82.7 - 90.5)	275	36.1 (30.1 - 42.6)	768	56.5 (51.9 - 61.1)	<0.001
Incomplete O level	73	12.7 (9.3 - 17.2)	495	56.8 (50.3 - 63.2)	568	39.2 (34.3 - 44.3)	
Higher education (O/A level/Diploma/Degree)	1	0.2 (0.0 - 1.3)	80	7.0 (4.2 - 11.6)	81	4.3 (2.6 - 7.0)	

The main reasons cited for not leaving school were family not affording fees 51.5% (246), got married 15.2% (77), and got pregnant 10.9% (63) as shown in table 16 below.

Table 16: Reasons for dropping out of school among the 10-19 years.

Reasons for leaving school for adolescents aged between 10 and 19 years							
	10 - 14-Years		**15 - 19-Years**		**10 - 19 Years**		**P values**
	N = 567		**N = 851**		**N = 1418**		
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
What was your reason for leaving school?							
My family/ care giver could not afford fees	19	70.3(47.7 – 86.0)	227	50.6 (42.1 - 59.1)	246	51.5 (43.3 - 59.6)	0.243
Inadequate passes	0	0.0	49	9.1 (5.5 - 14.6)	49	8.7 (5.3 - 13.9)	
I got pregnant	1	4.0 (0.6 - 22.7)	62	11.2 (7.2 - 17.1)	63	10.9 (7.0 - 16.6)	
I got married	1	6.1 (0.9 - 32.3)	76	15.6 (11.8 - 20.3)	77	15.2 (11.7 - 19.4)	
I was sick	0	0.0	6	0.9 (0.3 - 3.0)	6	0.9 (0.3 – 2.9)	
I did not like school	1	1.6 (0.2 - 11.9)	9	1.4 (0.5 - 3.6)	10	1.4 (0.6 - 3.4)	
I was ill treated at school	0	0.0	2	0.3 (0.0 - 1.9)	2	0.3 (0.0 - 1.8)	
Parents/guardian refused	1	4.0 (0.6 - 22.7)	1	0.2 (0.0 - 1.6)	2	0.4 (0.1 - 1.5)	
I got a job	0	0.0	1	0.0 (0.0 - 0.2)	1	0.0(0.0 - 0.2)	
To help at home	0	0.0	1	0.2 (0.0 - 1.8)	1	0.2 (0.0 - 1.7)	
Others	3	13.9 (3.9 - 39.1)	57	10.5 (7.3 - 14.7)	60	10.6 (7.5 - 14.7)	

Ninety-six percent (1354) of the adolescents were unemployed and 4% (64) were employed on full time, part-time or on an informal basis. Of the 66 adolescents with disabilities, 60 were unemployed and 6 were employed.

Of the 1,418, 77% (1091) were non-orphans, 15% (210) were double orphans, 4% (61) were maternal and 4% (56) were paternal orphans. Of the 1194 adolescents who were not married 57% (759) were staying with biological parents and 43% (583) were staying with non-biological parents. Of those that were staying with non-biological parents, 5% (80) were staying in child-headed households. Of the 1,338 adolescents who lived with an adult primary caregiver, 73% (981) were staying in female headed households and 27% (357) were staying in male headed households. There was evidence of an association between province and gender of caregivers, p = 0.016.

We used the Household Food Insecurity Access Scale to assess food security and 11% of the adolescents reported that they were living in food insecure households. Of the 66 adolescents with disabilities, 45 were non-orphans, 17 were paternal orphans, 2 were maternal, and 2 were double orphans. Thirty-one were staying with biological parents, 30 were staying with non-biological parents, and 5 had no primary caregivers. Twelve self-reported that they were staying in food insecure households and 54 were staying in food secure households. Table 18 below shows the distribution of gender of caregivers per province.

Table 17: Gender distribution of caregivers by province

Distribution of gender of caregivers for adolescents				
Province	**N**	**Male Caregiver**	**Female Caregiver**	**P value**
	Number	**% (95% CI)**	**% (95% CI)**	
Bulawayo	288	12.9 (9.4 – 17.3)	87.2 (82.7 – 90.6)	0.016
Harare	137	22.3 (17.9 – 27.4)	77.7 (72.6 – 82.1)	
Mashonaland Central	296	25.2 (17.4 – 35.1)	74.8 (65.0 – 82.6)	
Mashonaland West	259	30.6 (20.3 – 43.3)	69.4 (54.7 – 79.7)	
Masvingo	244	39.1 (32.9 – 45.7)	60.9 (54.3 – 67.1)	
Matabeleland North	114	19.1 (12.5 – 28.1)	80.9 (71.8 – 87.5)	
Total	1338	29.0 (24.0 – 34.6)	71.0 (65.4 – 76.0)	

SRHR Knowledge

The study explored SRHR knowledge and of the 1418 adolescent girls interviewed 64% were aware of one or more SRHR services. The majority, 741(73.6%) cited schoolteachers as their source of SRHR information compared to other sources: community health workers (32.8%), NGOs (12.3%), peers (12.3%), radio (8.8%), and television (5.2%). Of the 966 who knew at least one SRHR service only 44.8% (686) knew how to access the services. Of the 44.8% (686) who knew how to access service only 23.5% were very young adolescents, confirming suboptimal knowledge of SRHR services especially among the 10–14-year age group. 51.2% of the adolescent knew where to access the SRHR services, and of these 26.5% were very young adolescents. Health facilities were the most cited (93.5%) among SRHR service providers compared to police (6.5%), NGOs (11.7%), and community providers (5.5%). Knowledge of at least one SRHR service, how to access SRHR services and where to access SRHRS services was statistically different between the younger (10 – 14) year and older adolescents (15 – 19) year olds (p< 0.001). Uptake of SRHR was statistically different between the older adolescents and very young adolescents (p = 0.001). (Table 18). Adolescents in rural areas (88.9%) were more likely to have accessed services compared to adolescent girls in urban areas (11.1) with a significant statistical difference of p = 0.015.

Table 18:SRHR knowledge

SRHR knowledge, access and uptake among adolescents aged 10 -19 years							
	10 - 14-Years		**15 - 19-Years**		**10 - 19 Years**		**P values**
	N = 567		**N = 851**		**N = 1418**		
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Do you know any of the listed SRHR services (Contraceptive, STI Screening and Testing, HIV Counselling and Testing Sexuality Education, Information Sexual Rights Sexual Violence and Coercion, HIV and STI Prevention)?							
No	261	55.7 (46.6 - 64.4)	191	23.13 (16.8 - 31.0)	452	36.2 (28.4 - 44.7)	<0.001
	541	96.0 (92.9 - 97.8)	360	40.9 (31.5 - 51.1)	901	63.0 (53.6 - 71.4)	
Yes	306	44.3 (35.6 - 53.5)	660	76.9 (69.0 - 83.2)	966	63.8 (55.3 - 71.6)	
Do you know how to access SRHR services?							
No	390	76.5 (71.3 - 80.9)	342	41.0 (34.2 - 48.1)	732	55.2 (48.7 - 61.5)	<0.001
Yes	177	23.5 (19.1 - 28.7)	509	59.0 (51.9 - 65.8)	686	44.8 (38.5 - 51.3)	
Do you know where to access SRHR services?							
No	366	73.2 (67.8 - 77.8)	263	32.5 (25.5 - 40.3)	629	48.8 (41.8 - 55.8)	<0.001
Yes	201	26.8 (22.0 - 32.2)	588	67.5 (59.7 - 74.5)	789	51.2 (44.2 - 58.2)	
Have you ever accessed any one of the SRHR services?							
No	126	62.3 (46.9 - 75.6)	206	35.8 (24.8 - 48.6)	332	41.4 (30.3 - 53.4)	0.001
Yes	74	36.7 (23.2 - 52.6)	381	63.9 (51.2 - 75.0)	455	58.2 (46.3 - 69.2)	
I don't wish to answer	1	1.0 (0.1 - 7.2)	1	0.2 (0.0 - 1.7)	2	0.4 (0.1 - 1.6)	

Knowledge of SRHR service was statistically different by province ($p<0.001$), Bulawayo had the highest number of knowledgeable participants 91.2%, followed by Matabeleland North 87.6%, and Harare 79.3%. Of the recruited adolescents Mashonaland West 49.9% had the least knowledgeable participants in the study. Participants who had ever been pregnant (79.5%) were more knowledgeable in SRHR than those who had not 58.6%. There was evidence of statistical difference between the two groups in their knowledge in at least one of the SRHR services mentioned above ($p = 0.001$). Participants who practiced apostolic religion were most knowledgeable in SRHR services in comparison with the protestant (67.6%), Pentecostal (63.5%) and who practiced other religions (38.9%). Comparing participants knowledge in SRHR services by the level of education attained, those who had attained higher education were the most knowledgeable (88.8%). Those who had not attended school or attained primary level had the least knowledgeable 52.3%. Very young adolescents aged 10-14 years (44.3%) were less knowledgeable in SRHR than the older adolescents (76.9%). Participants who resided in rural settlements (62.0%) were less knowledgeable than those who resided in the urban settlements (74.3%). The differences shown in the table 19 below were all statistically significant with $p < 0.05$.

Table 19: SRHR knowledge among adolescent aged 10-19 years

	No (n)	% 95% CI	Yes (n)	% 95% CI	Total (N)	P Value
Province						
Bulawayo	27	8.9 (6.5 - 11.9)	278	91.2(88.1 - 93.5)	305	<0.001
Harare	31	20.7(16.8 - 25.4)	117	79.3(74.7 - 83.2)	148	
Mashonaland Central	145	47.0 (39.1 - 55.1)	164	53.0 (44.9 - 60.9)	164	
Mashonaland West	125	50.1(39.0 - 61.2)	136	49.9(38.8 - 61.0)	136	
Masvingo	104	36.9(27.5 - 47.5)	164	63.1(52.5 - 72.5)	268	
Matabeleland North	20	12.4(6.6 - 47.5)	107	87.6(77.9 - 93.4)	107	
Have ever been pregnant						
No	373	41.4(33.1 - 50.2)	708	58.6(49.8 - 66.9)	1081	0.001
Yes	79	20.5(12.7 - 31.5)	258	79.5(68.5 - 87.3)	337	
Religion						
Christian-Protestant	72	32.5(23.5 - 43.0)	232	67.5(57.0 - 76.6)	304	0.026
Christian-Pentecostal	93	36.5(25.9 - 48.6)	269	63.5(51.4 - 744.1)	362	
Christian-Apostolic	211	32.4(22.0 - 45.0)	393	67.6(55.0 - 78.0)	604	
ATR, Muslim, No religion, Other	76	61.1(49.2 - 71.8)	72	38.9(28.2 - 50.8)	148	
Highest level of education attained						
Primary / No education	324	47.7(39.7 - 55.8)	444	52.3(44.2 - 60.3)	768	<0.001
Incomplete O level	117	22.3(14.2 - 33.1)	451	77.7(66.9 - 85.8)	568	
Higher Education	11	11.2(4.5 - 25.4)	70	88.8(74.7 - 95.5)	81	
Don't wish to answer	0	0	1	100		
Age group						
10 - 14 (Very young adolescents)	261	55.7(46.6 - 64.4)	306	44.3(35.6 - 53.5)	567	<0.001
15 - 19 (Older adolescents)	191	23.1(16.8 - 31.0)	660	76.9(69.0 - 83.2)	851	
Settlement type						
Urban	374	25.7(15.7 – 39.2)	559	74.3(60.8 – 84.3)	933	0.015
Rural	78	38.0 (29.2 – 47.6)	407	62.0(52.4 – 70.8)	485	

Of the 66 adolescents with disabilities, 49.2% (38) self-reported that they know some of the SRHR services and only 28 did not know. Although some adolescents with disabilities had knowledge on some of the SRHR services, most did not know how 75.1% (49) and where 71.1% (46) to access services. 65 have never used condoms and 99.0% (65) had never used any form of contraception. There was statistically significant difference in knowledge, how to access, where to access of SRHR services and use of condoms and disability status of the adolescents.

We looked at uptake by type of service, and HIV testing and counselling (64%) was the most accessed services followed by contraception (46.3%) while least cited services were sexuality education (4.8%) and STI screening and treatment (6.0%) (Table 20). These SRHR services were mostly accessed in antenatal and post-partum care.

Table 20: SRHR services accessed by adolescents aged 10 and 19 years.

SRHR service accessed	10 -14 Years		15 - 19 Years		10 – 19 Years		P Value
	N = 74		N = 382		N = 456		
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Condoms							
No	70	97.4(90.8 – 99.3)	282	75.7(67.8 – 82.3)	358	76.9(69.6 – 82.8)	<0.001
	104	36.9(27.5 - 47.5)	164	63.1(52.5 - 72.5)	268		
Yes	4	2.6(0.7 – 9.2)	100	24.3(17.8 – 32.2)	104	23.2(17.2 – 30.4)	
Contraceptives							
No	67	90.5(79.2 – 96.0)	213	48.1(41.0 – 55.3)	280	53.7(47.5 – 59.8)	<0.001
Yes	7	9.5(4.0 – 20.9)	169	52.9(44.7 – 59.0)	176	46.3(40.2 – 52.5)	
Sexuality education							
No	67	88.6(71.8 – 96.0)	359	96.2(92.0 – 98.2)		95.2(90.6 – 97.6)	0.040
Yes	7	11.4(4.0 – 28.2)	23	3.8(1.8 – 8.0)		4.8(2.4 – 9.4)	
STI and HIV prevention							
No	67	87.1(70.9 - 29.1)	316	84.3(79.4 - 88.2)	383	84.6(80.0 - 88.4)	0.661
Yes	7	12.9(5.1 - 29.1)	66	15.7(11.8 - 20.6)	73	15.4(11.6- 20.0)	
HIV counselling and testing							
No	57	55.5(32.5 - 76.3)	143	33.0(26.0 - 40.9)	200	36.0(28.1 - 44.7)	0.030
Yes	17	44.5(23.7 - 67.5)	239	67.0(59.2 - 74.0)	256	64.0(55.3 - 72.0)	
STI screening and treatment							
No	73	97.0(82.6 - 99.6)	357	93.6(88.0 - 96.7)	430	94.0(89.2 - 96.8)	0.427
Yes	1	3.0(0.5 - 17.5)	25	6.4(3.4 - 12.0)	26	6.0(3.3 - 10.8)	
Information on sexual rights							
No	32	65.8(41.7 – 83.7)	298	81.9(76.0 – 86.6)	330	79.8(73.2 – 85.0)	0.070
Yes	42	34.3(16.3 – 58.3)	84	18.1(13.4 – 24.0)	126	20.2(14.9 – 26.8)	
HIV and STI prevention							
No	67	92.2(73.7 - 98.0)	325	87.3(80.2 - 92.1)	392	87.9(81.5 - 92.3)	0.460
Yes	7	7.8(2.0 - 26.3)	57	12.7(8.0 - 19.8)	64	12.1(7.7 - 18.6)	

We looked at accessing SRHR services by sexual activity. Overall, 45% of the adolescents reported knowledge of how to access SRHR services. But this differed by sexual activity (65% vs 36%). Most of the non-sexually active adolescents reported not knowing how to access services 64.1% (416). Knowledge of where, how, on at least one of the mentioned SRHR services in table 22 between the sexually active and non-sexually active was statistically different ($p<0.05$) with the sexually active being more knowledgeable. Access to most SRHR services such as condoms, contraceptives and sexuality education remained low for both groups. Of concern is that only 11.1% (35) of the sexually active adolescent have accessed HIV and STI prevention services.

Table 21: SRHR descriptives among adolescents aged 10-19 (sexually active vs non sexually active)

SRHR service accessed	Sexually Active		Non-Sexually Active		All Adolescents		P Value
	N = 430		N = 988		N = 1418		
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Knowledge of SRHS services							
No	96	20.5(13.2 - 30.3)	356	43.2 (35.0 - 51.8)	452	36.2(28.4 - 44.7)	<0.001
	4	2.6(0.7 – 9.2)	100	24.3(17.8 – 32.2)	104	23.2(17.2 – 30.4)	
Yes	334	79.5(69.7 - 86.8)	632	56.8(48.2 - 65.0)	334	63.8(55.3 - 71.6)	
Know how to access							
No	160	35.1(28.9 - 42.0)	572	64.1(57.6 - 70.2)	732	55.2(48.7 - 61.5)	<0.001
Yes	270	64.9(58.1 - 71.1)	416	35.9(29.8 - 42.4)	686	44.8(38.5 - 51.3)	
Know where to access							
No	119	26.5 (19.7 - 34.8)	510	58.7(51.8 - 65.3)	629	48.8(41.8 - 55.8)	<0.001
Yes	311	73.5(65.2 - 80.3)	478	41.3(34.7 - 48.2)	789	51.2(44.2 - 58.2)	
Have accessed any of the following SRHR services							
Condoms							
No	172	70.9 (62.0 - 78.3)	180	71.6(78.8 - 93.0)	352	76.9 (69.6 - 82.8)	0.001
Yes	85	29.1(21.7 - 38.0)	19	12.4(7.0 - 21.2)	104	23.2(17.2 - 30.4)	
Contraceptives							
Yes	108	36.8 (28.6 - 45.9)	172	83.8(74.5 - 90.2)	280	53.7(47.5 - 59.8)	<0.001
No	149	63.2(54.1 - 71.4)	27	16.2 (9.8 - 25.5)	176	46.3(40.2 - 52.5)	
Sexuality education							
Yes	242	96.2(92.0 - 98.4)	184	93.4(86.4 - 96.9)	426	95.2(90.6 - 97.6)	0.249
No	15	3.8(1.6 - 9.0)	15	6.6(3.1 - 13.7)	30	4.8(2.4 - 9.4)	
STI and HIV prevention services							
Yes	206	82.9(75.9 - 88.2)	177	87.8(77.8 - 93.7)	383	84.6(80.0 - 88.4)	0.393
No	51	17.1(11.9 - 24.2)	22	12.2(6.3 - 22.2)	73	15.4(11.6 - 20.0)	
HIV counselling and testing							
No	76	26.8 (21.4 - 32.9)	124	52.4(35.3 - 68.9)	200	36.0(28.1 - 44.7)	0.004
Yes	181	73.2(67.1 - 78.6)	75	47.6(31.1 - 64.7)	256	64.0(55.3 - 72.0)	
STI screening and treatment							
No	237	92.2(84.8 - 96.1)	193	97.3(87.3 - 99.5)	430	94.0(89.2 - 96.8)	0.232
Yes	20	7.8(3.9 - 15.2)	6	2.7(0.5 - 12.7)	26	6.0(3.3 - 10.8)	
Information on sexual rights							
No	218	88.9(79.4 - 94.4)	112	63.5(52.4 - 73.3)	330	79.8(73.2 - 85.1)	<0.001
Yes	39	11.1(5.6 - 20.6)	87	36.6(26.7 - 47.7)	126	20.2(14.9 - 26.8)	
HIV and STI prevention							
No	222	88.9(80.7 - 93.9)	170	86.2(76.1 - 92.4)	392	87.9(81.5 - 92.3)	0.562
Yes	35	11.1(6.1- 19.3)	29	13.9(7.6 - 23.9)	64	12.1(7.7 - 18.6)	

Adolescent girls were asked if there were any platforms in the community where they learn about SRHR issues. Three quarters (1,000) of the participants stated that there were no platforms in their communities teaching adolescent girls SRHR issues. Only 25% (418) who knew acknowledged the presence of community platforms. Seventy six percent (280) cited girls' clubs and 24% (86) cited edutainment platforms.

Table 22: Availability of community platforms where adolescent girls learn about SRHR issues.

Availability of community platforms where adolescent girls learn about SRHR issues							
	10 -14 Years		15 - 19 Years		10 – 19 Years		P Value
	N = 567		N = 851		N = 1418		
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Awareness of presence of platforms where adolescent girls learn about SRHS							
No	430	79.3(69.7 - 87.1)	570	71.3(59.3 - 80.8)	1000	74.7 (64.9 - 82.)	0.012
	334	79.5(69.7 - 86.8)	632	56.8(48.2 - 65.0)	334	63.8(55.3 - 71.6)	
Yes	137	20.3(12.9 - 30.3)	281	28.7(19.2 - 40.7)	418	25.4(17.6 - 35.1)	
Girls' club							
No	40	18.0(10.5 - 29.1)	98	27.6(19.8 - 37.0)	138	24.5(18.1 - 32.3)	0.139
Yes	97	82.0(70.9 - 89.0)	183	72.4(63.0 - 80.2)	280	75.5(67.7 - 81.9)	
Edutainment							
No	103	65.9(55.7 - 74.8)	229	80.3(68.5 - 88.5)	332	75.7(64.9 - 84.0)	0.014
Yes	34	34.1(25.2 - 44.3)	52	19.7(11.5 -31.6)	86	24.3(16.0 - 35.1)	

Contraception knowledge

Table 22 below shows contraception knowledge and uptake among adolescents, and the condoms (57%) was the most known contraception method followed by pill (48%), injection (34%) and implant (13%). Safe period (0.5%), sterilization (1%), and withdrawal (2%) were the least known contraception methods. We explored uptake of contraception by method, and the male condom was the most used (21.1%) followed the pill (20.9%)8%. Very few reported using the femidoms. (Table23).

Table 23: Contraception knowledge and uptake among adolescents aged 10-19 years.

	10 -14 Years		15 - 19 Years		10 – 19 Years		P Value
	N = 567		N = 851		N = 1418		
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Knowledge on the following contraceptives							
Pill							
No	468	83.1(78.4 - 87.0)	238	31.1(26.8 - 37.9)	706	52.6(46.6 - 58.4)	<0.001
Yes	99	16.9 (13.0 - 21.6)	613	67.9(62.1 - 73.2)	712	47.5(41.6 - 54.0)	
Condoms							
No	363	69.7(64.8 - 74.3)	194	25.7(21.4 - 30.5)	557	43.3(38.6 - 48.2)	<0.001
Yes	204	30.3(25.7 - 35.2)	657	74.3(69.5 - 78.6)	861	56.7(52.8 - 61.4)	
Injection							
No	527	93.6(89.5 - 96.2)	419	47.0(41.6 - 52.6)	946	65.7(59.7 - 71.3)	<0.001
Yes	40	6.4(3.8 - 10.5)	432	53.0(47.4 - 58.4)	472	34.3(28.7 - 40.4)	
Implant							
No	559	98.7(96.2 - 99.6)	662	80.0(72.6 - 85.7)	1221	87.5(82.3 - 91.3)	<0.001
Yes	8	1.3(0.4 - 3.8)	189	20.0(14.3 - 27.4)	197	12.5(8.7 - 17.7)	
Femidoms							
No	565	99.1(96.0 - 99.8)	835	98.1(96.3 - 99.1)	1400	98.5(97.4 - 99.2)	0.417
Yes	2	0.9(0.2 - 4.0)	16	1.9(0.9 - 3.7)	18	1.5(0.8 - 2.6)	
Sterilization							

	10 -14 Years		15 - 19 Years		10 – 19 Years		P Value
	N = 567		N = 851		N = 1418		
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Yes	565	99.5(98.1 - 99.9)	839	98.7(97.2 - 99.4)	1404	99.0(98.2 - 99.5)	0.202
No	2	0.5(0.1 - 1.9)	12	1.3(0.6 - 2.8)	14	1.0(0.5 - 1.8)	
Safe period							
0.187							
No	566	99.8(98.5 - 100.0)	844	99.4(98.6 - 99.7)	1410	99.5(98.9 - 99.8)	
Yes	1	0.2(0.0 - 1.5)	7	0.7(0.3 - 1.4)	8	0.5(0.2 - 1.2)	
Withdrawal							
No	565	99.6(98.5 - 99.9)	821	96.8(93.2 - 98.5)	1386	97.9(95.9 - 98.9)	0.003
Yes	2	0.4(0.1 - 1.5)	30	3.3(1.5 - 6.8)	32	2.1(1.1 - 4.1)	
Which methods have you used? -sexually active adolescents							
Pill							
No	12	66.3(34.4 - 88.1)	305	79.5(68.1 - 87.6)	317	79.1(67.4 - 87.5)	0.229
Yes	3	33.7(11.9 - 65.6)	110	20.5(12.4 - 31.9)	113	20.9(125 - 32.6)	
Condoms							
No	14	92.7(66.6 - 98.8)	336	78.5(71.5 - 84.2)	350	78.9(72.2 - 84.4)	0.183
Yes	1	7.3(1.2 - 33.4)	79	21.5(15.9 - 28.5)	80	21.1(15.6 - 27.9)	
Injection							
No	15	100	394	95.8(91.1 - 98.1)	409	96.0(91.4 - 98.2)	0.609
Yes	0	0	21	4.2(1.9 - 8.9)	21	4.0(1.9 - 8.6)	
Implant							
No	15	100	414	99.8(98.7 - 100.0_	429	99.9(98.8 - 100.0)	0.876
Yes	0	0	1	0.2(0.0 - 1.3)	1	0.2(0.0 - 1.2)	
Femidoms							
No	15	100	415	0	430	0	
Sterilization							
No	15	0	414	99.7(97.8 - 100.0)	429	99.7(97.9 - 100.0)	0.872
Yes	0	100	1	0.3(0.0 - 2.2)	1	0.3(0.0 - 2.1)	
Safe period							
No	15	100	410	99.7(99.0 - 100.0)	425	99.7(99.0 - 99.9)	0.804
Yes	0	0	5	0.3(0.1 - 1.0)	5	0.3(0.1 -1.0)	
Withdrawal							
No	15	100		99.7(99.0 - 99.9)	410	99.7(99.0 - 99.9)	0.804
Yes	0	0		0.3(0.1 - 1.0)	5	0.3(0.1 - 1.0)	

Exploring most contraceptives used by the sexually active adolescents, there was no statistical evidence in difference of contraceptive uptake by settlement type with p>0.05 for all contraception methods (table 24).

Table 24: Contraception uptake by settlement type

	Rural	Urban	Total	P Value
	% (95% CI)	% (95% CI)	% (95% CI)	
Contraception method used				
Condoms				
No	78.1(70.6 - 84.0)	86.1973.3 - 93.2)	78.9(72.2 - 84.4)	0.207
	259	30.6 (20.3 – 43.3)	69.4 (54.7 – 79.7)	
Yes	22.0(16.0 - 29.4)	13.9(6.8 - 26.3)	21.1(15.6 - 27.9)	
Pill				
Yes	79.6(66.5 – 88.4)	75.7(51.8 – 90.1)	79.1(67.4 – 87.5)	0.725
No	20.5(11.6 – 33.1)	24.3(10.0 – 48.2)	20.9(12.5 – 32.6)	
Injection				
Yes	95.9(90.6 - 98.3)	96.1(92.7 - 97.9)	96.0(91.4 - 98.2)	0.952
No	4.1(1.7 - 9.4)	3.9(2.1 - 7.3)	4.0(1.9 - 8.6)	

HIV testing

Most adolescent girls 55.9% (816) self-reported that they had never been tested for HIV in their lifetime, only 43.9% (598) reported ever testing for HIV and 0.2% (4) don't know if they were ever tested. Only 6.2% (72) of the very young adolescents reported ever testing for HIV compared to 37.8% (526) older adolescents. Among the adolescent girls who had an HIV test, 71.2% (417) had tested for HIV in the past 12 months. Only 1.8% (14) tested HIV positive compared to 98.2% (568) that tested negative. Of the 66 adolescents with disabilities, only 40.2% (29) had been tested for HIV and none tested HIV positive. Of the 1.8% (14) tested HIV positive, 13 were on ART while one was not on any HIV medication.

We explored factors associated with HIV testing among 430 sexually active adolescents. Age, marital status, settlement type, knowledge of SRHR services, number of sexual partners, level of education attained, have ever been pregnant, and have ever experienced violence were considered as factors associated with HIV testing. Table 24 presents HIV testing prevalence, crude odds ratios (COR), and adjusted odds ratios (AOR) for demographic and socio-sexual characteristics associated with HIV testing among the sexually active adolescents. On factors associated with HIV testing among sexually active adolescents age, knowledge of SRHR services and have ever been pregnant were found to be statistically significant with $p < 0.05$.

The HIV adolescent prevalence among 10 – 19-year-olds was 89.8%, showing a significant association between age and ever HIV testing ($p < 0.001$). Adjusted for knowledge of SRHR services and ever been pregnant, for the 10 to 19-year-olds, every one-year increase in age increases chance of HIV testing by 59%. Among the sexually active, older adolescents (15 – 19) year olds have a HIV testing prevalence of 90.8% and very young adolescents 57.3%. Adolescents with knowledge of SRHR services (92.2%) had a statistically significantly higher HIV testing prevalence than those who were not knowledgeable (80.3%) with a p value of 0.049. Those who were knowledgeable of SRHR were 2.80 times more likely to have ever been tested HIV while participants who had ever been pregnant were 8.93 times more likely to have ever been tested HIV than those who have never been pregnant in the adjusted model.

Table 25: Factors associated with HIV testing among adolescents aged 10-19 years.

	n/N	%	COR (95% CI)	P Value	AOR (95% CI)	P Value
Participant age						
(10 - 19) Years	373/430	89.8	1.85(1.44 - 2.38)	<0.001	1.59(1.22 - 2.06)	0.001
Marital status						
Married (Ref)	208/239	88.5	1	0.661		
Single	126/150	90.7	1.26(0.49 - 3.27)			
Separated/Divorced/ Widowed	39/41	94.3	7.71(4.46 - 13.0)			
Settlement type						
Urban (Ref)	110/130	81.3	1	0.128		
Rural	263/300	90.8	2.28(0.78 - 6.65)			
Knowledge of SRHR services						
No (Ref)	76/96	80.3	1	0.047	1.00	0.049
Yes	297/334	92.2	2.91(1.01 - 8.37)		2.80(1.00 - 7.82)	
Number of sexual partners						
1(Ref)	257/305	87.6	1	0.118		
2	67/71	95.4	2.92(0.89 - 9.61)			
3+	49/54	95.9	3.27(0.70 - 15.32)			
Level of education attained						
Primary / No education (Ref)	145/175	83.5	1	0.002	1.00	0.111
Incomplete O level	199/224	93.8	3.01(1.50 - 6.04)		1.63(0.75 - 3.51)	
Higher Education	28/30	97.6	8.13(1.28 - 51.50)		4.18(0.53 - 32.88)	
Ever pregnant						
No (Ref)	57/93	66.8	1	<0.001	1.00	<0.001
Yes	316/337	95.1	9.75(4.83 - 19.68)		8.93(3.84 - 20.77)	
Experienced violence						
Yes (Ref)	139/159	89.0	1	0.784		
No	234/271	90.2	1.13(0.47 - 2.73)			

Sexual Activity

Five hundred and nineteen of the adolescent girls reported having a boyfriend/ husband or sexual partner, and of these 30% (430) reported ever had sexual intercourse. Being sexually active increased with age with only 1% (15) 10-14 year old adolescents reported being sexually active compared to 29% (415) older adolescents(Fig 12). The median age at sexual debut was 16 years, the middle 50% lied between 15 and 17 years.

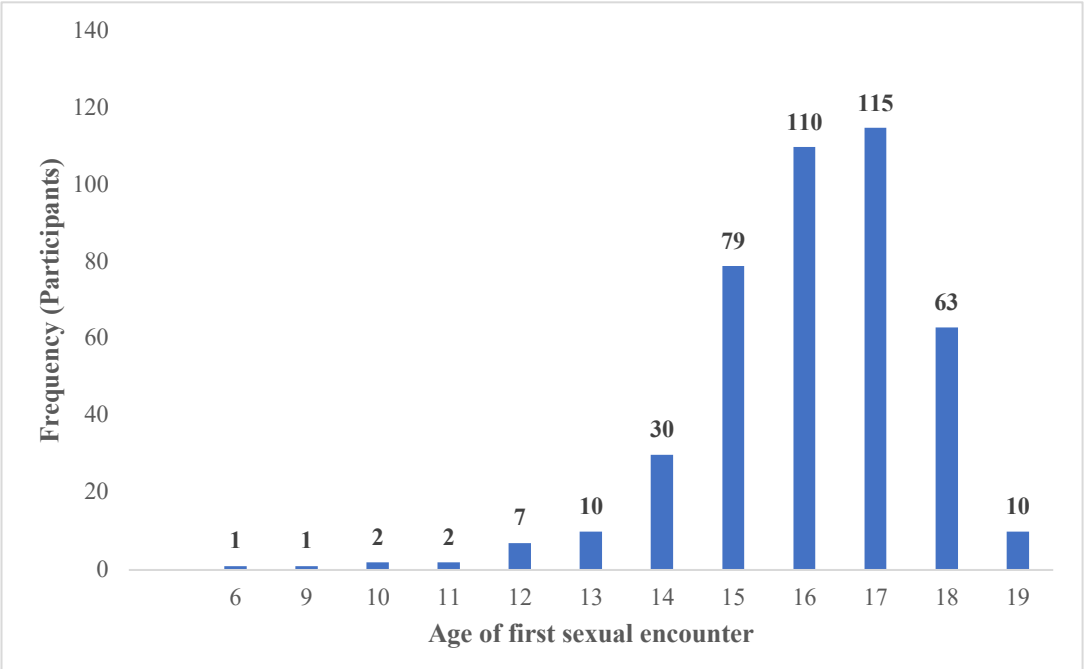


Figure 12: Age of first sexual encounter

Approximately 31% (134) reported to have had forced sex on their first sexual encounter[6]. Only 104 managed to respond to the question on whether they reported to the police or not. Of these, 85% (95) reported to the police. Among those who reported to the police, 74% reported that no action was taken by the responsible authorities, 24% reported that the court cases were pending, withdrawn, or dropped by the courts and 2% had the perpetrators prosecuted (Table 26).

[6]The question on whether forced sex was reported to the police was added after one was completed hence 30 adolescents did not respond to the question.

Table 26: Consensual and non- consensual sex

	10 -14 Years		15 - 19 Years		10 – 19 Years		P Value
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
The first time you had sex was it voluntary							
Yes	7	49.4(16.8 - 82.5)	283	67.5(61.2 - 73.2)	290	67.0(60.1 - 73.2)	0.490
No	8	50.6(17.5 - 83.2)	126	30.8(25.2 - 37.0)	134	31.4(25.2 - 38.3)	
Don't know	0	0	6	1.7(0.5 - 5.4)	6	1.7(0.5 - 5.3)	
Was it reported to the police							
Yes	4	66.5(11.7 - 96.8)	91	86.1(65.9 - 95.2)	95	85.3(66.7 - 94.4)	0.405
No	1	33.5(3.3 - 88.3)	8	13.9(4.8 - 34.1)	9	14.7(5.6 - 33.4)	
What happened to the perpetrator							
Jailed	0	0	3	2.2(0.4 - 11.1)	3	2.1(0.4 - 10.7)	0.784
No action	3	63.4(21.0 - 91.8)	75	74.8(62.0 - 84.4)	78	74.3(62.1 - 83.6)	
Other (specify)	2	36.6(8.2 - 79.0)	21	23.0(13.5 - 36.4)	23	23.6(14.3 - 36.3)	
	Without disabilities		**With disabilities**		**All adolescents**		
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Voluntary	278	66.9(59.6 - 73.4)	12	69.6(38.8 - 89.2)	290	67.0(60.1 - 73.2)	0.915
Forced	123	31.4(24.9 - 38.7)	11	30.4(20.8 - 62.2)	134	31.4(25.2 - 38.3)	
Don't know	6	1.7(0.5 - 5.5)	0	0	6	1.7(0.5 - 5.3)	

Approximately 75% (315) of the first sexual encounter occurred with boyfriends, and only 23% (97) with husbands, 1.5% (10) with strangers, 0.8% (6) with relatives, and 0.1% (2) with casual partners.

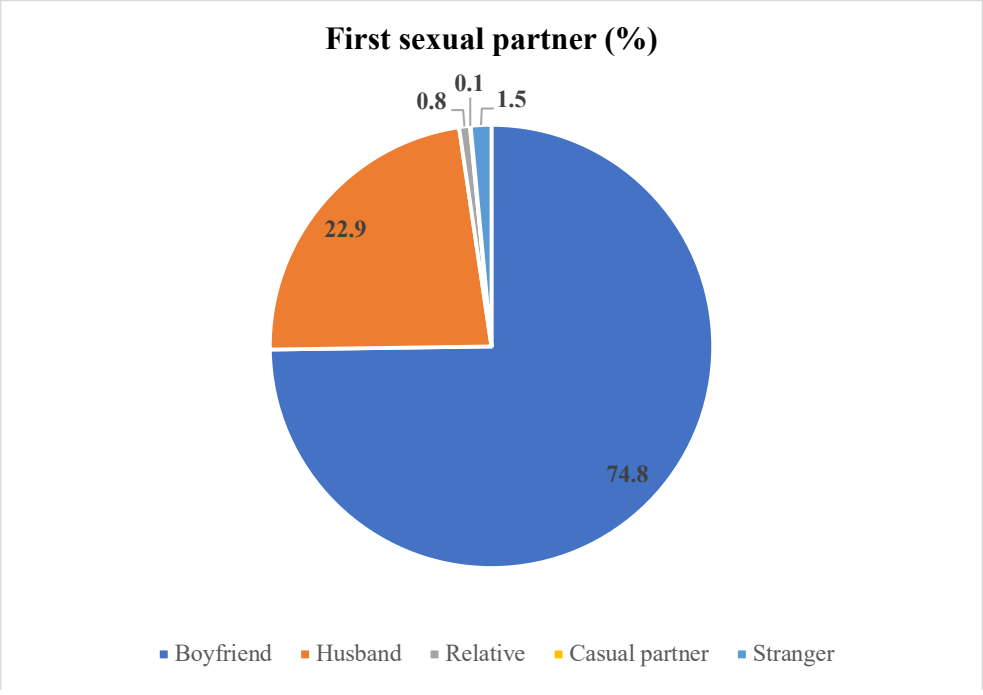


Figure 13: With whom on first sexual encounter

Almost three quarters, 72.5% (305) of the sexually active adolescents self-reported having one lifetime sexual partner, 16.2% (71) had two sexual partners, 7.9% (29) had three partners, and 3.4% (25) had more than four sexual partners at the time of data collection (50 sexual partners being the highest recorded). The median number of people that they had sex with was 1, while the middle 50% of the data lies between 1 and 2 within a range of 1. Adolescents who reported having more than 10 sexual partners were all above 15 years and were mainly from Epworth, Hurungwe and Cowdry Park districts. About 6 in 10, 59.9% self-reported a first sexual encounter with no condom, 39.7% (158) used condoms, and 0.4% (4) do not remember whether they used a condom or not. 30.9% (23) of adolescent girls with disabilities reported being sexually active and 69.1% (43) were not sexually active. Of the 23 that were sexually active, 16 self-reported having 1 sexual partner, 3 had 2 sexual partners, 3 had 3 sexual partners, and only 1 had 11 sexual partners. 12 self-reported that their first sexual encounter was non-consensual and only 11 reported that it was consensual sex. 14 had their first sexual encounter with their boyfriends, 5 with their husbands, 2 with a relative, and 2 with a stranger.

Pregnancy experiences

Out of the 430 sexually active adolescents, 78% (337) reported ever being pregnant. Almost 9 in 10, 86.7% (284) were primiparous and only 13.3% were multiparous, 61% had a live birth, 27% were still pregnant, and 8% had had a miscarriage. Of these only 1 adolescent was aged 10-14 years. About 2.3% (13) tried to terminate their pregnancy because they or their partners did not want the pregnancy, or they were afraid of their parents, or getting expelled from school. Of these 0.5% (4) had an illegal abortion. 37% (120) of the pregnancies were intended. 58% of the adolescents self-reported that they were worried when they learnt that they were pregnant, and the most common cause of worry was parents' reaction, and that they did not want to have a baby. Fifty seven percent of the adolescents did not think that they were going to fall pregnant when they had sex (Table 27).

Table 27: Pregnancy experiences

Variable	10 -14 Years		15 - 19 Years		10 – 19 Years		P Value
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Have you ever tried to terminate your pregnancy?							
No	4	100	320	97.7(95.1 - 98.9)	324	97.1(95.2 - 98.9)	0.765
	0	0	6	1.7(0.5 - 5.4)	6	1.7(0.5 - 5.3)	
Yes	0	0	13	2.3(1.1 - 4.9)	13	2.3(1.1 - 4.8)	
Why did try to terminate?							
My partner did not want the pregnancy	0	0	3	29.2(5.1 - 75.9)	3	29.2(5.1 - 75.9)	
I was afraid of my parents/ family reaction	0	0	3	15.8(2.1 - 62.1)	3	15.8(2.1 - 62.1)	
I was afraid of being expelled from school	0	0	2	12.9(2.0 - 51.9)	2	12.9(2.0 - 51.9)	
I didn't want the pregnancy/child	0	0	5	42.1(10.2 - 82.3)	5	42.1(10.2 - 82.3)	
How many pregnancies have you had in your lifetime?							
1	4	100	280	86.5(79.1 - 91.6)	284	86.7(79.4 - 91.7)	0.724
2	0	0	48	12.0(7.5 - 18.7)	48	11.8(7.4 - 18.3)	
3	0	0	5	1.5(0.5 - 4.2)	5	1.5(0.5 - 4.1)	
At the time you became pregnant with your first pregnancy did you want to have a baby at that time							
Not at all	3	75.8(22.6 - 97.1)	131	37.8(31.1 - 45.0)	217	38.4(31.7 - 45.5)	0.257
Yes	1	24.2(2.9 - 77.4)	119	37.0(27.6 - 47.6)	120	36.8(27.5 - 47.2)	
Yes, but not now	0	0	83	25.2(19.4 - 31.9)	83	24.4(19.2 - 31.5)	
How did you feel when you discovered that you were pregnant?							
Happy	0	0	128	36.5(23.9 - 51.3)	128	35.9(23.6 - 50.5)	0.279
Worried	4	100	178	57.1(41.6 - 71.3)	182	57.7(42.5 - 71.6)	
Neither happy nor worried	0	0	27	6.4(4.0 - 10.3)	27	6.3(3.9 - 10.1)	
What happened to your pregnancy?							
Live birth	1	17.2(1.9 - 69.1)	214	61.8(53.1 - 69.8)	215	61.1(52.8 - 68.9)	0.001
Miscarriage	0	0	31	7.8(5.1 - 11.6)	31	7.7(5.0 -11.6)	
Stillbirth	0	0	10	2.2(0.9 - 5.0)	10	2.1(0.9 - 4.9)	
Legal abortion	0	0	1	0.4(0.1 - 3.6)	1	0.5(0.1 - 3.5)	
Illegal abortion	0	0	4	0.5(0.1 - 2.5)	4	0.5(0.1 - 2.4)	
Still pregnant	3	82.6(30.9 - 98.1)	72	27.1(17.3 - 39.7)	75	27.9(18.4 - 39.9)	
I don't wish to answer	0	0	1	0.2(0.0 - 1.5)	1	0.2(0.0 - 1.4)	

Among the 20 adolescents with disabilities, 16 were primiparous and only 4 were multiparous. 10 had a live birth, 3 were still pregnant, 3 had a stillbirth and 1 had a miscarriage (Table 28). Only 3 adolescents with disabilities tried to terminate their pregnancy. One did not want the pregnancy while the other one was afraid of her parents' reaction. Of the 20 adolescents with disabilities who experienced pregnancy, 14 were unintended. Fourteen adolescents reported that they were worried when they learnt that they were pregnant, and only 6 were happy. The most common causes of worry were parents' reactions, and that they did not want to have a baby.

Table 28: Pregnancy outcome among adolescents with disabilities

	Without disabilities		With disabilities		Total		P value
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Pregnancy experiences							
Live birth	205	61.5(52.6 - 69.7)	10	51.8(28.0 - 74.8)	215	61.1(52.8 - 68.9)	<0.001
	0	0	13	2.3(1.1 - 4.9)	13	2.3(1.1 - 4.8)	
Miscarriage	30	7.6(5.0 - 11.4)	1	10.7(1.3 - 52.3)	31	7.7(5.0 - 11.6)	
Stillbirth	7	1.9(0.8 - 4.6)	3	6.5(1.1- 29.7)	10	2.1(0.9 - 4.9)	
Legal Abortion	1	0.5(0.1 - 3.6)	0	0	1	0.5(0.1 - 3.5)	
Illegal abortion	1	0.0(0.0 - 2.3)	3	11.6(1.8 - 48.2)	4	0.5(0.1 - 2.4)	
Still pregnant	72	28.3(18.5 - 40.6)	3	19.5(7.6 - 41.5)	75	27.9(18.4 - 39.9)	
don't wish to answer	1	0.2(0.0 - 1.5)	0	0	1	0.2(0.0 - 1.4)	

Qualitative interviews also confirmed that most adolescent were worried, shocked, and devastated at the discovery of pregnancy. Most were worried about telling their parents about the pregnancy and about their partner's reaction.

> *"I missed my periods, and I realized that I was pregnant, and I was so worried because I was at school still studying, so I thought of terminating it, but I could not find anyone to help me terminate it. I did not know how to tell my parents; I was so scared and knew they would chase me away from home. I also worried that what if my boyfriend denies responsibility what am I going to do" (18-year-old pregnant adolescent,* ***IDI, Umuguza district).***

Factors Associated with Adolescent Pregnancy

In the multi-variable analysis, age, residency type, religion, level of education, presence of a caregiver, experience violence, knowledge of SRHR, and discussion with parents or guardians on menstruation and abstinence were considered as factors associated with adolescent pregnancy. Table 29 presents pregnancy prevalence, crude odds ratios (COR) and adjusted odds ratios (AOR) for demographic and social characteristics associated with adolescent pregnancy. Findings of this study showed that the pregnancy prevalence was 25.1% on occurrence of 336 pregnancies in 1,418 adolescents.

In the adjusted analysis, significant factors associated with pregnancy prevalence among adolescents were age, religion and level of education attained with $p < 0.05$. Among the participants, older adolescents (15 – 19) year olds had statistically significant higher pregnancy prevalence of 41.2% compared to very young adolescents aged 10-14 years 0.9% ($p<0.001$). The older adolescents were 71.2 times more likely to be pregnant than the very young adolescents.

Regarding religion, there was a statistically significant difference in pregnancy prevalence between Protestant, Pentecostal, Apostolic, and other religious groups ($p = 0.012$). Adolescents who practiced other religions were 2.79 times more likely to become pregnant than those who practiced Protestantism, while those who practiced Apostolic faith were 1.98 times more likely, and those who practiced Pentecostalism were 1.15 times more likely to become pregnant holding other variables constant.

Adolescents who had experienced violence were 1.33 times more likely to be pregnant than those who did not. Adolescents who did not discuss abstinence with their parents or guidance were 4.81 times more likely to become pregnant ceteris Paribas.

Table 29: Factors associated with adolescent pregnancy among 10-19 years.

	n/N	%	COR (95% CI)	P Value	AOR (95% CI)	P Values
Age						
10 - 14 Year Olds	4/567	0.9	1.00	<0.001	1.00	<0.001
15 - 19 Year Olds	332/851	41.2	74.85(26.56-210.94)		71.2(25.14 – 201.46)	
Settlement type						
Urban	91/485	15.5	1.00	0.232		
Rural	246/933	26.8	2.00(0.63 - 6.30)			
Religion						
Protestant	44/304	14.5	1.00	0.004	1.00	0.003
Christian - Pentecostal	62/362	15.8	1.10(0.63 - 1.94)		1.15(0.54 – 2.48)	
Christian - Apostolic	176/604	31.5	2.72(1.50 - 4.93)		1.98(1.06 – 3.68)	
Other (Muslim, ATR, No religion)	55/148	34.6	3.11(1.32 - 7.30)		2.79(1.14 – 6.84)	
Level of education attained						
No schooling/Primary	140/768	17.0	1.00	0.03	1.00	0.806
Higher (Completed O/A level/ Degree/Diploma	21/81	26.2	1.73(0.69 - 4.35)		0.22(0.08 – 0.61)	
Incomplete O level	175/568	36.6	2.82(1.76 - 4.52)		0.76(0.30 – 1.92)	
Presence of a caregiver						
Biological caregiver	70/759	11.5	1.00	0.345		
Non biological caregiver	228/583	39.6	5.03(2.96 - 8.57)			
No caregiver	39/76	45.0	6.28(3.36 - 11.75)			
Have experienced violence						
No	214/960	23.8	1.00	0.029	1.00	0.036
Yes	123/458	28.5	1.28(1.03 - 1.59)		1.33(0.83 – 2.13)	
Knowledge of SRHS						
No	79/452	14.2	1.00	0.001	1.00	0.108
Yes	258/966	31.2	2.74(1.56 - 4.81)		1.69(0.91 – 3.13)	
Discuss menstruation with parents or guardians						
No	271/1100	24.8	1	0.783		
Yes	66/318	26.1	1.07(0.64 - 1.80)			
Discuss with parents or guardians on abstinence						
Yes	28/238	13.4	1.00	0.016	1.00	0.001
No	309/1180	27.3	2.41(1.19 - 4.89)		4.81(1.73 – 13.34)	

Factors associated with pregnancy among sexually active adolescents.

Of the 1,418 adolescents aged between 10 and 19 recruited in the study, 430 adolescents were included in the model to assess factors associated with adolescent pregnancy among the sexually active. Age, settlement type, religion, level of education, presence of a caregiver, experience violence, knowledge of SRHR, access to condoms, access to sexuality education, access to information on sexual rights, used condoms, and discussion with parents or guardians on menstruation and abstinence were considered as factors associated with adolescent pregnancy among the sexually active (Table 31).

On factors associated with pregnancy prevalence among adolescents age and use of condoms were found to be statistically significant with $p < 0.05$. Among the participants, there is evidence that older adolescents aged 15 – 19 years had statistically significant higher pregnancy prevalence of 82.3% whilst very young adolescents aged 10-14 years 41.8% ($p<0.001$) holding other variables constant. The older adolescents were 5.85 times more likely to be pregnant than the very young adolescents. Adolescents who did not use condoms were 3.90 times were to be pregnant than those did use condoms ceteris Paribas.

Table 30: Factors associated with adolescent pregnancy among sexually active adolescents aged 10- 19 years.

	Sample n/N	%	COR (95% CI)	P Value	AOR 95% CI	P Value
Participant Age						
10 - 14 Years (Ref)	4/15	41.8	1.00	0.037	1.00	0.066
15 - 19 Years	333/415	82.3	6.49(2.26 - 18.68)		5.85(1.82 - 18.79)	
Settlement type						
Urban (Ref)	91/130	70.9	1.00	0.211		
Rural	246/300	82.4	1.92(0.68 - 5.42)			
Religion						
Other (Muslim, ATR, Non) (Ref)	55/73	74.4	1.00	0.284		
Christian- Pentecostal	62/81	79.2	1.31(0.43 - 4.02)			
Christian- Apostolic	176/215	82.9	1.67(0.76 - 3.67)			
Protestant	44/61	83.3	1.72(0.76 - 3.67)			
Level of education attained						
Primary education/no education (Ref)	140/175	75.9	1.00	0.468		
Higher (Completed O/A level/ Degree/Certificate/Diploma	21/30	76.2	1.02(0.25 - 4.09)			
Incomplete O level	175/224	85.5	1.87(0.77 - 4.58)			
Presence of a caregiver						
Biological caregiver (Ref)	70/110	69.4	1.00	0.933		
No caregiver	39/49	85.4	2.58(0.88 - 7.52)			
Non-biological caregiver	228/271	85.9	2.68(1.61 - 4.47)			
Have experienced violence						
Yes (Ref)	123/159	80.7	1.00	0.886		
No	214/271	81.4	1.05(0.54 - 2.03)			
Knowledge of SRHS						
Yes (Ref)	258/334	81.1	1.00	0.984		
No	79/96	81.3	1.01(0.40 - 2.55)			
Access to condoms						
No (Ref)	271/345	81.1	1.00	0.963		
Yes	66/85	81.4	1.02(0.50 - 2.05)			
Access to sexuality education						
No (Ref)	12/15	80.8	1.00	0.079		
Yes	325/415	94.5	4.08(1.66 – 10.036			
Access to information on sexual rights						
No (Ref)	311/391	81.0	1.00	0.730		
Yes	26/39	83.4	1.17(0.45 - 3.03)			
Used condoms						
Yes (Ref)	74/80	77.9	1.00	0.003	1.00	0.003
No	263/350	93.5	4.09(1.66 - 10.04)		3.90(1.62 – 9.38)	
Discuss menstruation with parents or guardians						
No (Ref)	271/346	80.8	1.00	0.847		
Yes	66/84	82.4	1.11(0.36 - 3.45)			
Discuss with parents or guidance on abstinence						
Yes (Ref)	309/389	60.6	1.00	0.127		
No	28/41	83.8	3.36(0.70 - 16.13)			

Drivers of adolescent pregnancy

We qualitatively explored factors contributing to adolescent pregnancy among five groups of participants. Ten factors came out in all the focus group discussions and are discussed in turn below.

Economic challenges

The prevailing economic decline which has undermined family structures was cited as a key driver of adolescent pregnancy. The economic decline has led to an upsurge in migration of parents and caregivers to other countries. Interviewed parents and community leaders cited that the demand to generate household income was at odds with being able to afford quality time with families. Migration of parents to neighboring countries like South Africa and Botswana or international destinations such as the United Kingdom leaving children alone or under the care of grandparents, maids or friends was common in both rural and urban areas.

The prolonged absence of parents or caregivers from the home has increased vulnerability to sexual abuse by proxy caregivers or people who are assigned to assist with household chores especially among adolescent girls. Parental migrations affected all adolescents regardless of age, location and whether they had a disability or not. In FGDs one participant stated that:

> *"We have families in our communities where parents have gone to work in other countries leaving children behind and such child headed families have become playgrounds for men who help with minor chores such as cutting firewood and end up abusing the children" 15 year old girl, FGD, Bindura district).*

Interviewed stakeholders also acknowledged that this migration has raised a lot of child welfare concerns. Related to migration was also the long working hours. In urban areas parents reported being involved in street-vending and cross-border trading resulting in longer working hours or prolonged periods away from home. FGD participants mentioned examples of parents who move around selling their wares in mining towns, illegal gold panners who temporarily camp at gold mines and migrant farmers who temporarily migrate to Mozambique during the rainy season leaving children alone at home.

When asked how this migration and prolonged absence from home can be addressed, parents cited being caught in a dilemma as they were very limited functional alternative social safety nets to draw on hence, they need to work to provide for their household. Parents stated that they were balancing increased caregiving demands with financial obligations against a backdrop of dramatically diminished social and economic support. As the economic situation worsened over the years, the overburdened monthly social protection grants have been severely affected by rising inflation, are no longer sufficient to live on and are not accessible to every financially constrained household, leaving parents with no choice but to migrate to other countries and rely on proxy caregivers to supervise their children in their absence. Interviews also highlighted how the economic decline has diminished pensions and savings, leaving household with no savings to depend on.

> *"My father died last year, but my mother died when I was 5 years old. Our father took care of us when we were growing and I was attending school in Harare but when my father got sick and was diagnosed with cancer, he could no longer afford to send us to school... When he followed up with the policies, he was told that it was ZWE $56 which was not enough to pay our fees for one term, and we relocated to Murehwa. I stayed at home till I got fed up and looked for a job as a house maid that's where I met him and eventually got pregnant." (18-year-old adolescent mother, IDI, Bindura district).*

Parents and community leaders also cited the falling prices of their agricultural produce as affecting the capacity of families to send their children to school. Parents stated that their produce was being bought at low prices despite the ever-increasing costs of living and agricultural inputs. One participant mentioned this in Mt Darwin.

> *"The problem is the low prices of our agricultural or farm produce, you can imagine a bucket of rapoko is now being bought for two dollars (USD$2) from eight dollars (USD$8), so with 2 dollars you can't send a child to school and a lot of girls are now sitting at home unable to go to school. And when this happens, that's when they get time to see their boyfriends, because they will be just idle, so the issue of crop produce pricing is also behind the increasing problem of adolescent pregnancy." (61-year-old Church Leader, FGD, Mt Darwin district).*

The current economic decline has also resulted in the need for children to supplement their parents or caregiver's income through numerous activities. FGDs highlighted how some children have been driven into petty trading, l artisanal gold panning or selling of wares among artisanal miners which increase their vulnerability to early engagement in risky sexual behavior, transactional sex,

drug use and dropping out of school.

> *"I met him [partner] at the gold mine where I used to go and sell airtime. He would buy me lunch and give me money and we started dating and I got pregnant." (15 year old adolescent mother, IDI, Shamva district).*

> *"Chikuti is known for gold mining and children often miss school to go sell or for gold panning and often at time these girls are sexually abused, they are lured by these Makorokoza who have money and they end up getting impregnated, they are infected with STIs or HIV at such young ages." (46 year old female primary school teacher, KII, Hurungwe district).*

Interviewed key stakeholders also confirmed that child abuse was on the increase in mining communities.

> *"We have noted that children who are into gold panning or who sell goods to miners are at risk of getting abuse and we have several hotspots in this district, and we have been carrying out awareness campaigns to educate parents on the dangers of exposing young children to artisanal miners. Both boys and girls are exploited or abused in one way or the other and we have been receiving cases from these mining communities." (33 year old key stakeholder, KII, Sanyati district).*

> *"We have mining issues in our area, our district is a mining area, we have artisanal mines, so our schools in this back of beyond they have children who are vulnerable to these miners, they are lured when they go and come back from school, they are exposed to these artisanal miners around townships." (62 year old Key stakeholder, Hurungwe district).*

Social and religious norms

Linked to poverty and economic decline was also child marriage. Despite investments in transforming harmful social and religious norms that drive adolescent pregnancy, forced and child marriages were still prevalent in many of the communities that participated in the study. Child marriage is a root cause of adolescent pregnancy. FGDs with community-based service providers highlighted that child marriages were still a challenge in their communities. Child marriages were more prevalent among adolescent girls in rural communities (72%, 187/242) compared to only 23% (55/242) who resided in urban communities. They stated that adolescent girls were married off mostly for religious reasons or economic gains. In most cases the girls have little or no say in decisions about when and or whether to become pregnant.

> *"Cases of child marriage are very common in this village and very difficult to address because of the strong presence of the Apostolic churches. We just hear that so and so is married and when you visit the family, they lie that she transferred to a school in Harare or that she is now staying with her sister in another location." (42 year old case care worker, Rushinga District).*

> *"Those that go to the Dhuterere Apostolic churches marrying off young girls they just say prophet dreamt that the girl should go this man's family after church service. Whether the girl is 11 or 10 or the man is old and has other wives they do not care they simply follow the prophet's orders..." (51 year old parent, FGD, Shamva district).*

Gender inequality and poverty came out strongly in adolescent girls FGDs as contributing to child marriages. Adolescents spoke of how some of their agemates were married off after completing primary level education in exchange of food or money and how some parents do not want to educate girls beyond primary level. The FGDs highlighted the persistent prioritization of boys' education over girls in resource constrained households.

> *"The challenge is we still have parents who do not value girls. In my stream most of the girls could not proceed to secondary school. Some parents are still marrying off girls. My friend was married off to a man who was twice her age. Her father arranged everything without her knowledge. We only heard she was now staying with her husband and that was the last time I saw her. I heard she now has two children, yet she is only my age [15 years]." (15 year old girl, FGD, Mbire district).*

In some cases, child marriages were also linked to adolescents wanting to escape poverty. Adolescent girls were reported to be entering into child marriages to escape hunger at home. One of the FGDs participants stated that:

> *"Sometimes they will be no food at home, or they will be staying in homes where they are abused. For example, they will be staying with a stepmother who does not give them enough food so one end up thinking that getting pregnant will improve their situation." (17 year old girl, FGD, Epworth district).*

One of the adolescent mothers narrated how she ended up marrying at the age of 14 years as her mother could not meet her educational and general upkeep costs.

> *"It was becoming too tough for him he told me that you are a girl and I'm paying your fees and doing everything for you, and I do not get anything from you that shows me that you will be mine forever or you will end up leaving me. So just come and stay with me and I will take care of you at my home. I cannot keep taking care of you whilst you are going to school. So, I just came and stayed with him here." (15 year old pregnant adolescent, IDI, Hurungwe district).*

Although child marriages were still prevalent, most adolescents disapproved of early marriages. 97% (1378) of adolescents were against child marriages and only 2% approved of child marriages. 78% of girls agreed that girls below the age of 18 years have a right to refuse forced marriages. Most (87%) disagreed with the statement that completing school was less important when one finds a partner who wants to marry (Table 31). There was no significant statistical difference in perceptions on all marriage related questions for both very young and older adolescents (p> 0.05).

Table 31: Adolescent girls' perception on marriage.

	10 - 14 Years		**15 – 19 Years**		**10 – 19 Years**		**P Value**
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Is it okay with the girl for her family to arrange for their daughter to be married before the age of 18?							
No	550	97.1(94.8 - 98.4)	828	96.9(93.9 - 98.5)	1378	97.0 (95.2 - 98.1)	0.962
Yes	14	2.6(1.4 - 4.8)	17	2.7(1.2 - 6.0)	31	2.6(1.6 - 4.5)	
I don't wish to answer	3	0.3(0.1 - 1.2)	6	0.4(0.2 - 0.9)	9	0.4(0.2 - 0.8)	
Someone below the age of 18 years has the right to say no to a forced marriage							
Strongly agree	200	31.2(24.3 - 39.1)	373	40.5(35.8 - 45.3)	573	36.8(32.8 - 40.9)	0.011
Agree	211	35.8(28.7 - 43.6)	317	36.4(31.0 - 42.3)	528	36.2(31.6 - 41.0)	
Neither Agree nor Disagree	35	8.0(4.8 - 13.0)	21	3.3(1.6 - 6.4)	56	5.2(3.2 - 8.4)	
Disagree	94	19.7(15.3 - 25.0)	116	16.4(13.3 - 20.1)	210	17.7(14.8 - 21.2)	
Strongly disagree	27	5.3(3.0 - 9.2)	24	3.4(1.7 - 6.5)	51	4.1(2.4 - 7.2)	
If a girl arrives home late or does not spend the night at home, she should be sent away by the family							
Strongly agree	39	6.5(4.3 - 9.7)	73	8.9(6.7 - 11.7)	112	7.9(6.2 - 10.1)	0.489
Agree	66	15.8(10.4 - 23.2)	103	14.3(9.6 - 20.7)	169	14.9(10.2 - 21.2)	
Neither Agree nor Disagree	23	5.6(2.7 - 10.9)	26	3.7(2.2 - 6.3)	49	4.5(3.1 - 6.4)	
Disagree	274	50.0(40.4 - 60.0)	391	48.4(40.4 - 56.5)	665	49.1(41.3 - 56.9)	
Strongly disagree	165	22.1(16.2 - 29.5)	258	24.7(18.5 - 32.1)	423	23.7(18.0 - 30.4)	
Completing school becomes less important when a girl finds a partner who loves them and wants to marry early.							
Strongly agree	9	1.2(0.6 - 2.4)	33	4.0(2.6 - 6.1)	42	2.9(1.9 - 4.2)	0.148
Agree	28	5.1(2.8 - 8.9)	47	5.8(4.0 - 8.4)	75	5.5(4.1 - 7.3)	
Neither Agree nor Disagree	29	6.7(3.7 - 12.0)	34	3.9(2.6 - 5.9)	63	5.0(3.6 - 6.9)	
Disagree	308	57.1(48.8 - 65.1)	455	57.6(51.5 - 63.4)	763	57.4(51.2 - 63.3)	
Strongly Disagree	193	30.0(22.9 - 38.1)	282	28.8(22.5 - 36.0)	475	29.3(23.3 -36.0)	
When someone gets married below the age of 18 due to religious or cultural background, there is no problem							
Strongly agree	26	4.9(2.9 - 8.0)	74	7.1(4.6 - 10.9)	100	6.2(4.0 - 9.5)	0.284
Agree	68	12.6(9.4 - 16.9)	103	11.7(9.3 - 11.4)	103	12.1(10.0 - 14.4)	
Neither Agree nor Disagree	35	6.7(3.7 - 11.8)	27	3.6(2.3 - 5.7)	27	4.9(3.6 - 6.6)	
Disagree	281	54.2(45.7 - 62.5)	420	55.8(46.1 - 65.2)	420	55.2(47.9 - 62.3)	
Strongly disagree	157	21.5(16.1 - 28.2)	227	21.8(15.3 - 30.1)	227	21.7(16.0 - 28.7)	

Seventy percent (1,000) of the interviewed adolescent girls were aware of the consequences of adolescent pregnancies. However, when asked about the specific health, educational, social and economic challenges faced by pregnant adolescents only a few knew some of the challenges as shown in Table 32 below. Complications during childbirth and infant and maternal deaths were the most known challenges with 62% and 56% respectively. Very few adolescents mentioned dropping out of school (34%), becoming an economic burden to parents (21%), poor family planning (1%), and unsafe abortions (13%) as some of the challenges faced by pregnant adolescents.

Table 32: Knowledge of challenges faced by pregnant adolescents.

Possible selected problems associated with early pregnancies by adolescents				
	10 – 14 Years		**15 – 19 Years**	
	Frequency	**% Responses**	**Frequency**	**% Responses**
Death of both new-born child and mother	178	27.05	380	20.88
Complicated childbirth	153	23.25	466	25.6
School dropouts	106	16.11	237	13.02
Becoming an economic burden to their parents	42	6.38	170	9.34
GBV	34	5.17	73	4.01
Poverty for the couple	33	5.02	108	5.93
Unsafe Abortions	33	5.02	92	5.05
Lack social prestige	30	4.56	100	5.49
Difficult marriages, with frequent marital disputes	21	3.19	83	4.56
Less participation in societal activities	14	2.13	35	1.92
Broken marriages	13	1.98	65	3.57
Poor family planning	1	0.15	11	0.6
Total	**658**	**100**	**1820**	**100**

Early exposure to pornographic materials

In addition to poverty and economic decline, participants also noted that the introduction of online educational lessons which increased proliferation of cell 'phones among adolescents increased their exposure to inappropriate sexually oriented content. Exposure to pornography was described as developmentally inappropriate and negatively influencing adolescent girls and boy's sexuality. One adolescent boy mentioned this.

> *"Since the Covid 19 pandemic, the school have been asking parents to buy 'phones citing that most books are now soft copies, but the adolescents are now putting pornography in the 'phones and downloading applications that locks or hide the content, so if a parent does not know these applications, they will never know that their children are seeing pornography; for example, an app called calculator." (17-year-old boy, adolescent boys and young men FGD, Mwenezi district).*

Parents, community leaders and teachers also talked about how adolescents were transmitting pornographic materials on their cell phones both at home and at school.

> *"Our children are desperately in need of phones nowadays, but they don't use them for education purposes. If you confiscate their phones, what you see from them is pornography and after watching they would want to experiment." (41-year-old caregiver, parents' FGD, Zvimba district).*

> *"Pornography in their 'phones and social media. They are doing many things that they see from their 'phones, and they are watching the content that they are not supposed to see, and it affects how they think to the extent that they want to experiment and have the feel of it, and they end up getting pregnant." (59 year old Community leader, Nkayi district).*

Interviewed teachers confirmed that the cases of children sharing pornography were on the increase in schools including in primary schools.

> *"At one point we had a girl who brought a phone with pornographic content in it, and they were watching it at school. One girl came and reported that girls were watching pornography. We called the girl who had the phone, and it was a 24-minute-long video of explicit sex. We confiscated the phone, but we did not know how many other children saw the video... we deal with these cases more often." (46-year-old female primary school teacher, KII, Hurungwe district).*

A common thread in all the focus group discussions was that access to cell phones has given boys and men leeway to talk to adolescent girls without their parents' consent thereby increasing their vulnerability to inappropriate sexual behavior and sexual violence.

> *"The issue of technology, I mean 'phones because men are now persuading young girls to give them their phone numbers and they start talking to them without their parents' knowledge which is different from long ago. During our parents' time 'phones were scarce, our fathers used to go somewhere to make calls but these days a grade 6 pupil owns a 'phone so that's how boys and men are taking advantage of these girls and start communicating on the phone." (16-year-old girl, FGD, Chiredzi district).*

Parents acknowledged they were also to blame for giving children too much unsupervised access to electronic gadgets. Parents raised concerns that some parents were overcompensating their absence from home with electronic gadgets or sending excessive money to the disadvantage of the children who tended to abuse the gadgets.

> *"The problem nowadays is that we just buy these gadgets and send them back home to our children, we don't even take time to educate our children on the dangers of social media and on how to properly use the gadgets. Those who stay with their children don't even bother to monitor what they will be watching; they watch pornographic movies at midnight. So, I think as parents we are to blame, we are spoiling our children by giving them too much freedom and the gadgets" (42-year-old parent, Parent FGD, Chitungwiza district).*

Drug and substance use

Drug and substance use came out strongly in all qualitative interviews as contributing to adolescent pregnancy, HIV and STIs. The upsurge in substance use through non-injecting routes such as smoking, snorting and swallowing was reported in all 25 districts. Substance use was noted to be affecting adolescents and young people regardless of age, gender, and location. Both parents and adolescents stated that adolescents and young people were taking substances such as alcohol, cannabis, skunk weed, paint thinners, hand sanitizers, cough syrups, boiling unused diapers or sanitary pads, cough syrups (histalix and bronclear), and crystal methamphetamine popularly known as mutororiro. These drugs were being sold mostly in public places such as boreholes and shops, and by the school gates by mostly female vendors.

> *"The other problem is that children are now using drugs and you find children as young as 12 years using drugs. Drugs are sold everywhere especially in places where young people hang out, for example by the school gates and at boreholes and they target young people maybe because they are easy to sell to, I don't know." (17-year-old girl, FGD, Hopley district).*

> *"All the drugs you sold in Harare are also here in this village and young people are easy targets. You see girls and boys using these drugs and they think it's the in thing, but this is what is causing some to fall pregnant because when they have taken these drugs, they can engage in sex willy-nilly without even thinking..." (18-year-old girl, FGD, Bindura district).*

Parents and caregivers also concurred that drug and substance use was rampant among adolescents and that it was contributing to HIV/STIs and adolescent pregnancies.

> *"Drugs are contributing towards these problems, eh early pregnancies, diseases, STIs, HIV and so on. Cases of drugs in the community are very high and these drugs are not used by the adults, it's those school children who are using them." (53-year-old father, Parent's FGD, Epworth district).*

"You find that if these children are involved in drugs in the end they indulge in sexual activity and the result is that they become pregnant. In the end they are not even sure who is responsible for the pregnancy from all the guys they would have slept with." (47-year-old caregiver, Parents FGD, Zaka district).

These drugs were noted to be making adolescents high and thereby limiting their capacity to negotiate for safer sex or non-coercive sex or have the capacity to seek appropriate care such as family planning. Drug and substance use also increased adolescents' vulnerability to sexual abuse.

"You get drunk, and you end up not remembering anything, smoking especially weed and drinking 'ngoma-cough syrup'. They make you drink ngoma and they give you an overdose to extent that you won't be able to see anything, in your eyes people will look like cartoons and you get abused eventually." (19-year-old girl, FGD, Makokoba district).

"We went to Cleveland dam for my friend's party, and we enjoyed ourselves, with my friends, drinking beer...then I got drunk. The way I ended up sleeping with him; I don't even understand. All I remember was that we were drinking beer with my friends." (16-year-old adolescent mother, Hopley district).

Peer pressure, experimenting, exposure to drugs, lack of employment and the prevailing economic challenges were cited as driving both in and out of school adolescents into drug use. FGDs with parents in Hopley and Chitungwiza districts highlighted that some adolescents were exposed or initiated on drugs unintentionally by their parents who use drugs. It was noted that some parents were in the habit of sending their children to purchase these drugs while some parents take these drugs in the presence of children.

"We have seen it here where parents take drugs in the presence of their children and some even send their children to buy these drugs for them so in other ways, they are introducing their children to taking drugs and some end up hooked on these drugs." (43-year-old Pastor, Community leaders FGD, Chitungwiza district).

Adolescents cited social parties such as the 'Vuzu' or school leavers parties as high-risk events where adolescents are initiated on drugs. Interviews also highlighted that some adolescents consume these drugs unknowingly through eating spiked muffins or drinks. Ganja muffins and aphrodisiac pills were mentioned among the drugs used to spike food.

"We buy pills called 7 hours and we use them to spike drinks. We usually buy the Pepsi grape drink to disguise the blue pills and if a girl takes the drink she will just walk for a short distance and she will be aroused and want to have sex there and then. The pill has the same effect as alcohol if you take it, you become drunk, and the girl will initiate sex. She is the one who will start touching you and she will be the one on the urge to have sex and sometimes she will be leaning on you, and you will have sex and as boys love to do it ... we get the pills here in the community from vendors who get it from Zambia for $0.50 for ten pills and you can only use one or two at a time." (18-year-old boy, FGD, Hurungwe district).

Limited parent child communication on sex and sexuality

The absence of parents in the home at convenient time also impacted on parent child communication on sex and sexuality. Although the interviewed parents/caregivers acknowledged the information gaps on SRHR issues among adolescents and young people, they still strongly feel that talking about sex and sexuality or contraceptives at home would inadvertently promote sexual activity, making parent child communication on sex and sexuality off limits. Although parents/caregivers felt that it was important to prevent adolescent pregnancy, they were not keen to engage in pregnancy prevention discussion with their children. FGDs with parents and community leaders highlighted how socio-cultural beliefs and social expectation of how adolescents and young people should handle themselves remained unchanged over the years-parents insisted on abstinence. Interviewed stakeholders confirmed the limited parent child communication.

"Parents leave discussions on sexuality in the hands of science or biology lessons but at home they don't want to talk about it as they are always either busy with the economic lives or are not comfortable to talk about sex with their children. This means that children do not openly discuss their sexual activities until they are pregnant." (33 year old CSE teacher, KII, Zaka district).

Interviewed adolescents mentioned that sex and sexuality discussions were difficult to initiate with parents because of their judgmental attitudes.

> *"It's very difficult to discuss such issues at home, the moment you ask about it the discussion does not end well as our parents would think that one is already indulging in sex even though one is genuinely asking so we prefer to keep it to ourselves or discuss with our friends at school than with our parents" (16 year old girl, FGD, Shamva district).*

In the few cases where parent child communication was happening, parents stated that the discussions mostly underscore the need for adolescent girls to avoid sex and to stay away from boys. The limited parent child communication also negatively impacted on adolescent girls' access and uptake of SRHR information and services.

Quantitative findings confirmed limited parent-child communication in several domains including abstinence, sex and sexuality and pregnancy across sub-groups. Only 15% (66) of the sexually active adolescents self-reported ever discussing sex and sexuality with their parents or caregivers, while 85% (364) had never discussed these topics with their parents. Among the not sexually active, only 7% (69) self- reported ever discussing sex and sexuality with parents compared to 93% (919) who have not. Discussions on pregnancy prevention was also very limited among both groups with only 28% (119) of the sexually active adolescent reporting ever discussed pregnancy prevention compared to 72% (311) who had never discussed. Not sexually active adolescents also had very limited pregnancy prevention discussions with their parents 87% (856). There was statistical evidence in difference for adolescents who had discussions with their caregivers with sexual activeness on abstinence, sex and sexuality, pregnancy, STIs including HIV and reasons not to have sex ($p<0.05$) whilst there was none on relationships (table 33).

Table 33: Parent child communication among adolescents aged 10-19 years (sexually active vs non sexually active)

	Sexually active		**Non-Sexually active**		**Total**		**P value**
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Menstruation							
No	346	74.9(65.3 - 82.6)	754	75.8(69.9 - 80.8)	1100	75.5(69.3 - 80.8)	0.805
Yes	84	25.1(17.4 - 34.7)	234	24.2(19.2 - 30.1)	318	24.5(19.2 - 30.7)	
Abstinence							
No	389	88.7(85.0 - 91.5)	791	82.2(78.2 - 85.7)	1180	84.2(81.2 - 86.8)	0.014
Yes	41	11.3(8.5 - 15.0)	197	17.8(14.3 - 21.8)	238	15.8(13.2 - 18.8)	
Sex and sexuality							
No	364	84.1(76.1 - 89.8)	919	92.9(89.7 - 95.2)	1283	90.2(87.1 - 92.6)	0.003
Yes	66	15.9(10.2 - 23.9)	69	7.0(4.8 - 10.3)	135	9.8(7.4 - 12.9)	
Pregnancy							
No	311	72.1(66.0 - 77.5)	856	91.1(87.3 - 93.9)	1167	85.3(81.1 - 88.1)	<0.001
Yes	119	27.9(22.5 - 34.0)	132	8.9(6.1 - 12.8)	251	14.8(11.9 - 18.2)	
STIs including HIV							
No	338	78.7(70.6 - 85.1)	902	94.3(92.0 - 96.4)	1240	89.5(86.2 - 92.1)	<0.001
Yes	92	21.3(14.9 - 29.4)	86	5.7(3.6 - 9.00)	178	10.5(7.9 - 13.8)	
Relationships							
No	358	86.7(79.9 - 91.4)	871	90.2(87.0 - 92.7)	1229	89.1(86.6 - 91.3)	0.277
Yes	72	13.4(8.6 - 20.1)	117	9.8(7.3 - 13.0)	189	10.9(8.8 - 13.5)	
Reasons not to have sex							
No	405	92.7(88.7 - 95.4)	831	84.8(80.4 - 88.4)	1236	87.3(84.0 - 89.9)	0.004
Yes	25	7.3(4.6 - 11.3)	157	15.2911.6 - 19.60	182	12.7(10.1 - 16.0)	

Of the 66 adolescents with disabilities, 51 self-reported that they had never discussed SRHR with their parents. Of those who had discussed SRHR only 3 had had discussions on sex and sexuality, 4 had had discussions on pregnancy prevention, 4 discussed about relationships and only 2 had had discussion on STIs including HIV.

Limited knowledge, access, and uptake of SRHR services

Knowledge, access, and uptake of SRHR services are an important factor in reducing adolescent pregnancy. Suboptimal knowledge was more pronounced among the 10-14 year olds and adolescents with disabilities regardless of age. A comparative analysis of the FGDs among the 10-14 year olds in urban and rural communities confirmed disparities in knowledge levels. In FGDs with 10-14 year olds conducted in rural communities, many young adolescents did not have SRHR information; they lacked information on how to prevent pregnancy and the consequences of adolescent pregnancies. Some of the adolescents were very reserved and shy to share their views which might reflect lack of exposure to research. As one key stakeholder stated.

> *"I think in urban areas some of the older girls or I can say from 13 years upwards they know where and how to access family planning services or condoms, but they just lack the confidence to get the services, unlike adolescents in rural areas who do not even know what SRHR services are, where and how to access them." (40 year old male key stakeholder, IDI, Bulawayo district).*

Interviewed key stakeholders highlighted that adolescent girls were falling pregnant because of restricted and sanctioned access to contraception. Socio-cultural beliefs and social expectation of how adolescents should handle themselves limited their access and uptake of contraception. Despite acknowledging adolescents' early sexual debut, parents and community leaders were strongly against unmarried adolescent girls accessing contraception. They argued that unmarried adolescents must abstain from sexual activities until they are married.

> *"Adolescents that are not married should not indulge in sexual activities as it is against our values and should not be seen taking family planning pills and condoms in public places as they will negatively influence the good girls out there." (44 year old village head, FGD, Mt Darwin district).*

> *"As parents we cannot watch our children loose track. We cannot give the youth freedom to be mischievous and to sleep around. If we allow them to access these services while they are still at school, we would have failed them, we would be licensing sexual activity and promoting prostitution and who will marry them when they started having sex at 11 or 14 years." (52 year old, Parent FGD, Shamva district).*

There were mixed feelings among community-based service providers with regards to adolescents' access to condoms and contraceptives. Most were in favor of adolescents freely accessing contraception. One village health worker had this to say:

> *"We agreed that there should not be anyone who stops children from accessing contraceptives. When DREAMS first started most parents were against them saying that they had come to corrupt our children but now we thank them because those same children can now have free access to contraceptives, and we see the number of pregnant adolescents going down – not that they are not having sex – but because they access contraception hassle free from the DREAMS project." (55 year old village health worker, FGD, Tsholotsho district).*

Some community-based service providers still insisted that adolescents should not be allowed to access contraception.

> *"I do not think we should teach or allow them [adolescents] to use condoms and pills. The pills influence them, they damage children. Teaching them about contraceptives is giving them the go-ahead to engage in sexual activities. Rather we keep warning them about the dangers of getting in contact sexually with another person." (43 year old CCW, FGD, Nkayi district).*

Government policies that eliminate corporal punishment

Parents and community leaders also cited that some of the government policies that eliminate corporal punishment in the schools were inadvertently contributing to adolescent pregnancy. FGDs with parents and community leaders highlighted strong beliefs in corporal punishment as the most effective form of disciplining children which should be permitted both in schools and at home. Parents argued that children were mostly taught about children's rights with very limited focus on responsibilities. Such policies were cited as destroying the moral fabric by making it difficult for teachers and parents to discipline children. Community leaders were concerned that such policies were ordinarily imposed on communities from the western countries with very limited consultation with parents.

> *"If we look at some of the rights, they are destroying our children. We used to be beaten and we were afraid of doing things because of fear but nowadays if a child is beaten the child will report you to the police. At school we used to be beaten thoroughly and if you report at home that I was beaten at school you would be beaten again at home, but these days at school corporal punishment is now being eliminated and at home if I beat my child because I see her with a boy, she can report me to the police. So, I believe that some of the rights that are now there are causing our girls to get pregnant early." (57 year old male, Parent's FGD, Zaka district).*

> *"We mostly talk of children's rights and some of the rights especially freedom of expression and freedom of what..., now children are taking them to mean that they are not supposed to be questioned on anything that they would have done. They say it is my right to do what I want." (49 year old Councilor, Community leaders FGD, Hopley district).*

Parents felt that there was discordance in the way values and rights were taught in schools and what was being taught at home and this was contributing to children misbehaving in the pretext of children's rights.

> *"I think it still comes back to the issue of rights. At school they are told that you have the right to do this and this and when they come home, and we tell them that this behavior is unacceptable they say it's my right to do so. I don't know if the values that we teach at home differ from the values that are taught at school." (49 year old parent, Parent FGD, Chiredzi district).*

Limited youth recreational facilities

Community- based service providers and key stakeholders also mentioned limited safe social spaces for adolescents in rural communities to hang out as contributing to adolescent pregnancy. They stated that adolescents end up roaming in the communities with nothing to do which makes them vulnerable to risky behaviors.

> *"The other thing there is no form of entertainment and activities to engage these adolescents and you know that they end up loitering around shopping areas and this is where they meet these young men who also have nothing to do, and they end up engaging in sex and eventually they get pregnant." (52 year old male key stakeholder, KII, Rushinga district).*

> *"A lot of girls fall pregnant while boys get into drugs while waiting for O level results because they have nothing to do so I think having too much discretionary time not being in school or working is affecting these adolescents" (48 year old female key stakeholder, KII, Chivi district).*

Adolescents also concur that lack of organized youth activities to occupy time while waiting for ordinary examination results or when they have inadequate exam passes and are not in school increase their vulnerability to pregnancy.

> *"What is causing pregnancies in this community is idleness, especially for girls who have completed ordinary level and have nothing to do. They end up engaging in sexual activities because they have nothing else to do." (17 year old girl, FGD, Lupane district).*

Unlike some adolescents in urban areas who reported accessing youth recreational and leisure activities such as in- and outdoor ball games, sports, and library facilities from the established youth centers, adolescents in rural communities have limited safe social spaces that offer youth tailored entertainment or life skills. In Hopley district, UNFPA supported the construction of youth

centers to improve adolescent and young people's sexual reproductive health outcomes and reduce vulnerability through life skills development and economic empowerment. Key informants noted that the establishment of youth centers is helpful in ensuring that young people from vulnerable communities have access to integrated SRHR services and activities that keeps them engaged and entertained.

Covid-19 pandemic

Having nothing to do was made worse by the closure of schools in response to the Covid-19 pandemic. The lockdown in government run institutions from March to September 2021 meant that children were spending time at home without lessons, making them vulnerable to pregnancy and drug and substance use. Even when schools reopened the social distancing at schools resulted in most children attending school for only 2 days a week, less than half the usual time. With all this extra time at home, one of the unintended consequences was an increase in unplanned pregnancies amongst the young girls. Interviewed parents had this to say.

> *"Being out of school gave too much time to the children to do anything. So Covid- 9 contributed a lot, and it left a mark on other children because they had to drop out of school because they were pregnant, and some of the children were so used to staying at home that they refused to come back when schools reopened." (32 year old parent, FGD, Chiredzi district).*

Key stakeholders also agreed that closing of schools in response to the Covid-19 pandemic led to several unplanned pregnancies. One key stakeholder mentioned that:

> *"Even through the restrictions were necessary, it's unfortunate that for the children it led to a lot of cases of child marriages and pregnancies. Our district was seriously affected by adolescent pregnancies during Covid -9. We have a school in Ntabazinduna where we had more than 25 girls falling pregnant. We ended up engaging the community to somehow sensitize the parents about the dangers of adolescent pregnancies." (37 year old key stakeholder, KII, Umguza district)*

Lack of role models

Lack of role models was also cited mainly by key stakeholders as contributing to adolescent pregnancy. Some of the parents and peers were themselves victims of child / adolescent marriage because of their religious and social norms and therefore condoned adolescent pregnancy. Young people have limited role models in some communities to motivate them to finish school or delay sex. One key stakeholder in Rushinga stated that:

> *"Our district is one of those disadvantaged districts, and once people move out of the district no one wants to come back and work here and showcase the benefits of being educated. They prefer to work in Harare and don't want to come back here because it's too remote." (52 year old male key stakeholder, KII, Rushinga district).*

Long distance to and from schools

Long distances to and from school was cited as increasing the vulnerability of adolescent girls to abuse. In some districts children were reported to be walking more than 10kms to school exposing them to risks associated with accepting free rides from 'mushikashika' drivers. In some cases, children were staying on their own in rented houses near schools and some ended up staying with their boyfriends. Parents also reported that children can be sexually abused on their way from school as some get home very late because of the long distances.

> *"In this district we have a challenge with long distances to school, for example after primary our pupils go to Kasimure or Tsvute secondary schools, we are talking about 6 km from here but there are those who come from other villages, some are from Magaisa and some from village 9 and they pass through here so you see these distances are too much, the secondary is just far and that's when you see a child leaves home early and comes back in the evening and that child will be vulnerable because they get home very late." (44 year old teacher, KII, Hurungwe district).*

> *"As a ministry we have had cases of children being sexually abused on their way from school because they walk long distances passing through forests, and plans are underway to establish satellite schools." (36 year old Key stakeholder, KII,*

Rushinga district).

Sexual abuse

We explored root causes of pregnancy among adolescents with disabilities, and sexual abuse was highlighted in addition to factors that affect adolescent girls without disabilities. Adolescents with disabilities cited that they were less likely to be in school which increased their vulnerability to sexual abuse at home when their parents or caregivers were preoccupied with day-to-day duties that take them away from home.

> *"They are sexually abused even if they don't want to do it and if they are met with those who have taken drugs or crystalmeth (mutoriro) they take advantage of these girls because in some cases they know that they are deaf and dumb and cannot report the person who would have abused them." (49 year old case care worker, FGD, Hopley district).*

> *"In most cases these girls are abused. Sometimes they are abused by people who live with them at home because these children do not walk, speak, or see, and family members can hide it – it's not talked about until you see the adolescent pregnant." (55 year old teacher, KII, Makokoba district).*

Opportunities for pregnancy prevention

We explored opportunities for pregnancy prevention at family, community, district and policy level and several initiatives were reported. At family level, the increased proliferation of cell 'phones offer an innovative opportunity for health education among at risk adolescent girls. The study found that 38% (586) of the adolescents own a mobile 'phone, 45.2% (551) do not have mobile 'phone, and 15.8% (273) share a mobile 'phone with their family members (Table 34 below). About 69% of the highly vulnerable group (15-19 years) either own or share a cell 'phone with a family member which can be used disseminate information on SRHR and contraceptive use for example. There was a statistically significant difference in cellphone coverage by age group (p<0.001). Having access to a cell 'phone is an opportunity that can be used to accelerate the spread of tailored information addressing some of the risk factors that make adolescents vulnerable to adolescent pregnancy. Customized text messages educating or reminding adolescents on the challenges associated with pregnancy can be shared to reinforce the messages they will be getting during the CSE sessions.

We qualitatively explored adolescent girls' preference of delivery and content of SRHR information including contraception information. Preferred sources of SRHR information largely depended on age. The 10-14 year olds selected schools, parents/home, VHWs and clinics as their most preferred sources of information. The 15-19 years old cited NGOs, radio, television, cell phones and peers as their preferred sources of information.

Table 34: Cellphone coverage among adolescents aged 10-19 years.

	10-14 years		**15-19 years**		**10-19 years**		**P Value**
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
I have my own cell phone	99	14.3(10.5 - 19.2)	487	53.8(47.3 - 60.2)	586	38.0(22.0 - 43.3)	< 0.001
I share the cell phone of a family member	121	15.9(11.2 - 22.0)	152	15.8(11.8 - 20.9)	273	15.8(12.7 - 19.6)	
I share someone else's phone (not a family member)	2	0.2(0.0 - 0.9)	6	1.3(0.4 - 3.9)	8	0.9(0.3 - 2.4)	
I do not have a cell	345	69.4(63.9 - 74.5)	206	29.1(23.7 - 35.2)	551	45.2(40.1 - 50.5)	

The existence of community initiatives such as sensitization sessions during meetings and community dialogues in which child welfare and rights issues are discussed are an opportunity to address some of the key drivers of adolescent pregnancy. Community-based service providers are given opportunities to sensitize communities on several issues affecting communities including issues such as child marriages, child rights, HIV and STIs, and the Covid-19 pandemic. Such sensitization platforms build the capacity of parents and leaders to understand, engage and respond to some of the key drivers of adolescent pregnancy. FGD participants had this to say:

> *"When we have our village meetings the village head talked about ending child marriages and that parents should be vigilant in teaching children good behavior and right morals. Other people are also invited to talk about different things, for example as case care workers we sometimes talk about child rights." (43 year old case care worker, FGD, Nkayi district).*

"As a case care worker, I am also responsible for giving talks at community events like food or seed distribution. We look at the information gaps and prepare talks to address the gaps. For example, last week I talked about gender-based violence as they were a lot of reports of husband abusing their wives and children. I informed parents that it was abuse and if reported they will get in trouble with the police." (43 year old case care worker, FGD, Mbire district).

Engaging community-based service providers to disseminate information on child rights is a good opportunity as these cadres are embedded in the communities and can regularize and tailor communication to respond to the information and service delivery gaps as they emerge. One example that came out in Mbire district was how the community case care workers were arranging face-to-face meetings on child marriages with Apostolic church leaders and members just before the annual Passover festival. The meetings were meant to discourage forced/child marriages which are common during these Passover festivals. In the same meetings parents were encouraged to value the girl child's education. Aligning community dialogue meetings with religious and community events meant that community-based service providers were able to customize their messages to meet the information needs of the different subgroups and directly address some of the root causes of adolescent pregnancy. If community- based cadres are well supported with educational materials and financial support, they can go a long way in addressing their community specific drivers of adolescent pregnancies.

Community dialogue is also another opportunity to redress information gaps that drive adolescent pregnancy. During the community dialogues duty bearers and gatekeepers were invited to address communities on some of the challenges faced by communities. FGDs highlighted how some communities were working with community and national leaders to address key drivers of adolescent pregnancy:

"We invited the Chief and chief senator in one of the meetings to talk about child marriages. They openly talked about their collaboration with the police in fighting child marriages. They informed communities that in addition to serving judiciary sentences chiefs were also fining families a cow for marrying, marrying off, or taking anyone below the age of 18 years as a daughter in law." (59 year old, village head, FGD, Mbire district).

"To add on to what he is saying in one of the meetings, we had the First Lady address us talking about drugs, bad behavior and adolescent pregnancy, and the meeting was attended by parents, leaders, and children. Before the meeting we had some parents who were difficult, refusing to have their children participate in some of the programs, but with the help of the First Lady we have managed to get a great number of children to come to some of the learner's guides sessions and these sessions have been helpful." (51 year old village head, FGD, Chiredzi district).

Interviewed key stakeholders confirmed also partnering with communities to implement the some of the community dialogues.

"The approach we have taken so far, we are taking a multi sectoral approach where we do some community dialogues where community leaders, health personnel, teachers, parents, and learners themselves dialogue around the issue of sexuality. Even though it is a taboo for children to talk about sex in front of their parents, we are trying to correct that to say we now must talk about it, so the children echo their sentiments and parents also give their views then at the end day the day we come up with common ground on how to approach the issue of sex education." (49 year old male key stakeholder, KII, Hurungwe district).

Churches were also mentioned as delivering talks that are meant to reduce the prevalence of risky sexual behaviors. Considering that most of the adolescents interviewed self-reported being Christians with only 10.4 % (148) being non-Christians, churches can play a big role in averting adolescent pregnancy. Interviews highlighted that church sessions were used as a platform to encourage young people to uphold social values and good behavior.

"This past Sunday we were discussing such issues in our church, trying to motivate and provide our children to get married the proper way and not to elope when they are still young. We told them that if they elope, they would have lost much and would have been short-changed." (55 year old church leader, FGD, Mt Darwin district).

Introduction of community radios by the government of Zimbabwe was also mentioned during FGDs as an opportunity to disseminate information on pregnancy prevention. Zimbabwe licensed 14 community radio stations in 2021. SRHR weekly radio talk shows targeting both parents and adolescents were ongoing in some districts. Interviews conducted in Masvingo and Umuguza referred to SRHR programs aired on Hevoi FM and Khulumani FM respectively. This is an opportunity to reach out to some hard-to-

reach communities which were previously affected by poor radio and TV reception. Intensifying SRHR and HIV/STI prevention radios programs can go a long way in improving SRHR and HIV outcomes among adolescents regardless of geographical location, age and whether they have a disability or not.

The introduction of guidance and counselling and life skills orientation in schools is also another opportunity that can be used to address idleness and lack of information on SRHR and lack of economic skills and empowerment which have been shown to increase adolescents' vulnerability to adolescent pregnancy. Through guidance and counselling adolescents both in and out of school are now somewhat exposed to CSE which presents a great opportunity for teaching of cognitive, emotional, physical, and social aspects of sexuality thereby equipping adolescents with skills to make informed decisions about their health including sexual health and pregnancy prevention.

> *"Schools have tried to strength child protection through introducing safeguarding policies. Of late we have what we call a life skills orientation program which mainly focuses on the reduction of HIV among learners and equipping life skills within the learners because life skills are lacking in our learners especially decision making, they don't see the reason why they should abstain from sex." (52 year old male key stakeholder, KII, Rushinga district).*

Although the introduction of in and out of school CSE has been seen as an opportunity to equip adolescents with scientifically correct, age specific and culturally sensitive SRHR information, the focus on abstinence in primary level CSE is a missed opportunity. Evidence has shown that abstinence based CSE have limited impact on reducing risk behavior among adolescents. Almost all the interviewed primary school teachers mentioned their CSE curriculum emphasized abstinence.

> *"Ah here at primary level we are only teaching them to abstain. It is impossible for us to teach children about condom use and contraceptives because they are still young. I can't imagine teaching a 12 year old about condoms at such a tender age." (41 year old female teacher, KII, Rushinga district).*

> *"We have limited our discussions to abstinence because we do not know how the parents will react if we introduce contraception issues at primary school level. We must give information that is age appropriate and if we introduce other issues the parents will be up in arms and say these teachers are now teaching our children to take family planning pills and there will be conflict." (34 year old headmaster, KII, Mwenezi district).*

It was also noted that some schools were not fully implementing CSE as required. CSE sessions were being less prioritized as school authorities wanted to make up for the lost time due to Covid-19.

> *"The problem that we have is that our curriculum is already packed because of the CALAs curriculum, the learners have to do CALA, they have to pass the exams, so some teachers just do not conduct the CSE or life skills sessions as they should do because these are not examinable subjects." (55 year old male teacher, KII, Chegutu district).*

Lack of fully developed content or teaching materials and limited capacity strengthening of teachers compromised the delivery of CSE in some settings again short-changing children of an opportunity to gain tailored SRHR information. Interviewed key stakeholders talked about the lack of induction or training on the delivery of CSE as limiting their capacity to effectively deliver CSE sessions which again is a missed opportunity.

> *"The implementation of CSE is very minimal in schools, we have been trying as a ministry to strengthen the teaching of guidance and counselling, but you find that the content and teaching materials are still very minimal so the teacher will be assigned to teach but they will not know what to teach and how to teach it and do know the approach as in most school teachers have just been selected but received no induction at all." (48 year old male key stakeholder, KII, Masvingo district).*

It was also noted that adolescents with disabilities were often missed in CSE activities. The presumed lack of sexual activity and the lack of tailored materials that suit their diverse needs have largely contributed to their marginalization. FGDs with adolescents with disabilities highlighted the lack of educational materials in accessible formats such as Braille limited communication. This is a missed opportunity which deprives adolescents of adequate age and development-appropriate sex education. Interviewed stakeholders also concurred that CSE was not inclusive with most districts failing to meet the needs of learners with disabilities.

"Ahh we can say children with disabilities are being left out when other children are been taught. Such that these issues of sexual health don't reach them, and others don't even come to school. In other circumstances even if they come to school they still miss out as most schools are not capacitated to handle them. We have a girl in this district that ended up dropping out of school because the teachers were not trained in sign language, and it was difficult to talk to her. I am the only one who could talk to her because I am a sign language interpreter, but I am based here at the district." (39 year old key stakeholder, KII, Sanyati district).

At policy level, the existence of enabling policy and legal framework that promote access to CSE, health promotion and favorable SRHR outcomes set a conducive environment for pregnancy prevention programming if consistently enforced. The legal and policy environment has supported implementation of various pregnancy prevention programs by Non-Governmental Organizations (NGOs) supporting some of the severely underfunded government programs. NGOs have now been allowed to work in schools and in the communities. Adolescent girls and young women were reported to be at the center of several NGOs with the aim of improving access to information and services, empowering adolescent girls and young women with risk reduction, violence prevention and retaining girls in schools. The DREAMS project, Plan International and FACT were among the most cited organizations running ASRHR programs for both in and out of school adolescents (see Annex 1). The Higherlife Foundation, CAMFED and World vision were cited as mainly focusing on protecting girls from dropping out of school.

Post pregnancy experiences among adolescents aged 10-19 years.

This section will focus on adolescent mothers and their infants. It will cover their delivery experiences, antenatal care services access and uptake, infant growth monitoring, and young child feeding practices, HIV testing and care services.

Birth related experiences

Of the 215 adolescents who had had a live birth, 93% (200) delivered at a health facility, 5% (11) delivered at home, 1% (2) delivered en route to a health facility, and 1% (2) at a faith healer. Among adolescents with disabilities, 9 delivered at a health facility and 1 delivered at home. Ninety-three percent (200) had a normal vaginal delivery and only 6.5% (14) had a caesarean section. Eighty-eight percent self-reported that they did not experience any birth related complications. Adolescents who experienced birth related complications were all aged 15-19 years, 2% had preterm delivery, and another 2% had post-partum hemorrhage, 0.6% had vaginal fistula,0.6 had low birthweight and 7% experienced other complications. (Table 35 below).

Table 35: Birth related complications among adolescents aged 10-19 years.

	10-14 years		**15-19 years**		**10-19 years**		**P Value**
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Post-partum hemorrhage	0	0	6	1.5(0.6 - 3.9)	6	1.5(0.6 - 3.8)	0.987
Vaginal fistula	0	0	2	0.6(0.1 - 2.9)	2	0.6(0.1 - 2.8)	
Preterm delivery	0	0	7	2.4(1.0 - 5.6)	7	2.4(1.0 - 5.5)	
Low birth weight	0	0	3	0.6(0.1 - 2.3)	3	0.6(0.1 - 2.3)	
I did not have any complications	4	100	283	88.3(82.1 - 92.5)	287	88.3(82.1 - 92.5)	
Others	**0**	**0**	**32**	**6.7(3.9 - 11.3)**	**32**	**6.7(3.9 - 11.3)**	

Among adolescents with disabilities, 12 did not experience any birth related complications, 2 had post-partum hemorrhage, 1 had preterm delivery, and another 1 had vaginal fistula and 4 experienced other complications. There was significant statistical difference in complications experienced during pregnant and childbirth with disability status ($p< 0.001$). Among adolescents with a disability who experienced pregnancy, 62% did not experience any complications, while for adolescents without a disability, 90% did not experience any complications.

Table 36: Birth related experiences among adolescents with and without disabilities

	Without disabilities		With disabilities		All adolescents		P Value
		P value	n	% (95% CI)	n	% (95% CI)	
Post-partum hemorrhage	4	1.3(0.4 - 3.9)	2	5.6(0.8 - 29.4)	6	1.5(0.6 - 3.8)	<0.001
Vaginal fistula	1	0.17(0.0 - 1.3)	1	11.191.3 - 53.4)	2	0.6(0.1 - 2.8)	
Preterm delivery	6	2.4(1.0 - 5.7)	1	0.9(0.1 - 7.1)	7	2.4(1.0 - 5.5)	
Low birth weight	3	0.6(0.1 - 2.4)	0	0	3	0.6(0.1 - 2.3)	
I did not have any complications	275	89.5(83.3 - 93.6)	12	62.1(38.5 - 81.2)	287	88.3(82.1 - 92.5)	
Others	**28**	**6.1(3.4 - 10.6)**	**4**	**20.4(8.4 - 41.8)**	**32**	**6.7(3.9 - 11.3)**	

In-depth interviews with nurses highlighted that treatment for vaginal fistula was only available in selected referral hospitals around the country and was not easily accessible to some adolescents especially in provinces where referral hospitals did not offer treatment. Commenting on birth related complications one of the nurses had this to say.

> *"It depends on the nature of the complication; some can be easily managed that the district hospital while some are managed at provincial hospitals. We also have other services that are not accessible even at national level for example treatment surgery for vagina fistula is still very limited. I am not sure now how many hospitals do fistula repairs in Zimbabwe now I only know of Chinhoyi hospital, but I am also not sure if they do it all the time or its occasionally" (37 year old nurse, KII, Hurungwe district).*

Access and uptake of antenatal care services

Access and uptake of antenatal care services was at 91.1% (290),. All adolescents aged 10-14 received antenatal care, while 89.6% of those aged 15-19 years received it. There was no sufficient evidence in difference in receiving antenatal care between the two age groups (p = 0.540). Among the adolescents who did not access antenatal care services the reasons were as follows: could not afford ANC registration (15%), didn't think it was important (15%), 4.2% feared maltreatment, judged or discrimination by nurses, 15% had disclosed pregnancy, 9% religious beliefs , and 43% cited other reasons for not receiving antenatal care at a health facility. Among adolescents with disabilities, only 3 self-reported not receiving antenatal care services at a health facility. Of these, 2 had not disclosed their pregnancy and 1 did not think that antenatal care services were important.

We looked at the gestation age at first antenatal care visits. Only 48% (140) accessed ANC within the MoHCC recommended 12 weeks gestation age. Forty-three percent (125) accessed ANC in the second trimester, and 9% (25) accessed ANC in the third trimester. Among the 17 adolescents with disabilities, 6 within 12 weeks, 7 accessed in the second trimester, and 4 accessed ANC in the third trimester (fig 14 below).

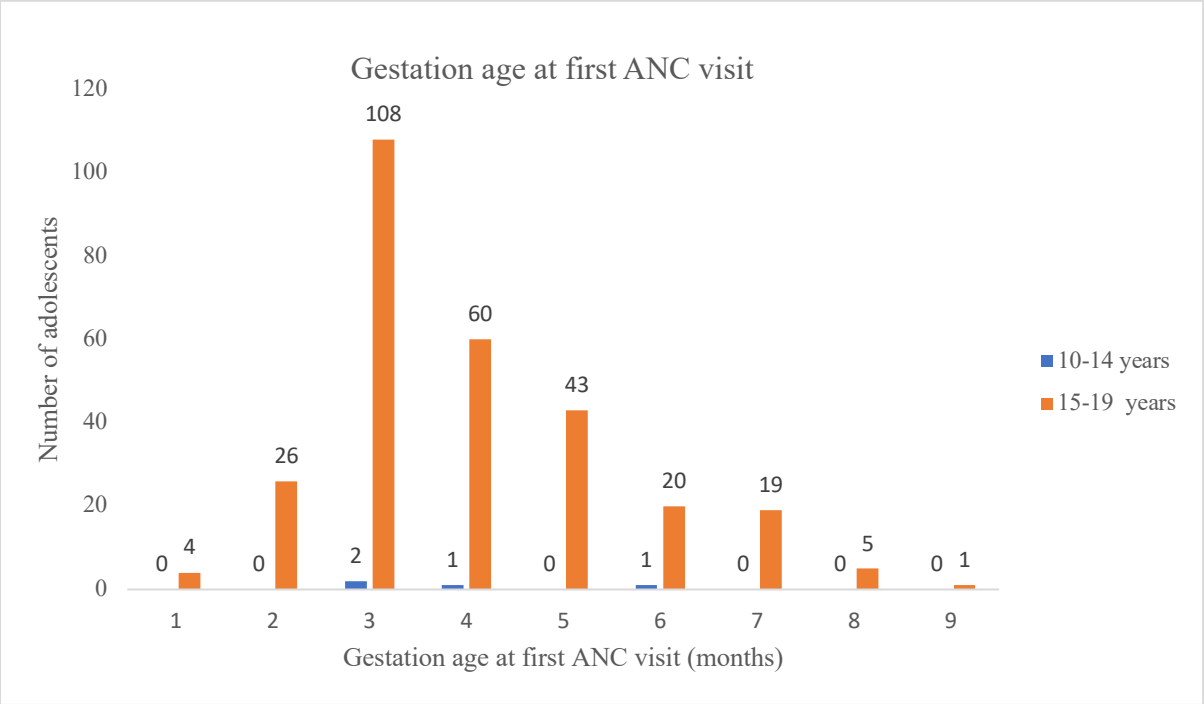


Figure 14: Gestation age at first ANC visit

We explored ANC contact visit among pregnant mothers, and only 4% (13) managed the 8 recommended ANC contact visits. Most (54%) had 4 or less contact visits and 41% had between 5-7 contact visits as shown in Fig 15 below. Among the 17 adolescents with disabilities who accessed ANC services, none managed the recommended 8 ANC contact visits, 11 had less than 4 and 6 had between 5-6 ANC contact visits.

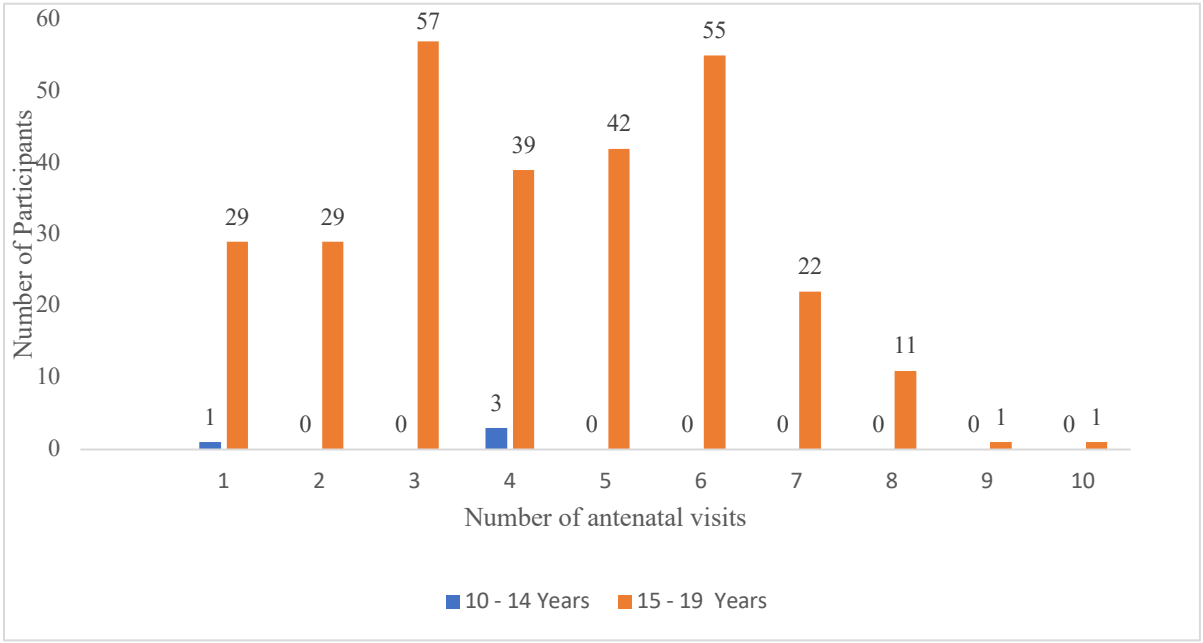


Figure 15: ANC visits by age

Eight nine percent (189) attended a postnatal visit. Reasons for not attending a postnatal visit included not being told about the visit, the long distance to the facility, and not thinking that it was important among other reasons. For the age group 10-14, all of them 1(100%) did not go to a postnatal clinic visit because they perceived their baby and themselves to be healthy and did not see the need to visit. Among the 16.9% (25) of participants aged 15-19 who did not go, the main reason was not being advised to have a visit (63.4%) and thinking that both the mother and baby were fit (16.3%).

Uptake of dual HIV and syphilis testing services and early infant diagnosis

Among the 337 who reported ever pregnant 91% (290) had an HIV and syphilis test. Among the 14% not tested 22% cited not being offered the test, 5% not at risk of HIV,1% scared of the HIV result, 0.3 testing site too far, 0.7 knew they were HIV negative, 10% religious reasons, and other reasons at 62%. Five adolescents tested HIV positive and 4 were initiated on treatment while 1 did not receive ART. Of the 4 HIV exposed infants whose mothers received ART, 2 received ART prophylaxis while 2 did not receive any prophylaxis. Three infants were tested at 6 weeks and only 1 was not tested as the infant was below six weeks. All the infants were HIV negative at the time of data collection. Of the 20 adolescents with disabilities who became pregnant, 16 had an HIV/syphilis test and only 4 were not tested. One was not offered the test, and 1 knew she was HIV negative and 2 cited other reasons.


Photo credit: Concilia Mutasa/CeSHHAR Zimbabwe

Table 37: HIV and syphilis testing

Uptake of dual HIV and syphilis testing services and early infant diagnosis							
	10 – 14 Years		15 – 19 Years		10 – 19 Years		P Values
		P value	n	% (95% CI)	n	% (95% CI)	
When you were pregnant with this baby, were you ever tested for HIV and syphilis?							
No	0	0	47	9.2(6.0 - 14.0)	47	9.1(5.9 - 13.7)	0.536
Yes	4	100	286	90.8(86.1 - 94.0)	290	90.9(86.3 - 94.1)	
Why did you not test for HIV or syphilis?							
I was not offered an HIV/syphilis test	0	0		22.0(10.6 - 40.2	9	22.0(10.6 - 40.2	N/A
I am not at risk for HIV/syphilis	0	0		4.6(1.1 -17.2)	2	4.6(1.1 -17.2)	
I was scared to find out the	0	0		1.0(0.1 - 7.9)	1	1.0(0.1 - 7.9)	
Testing site is too far away	0	0		0.3(0.0 - 3.0)	1	0.3(0.0 - 3.0)	
I knew I was HIV negative	0	0		0.7(0.1 - 6.1)	2	0.7(0.1 - 6.1)	
Religious reasons	0	0		9.5(2.1 - 33.5)	4	9.5(2.1 - 33.5)	
Other	0	0		61.8(41.0 - 79)	28	61.8(41.0 - 79)	
For any of these HIV tests during your pregnancy with your baby, were the results ever positive?							
No	4	100	328	98.6(95.7 - 99.5)	332	98.6(95.8 - 99.5)	0.812
Yes	0	0	5	1.4(0.5 - 4.3)	5	1.4(0.5 - 4.2)	
Did you receive any treatment to take yourself to prevent the baby from getting infected with HIV							
No	0	0	1	7.4(0.2 - 74.6)	1	7.4(0.2 - 74.6)	N/A
Yes	0	0	4	92.6(25.4 - 99.8)	4	92.6(25.4 - 99.8)	
Did the baby receive any of these forms of treatment or to prevent the baby from getting the HIV infection							
No	0	0	2	37.2(1.9 - 94.8)	2	37.2(1.9 - 94.8)	N/A
Yes	0	0	2	20.5(0.8 - 88.9)	2	20.5(0.8 - 88.9)	
I am still pregnant	0	0	1	42.4(1.9 - 96.6)	1	42.4(1.9 - 96.6)	
Was the baby ever tested for HIV?							
No	0	0	1	42.3(13.5 - 77.4)	1	42.3(13.5 - 77.4)	N/A
Yes	0	0	3	57.7(22.6 - 86.5)	3	57.7(22.6 - 86.5)	
What was the baby's HIV test result							
HIV negative	0	0	3	100	3	100	N/A
Didn't collect the results	0	0	0	0	0	0	
Prefers not to say	0	0	0	0	0	0	

Infant and young child feeding

Most of the mothers (99.5%) self-reported breastfeeding their infants and only 0.5% did not breastfeed. The median duration of breastfeeding was 10.5 months (interquartile range 4-16 months) (figure 16 below).

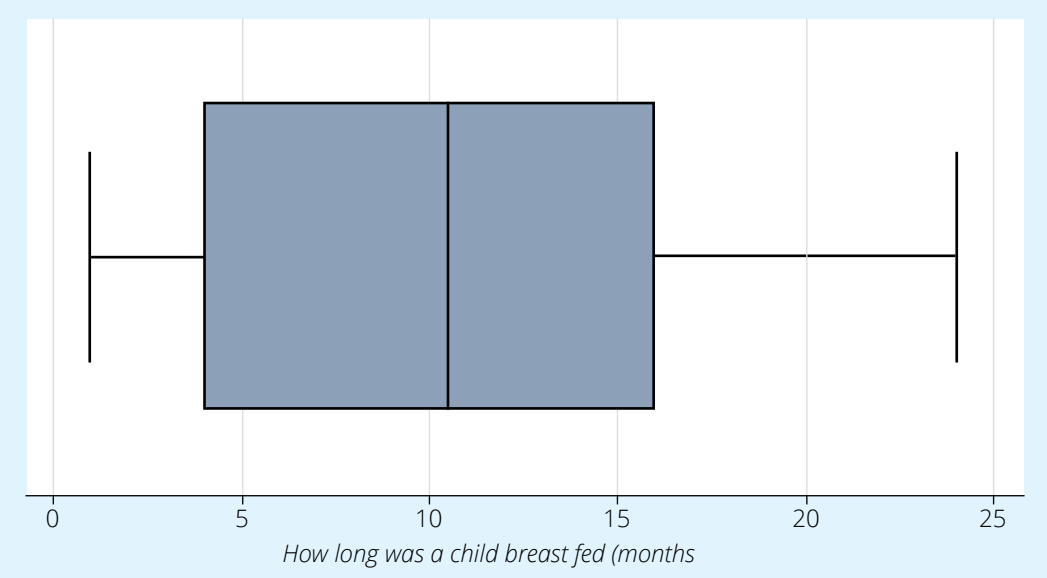


Figure 18: Duration on breastfeeding

Approximately 36% were immediately breastfed after birth, 38% were breastfed in less than an hour after birth, while 19% were breastfed in less than 24 hours; and only 7% took more than 24 hours to breastfeed after birth. More than 6 in 10, 66% (141) were still breastfeeding at the time of data collection while 34% (73) had ceased breastfeeding. All the 10 adolescents with disabilities self-reported breastfeeding their infants. Four immediately breastfed their babies at birth, 5 breastfed within an hour and 1 took longer than 24-hours to breastfeed. Of these 10, 5 were still breastfeeding and 5 were no longer breastfeeding. 29% (63) of the infants were breastfed for 6 months or less, 59% (127) of the infants were breastfed between 7-12 months, 36% were breastfed for 13-18 months, and 8.4% were breastfed for more than 18 months.

Our study found that exclusive breastfeeding practices among adolescent mothers varied. Among the 215 adolescent mothers who had a live birth, 28.4% exclusively breastfed their infants for a duration shorter than the recommended 6 months, while 30.2% exclusively breastfed for the recommended 6 months and , 18.1% exclusively breastfed for longer than 6 months, ranging from 7 to 24 months. A higher proportion (22.8%) reported that they have not yet introduced solid foods to their infants, which is concerning since appropriate complementary foods should be introduced after 6 months to ensure adequate nutrition for the growing infant. Only 5% of adolescent mothers could not remember their exclusive breastfeeding practices.

Despite the WHO recommendation to exclusively breastfeed without any other food or water for the first 6 months of life, some adolescent mothers reported giving their infant's water (50%, 108), solids (28%, 61) and non-prescribed traditional medicine /herbs (13%, 29) before they reached 6 months.

We looked at why some mothers introduced complementary feeding way to early while others introduced very late. About 73% of the adolescent mothers reported that they were not taught or given instructions on how to breastfeed. Among the mother who reported not being taught or given instructions at the facility on infant feeding, only 1(100%) was among the 10-14 age group while 26.9% were aged 15-19 years. On the other hand, 189(73.1%) of the participants were taught how to breastfeed.

Although some mothers reported that they exclusively breastfed, some felt that exclusive breastfeeding was unrealistic. Qualitative interviews highlighted that some infants were introduced to solids as early as 2 weeks. Fear that the infant was not getting enough milk, insufficient milk, religious and cultural beliefs in which a baby is given either holy water or traditional medicine for protection were some of the reasons that hindered exclusive breastfeeding.

> *"She started eating porridge when she was a month... I did not have enough milk so she would cry a lot and I ended up giving her with porridge so I would say no, I never exclusively breastfeed. I breastfed as well giving him porridge." (16 year old adolescent mother, IDI, Rushinga district).*

> *Participant – "Yes, porridge."*
> *Interviewer – "Your baby is only two weeks, what made you to give him porridge early?" Participant – "The baby will be crying and sometimes I won't have enough milk." (17 year old adolescent mother, IDI, Mwenezi district).*

Some mothers found breastfeeding to be challenging and boring. Some of the challenges included not knowing the correct breastfeeding position, producing insufficient milk, cracked nipples, lack of social support on breastfeeding, infants failing to suckle and difficulty knowing how to regulate the breastfeeds. Interviewed adolescent mothers narrated their breastfeeding experiences:

> *"Uh breastfeeding was difficult the first time my breasts were sore, the nipples were cracking, and I was not producing enough milk and my baby would cry and my grandmother kept forcing me to breastfeed so, each time my baby cried my tummy would rumble with fear. So, I think it needs time to get used to it plus you won't even know how to hold the baby while breastfeeding and my grandmother would shout at me that the baby is only swallowing air and not milk so I had a difficult time." (18 year old adolescent mother, IDI, Hurungwe district).*

> *"Breastfeeding is boring I cannot deny that ahh breastfeeding all the time there is no rest, even at night you have to wake up and breastfeed or in front of people you have to take out your breast and start breastfeeding." (16 year old adolescent mother, IDI, Nkayi district).*

> *"The other challenge is because my son can't say out what he wants so whenever he wakes up, I breastfeed him and if I overfeed him at times he will vomit and soon after vomiting he still wants more milk so I don't understand since the baby can't communicate that he is now full. He doesn't know that he is full he will just continue to open his mouth for more, so I still don't understand him." (15 year old adolescent mother, IDI, Masvingo district).*

Interviewed health care workers confirmed that some of the adolescent mothers had challenges producing adequate milk and most of the challenges were rarely communicated to the health care workers. Health care workers attributed the non-disclosure of breastfeeding challenges to being young, first-time mothers and beliefs that low milk production was normal during the early days post-partum. They confirmed conducting infant and young children feeding health talks which aimed at giving these young mothers information on childcare and infant feeding. Seventy-four percent (160) of the adolescent mothers reported receiving facility level counselling on feeding the infant.

Qualitative interviews also confirmed that some mothers received counselling from health care workers on infant feeding.

> *"I was taught that I should feed the baby on time and not to let the baby cry while I continue doing some other thing and that I should feed my baby breast milk only and when the time comes that she must be fed other foods they will tell me." (19 year old adolescent mother, IDI Lupane district).*

In-depth interviews with adolescent mothers explored complementary feeding, and sadza, sour porridge and maheu [traditional brewed beverage] were the mostly cited foods. Very few mentioned potatoes, tea, fresh milk.

"She was having breast milk and eating porridge also. At first, she did not want sadza so she mostly ate porridge and Maheu" (19 year old adolescent mother, IDI, Lupane district).

Some mothers talked about mixing maheu with traditional herbs to boost nutrition and growth. This was very common in Mashonaland provinces.

"I give him porridge with peanut butter in the morning. In the afternoon I sometimes make Mahewu with mukoyo … it's the roots of a certain tree that prevent a child from having kwashiorkor" (16 year old adolescent mother, IDI, Hurungwe district).

Immunization and growth monitoring

Of the 215 adolescent mothers who had a live birth 82% (205) had their infants immunized and only 18% (10) were not immunized. Reasons for not taking up immunization included not being told about the immunization (42%), religion not allowing it (29%), forgetting (1%), and being sick (30%). Eighty-two percent (171) of the infants had never been hospitalized since birth. Eighty percent (158) of the infants were up to date with the scheduled vaccinations as per their child health cards. 19% of the infants had missed one or two vaccinations and Covid-19 related disruptions were cited as the reason for missing vaccinations. Seventy-three percent % (141) of the infants received Vitamin A supplements and 92% (187) of the infants had normal weight and only 8% (7) were moderately underweight (table 38).

Table 38: Immunization uptake

	10 - 14 Years		15 - 19 Years		10 - 19 Years	
	n	**% (95% CI)**	**n**	**% (95% CI)**	**n**	**% (95% CI)**
Did you go to a clinic at some point after the birth of your baby so that your baby could receive immunizations?						
No	0	0	10	18.5(13.0 - 26.4)	10	18.4(12.5 - 26.4)
Yes	1	100	204	81.5(73.6 - 87.4)	205	81.6(73.6 - 87.5)
Why did you not go to a clinic to have your baby immunized?						
I was not told when to bring in my child	0	0	3	42.2(11.2 - 80.9)	3	42.2(11.2 - 80.9)
My religion does not allow	0	0	3	28.5(5.4 – 73.4)	3	28.5(5.4 – 73.4)
I forgot	0	0	1	1.4(0.1 - 18.1)	3	1.4(0.1 - 18.1)
I was not feeling well	0	0	3	27.9(4.1 - 77.9)	1	27.9(4.1 - 77.9)
Have baby ever spent the night in a clinic or hospital after being discharged from the birth facility						
No	1	100	170	81.5(73.6 - 87.4)	171	81.6(73.6 - 87.5)
Yes	0	0	44	18.5(12.6 - 26.4)	44	18.4(12.5 - 12.4)
Do you have your baby's health card? ASK TO SEE THE CARD						
No	0	0	21	9.6(5.1 - 17.3)	21	9.5(5.1 - 17.2)
Yes	1	100	193	90.5(82.7 - 94.9)	194	90.5(82.8 - 95.0)
Is the child up to date with vaccinations						
No	0	0	36	19.9(12.1 - 31.2)	36	19.9(12.0 - 31.0)
Yes	1	100	157	80.1(68.8 - 87.9)	158	80.2(69.0 - 88.0)
Please tell me if the child has received vitamin A supplements						
No	0	0	53	27.0(18.7 - 37.2)	53	26.9(18.6 - 37.1)
Yes	1	100	140	73.0(62.8 - 81.3)	141	73.2(62.9(81.4)
Does the weight line on the baby health card show good, dangerous and very dangerous growth rate?						
Good-Normal	1	100	186	91.5(76.3 - 97.3)	187	91.6(76.4 - 97.3)
Dangerous- Moderate	0	0	7	8.5(2.7 - 23.7)	0	8.5(2.7 - 23.6)

We qualitatively interviewed three out of the seven mothers whose infants were underweight, to explore why their infants were underweight. One mother narrated how she had prematurely weaned her infant because of lack of knowledge on infant feeding.
RESP: My baby is turning six months next month, and I weaned her when she was two months but health wise, she is not okay, and people are saying that it's my milk which is very weak and cannot make my baby grow so I am now giving her cow milk. My sister was telling me that the child was not growing, so she suggested that I give her cow milk. She said maybe the milk I was producing was not nutritious enough.

> *RESP: My baby is turning six months next month, and I weaned her when she was two months but health wise, she is not okay, and people are saying that it's my milk which is very weak and cannot make my baby grow so I am now giving her cow milk. My sister was telling me that the child was not growing, so she suggested that I give her cow milk. She said maybe the milk I was producing was not nutritious enough.*
> *INT: "Why did you not give her both cow milk and breastmilk?"*
> *RESP: "My aunt said it was unacceptable to mix the two. She said that I shouldn't mix the two, so I am only giving cow milk."*
>
> *INT: "How about at the clinic, what did the nurses tell you?"*
> *RESP: "They do not know that she is not breastfeeding. I did not tell them as I did not think it was important. They were saying if she reaches an age whereby, she can be fed plump nuts, we can give her. So, I am waiting for her to turn six." (16 year old adolescent mother, IDI, Bindura district).*

One of the mothers stated that she discovered that her daughter was severely underweight when she went for the day seven checkup. The nurses told her that her daughter was not growing well.

> *"When I went with my baby for antenatal visits, they would say my baby has less kilograms. When I went with my baby for seven days and on other visits the nurses said that my child was not changing and growing properly, and they advise me to properly breastfeed. Some were saying maybe I was not producing enough milk." (15 year old adolescent mother, IDI, Chivi district).*

Profiles of pregnant and adolescent mothers

As stated earlier, we conducted in-depth interviews with a subset of pregnant and adolescent mothers to unpack their lived experiences. About 42% (140) either got pregnant or married while in school and had to drop out of school because of pregnancy and or marriage. It is important to note that although most of the pregnant and adolescent mothers were in school, most of the pregnancy happened during the Covid-19 lockdown when most adolescents were not attending school.

> *"She studied up to form three and she got pregnant in form three during the lockdown and by the time the schools reopened her pregnancy was already showing and she could not go back to school." (37 year old parent of an adolescent mother, IDI, Hwange district).*

> *"She was impregnated when she was in form two; she was supposed to have finished form two this year. She turned 15 in August, and that is her first child, and her baby is now two weeks. Is her first child." (40 year old parent of an adolescent mother, IDI, Hopley district).*

Pregnant and adolescent mothers were found in all geographical locations but mostly concentrated in rural areas, mining and farming communities and were more likely to be from single parent households or staying with non-biological parents.

> *"My parents separated when I was a toddler and father relocated to South Africa. All along I was staying with my mother until she was jailed two years ago, and I am now staying with her friend. Since my mother was jailed, we have been moving houses a lot because of high rentals and I ended up getting married because my mother's friend was complaining that I was*

becoming a burden, and no one knows when my mother will be released from jail." (14 year old pregnant adolescent, IDI, Chitungwiza district).

"My father and mother are in South Africa, and I stay with my grandmother and siblings. My parents used to visit every year end but since the Covid-19 they have not been home. When I got pregnant, I had planned it – staying at home was becoming boring, so we agreed with my boyfriend that I was ready for it [pregnancy]." (17 year old adolescent mother, IDI, Lupane district).

Most of the adolescents were unaware of their partner's HIV status and didn't think that they were at risk of HIV infection when they first had unprotected sex.

Photo credit: Zivai Mupambirewi/CeSHHAR Zimbabwe

CASE STUDIES

Documented detailed cases studies unpacking some of the pathways to adolescent pregnancy

CASE STUDY 1

Ten detailed cases studies were documented to unpack some of the pathways to adolescent pregnancy, below we present seven out of the 10 cases studies.

Natalie is a 12-year-old paternal orphan who was now living on her own with her son in Hurungwe district. Natalie's father died when she was 3 years old, and her mother abandoned her when she was 2 years old and that was the last time, she saw her.

> *"My grandmother told me that my mother ran away when my dad was sick and she left me then, I was young, and she left me with my grandmother, who took care of me... We are three in our family two girls and one boy, and I am the youngest."*

Natalie has no recollection of her parents as she was left in the care of paternal grandmother who died when she was 5 years. When her grandmother died, she had no fixed accommodation or caregiver's as she kept being passed on from one relative to the other. Her fluidity of care arrangement meant that she was always in and out of school and always negotiating new homes and school environments. In 2018 she was taken in by her paternal grandmother's young sister who looked after her while she assisted her with household chores after school. In 2020 her foster parent got sick and was taken to Harare for medical care. Natalie was left in the care of her cousin aged 21 years who also stayed in that household. The cousin was out of school and depended on selling sex at the local business Centre. Her foster parent's deteriorating health meant that she could no longer afford to send groceries or pay for her school fees. Natalie dropped out of school at the beginning of 2020 when she had just started grade 5. Natalie's cousin started organizing men for her. Natalie had her first boyfriend in August 2020, became pregnant in December 2020 and delivered in Sep 2021.

Photo credit: Zivai Mupambireyi/CeSHHAR Zimbabwe

"I had my first boyfriend when I was 10 years old, we met on the road. He stays in this village with his grandmother, his mother passed away. We started to know each other from the illegal gold mines where I used to go and wash gold ore. He worked there as well. We used to meet there that's when our relationship started and one of our secret meeting points was at the community borehole during the evenings".

Her first sexual encounter was nonconsensual, and her boyfriend forced her to have sex, but she had no one to tell as people in the community knew that they had a love relationship. She was not ready for sex and unfortunately, she became pregnant.

"He lied to me that he wanted me to meet his uncle, so we went to the other side in the mountainous area visiting his uncle and he forced me to have sex with him in the bush. I did not want to have sex and I tried to resist but he overpowered me."

Natalie's partner denied responsibility and moved out of the area. Her foster parent disowned her. Natalie now has other two sexual partners: a 35-year-old man and a 26-year-old man. She is responsible for raising her son on her own with the help of stipends from her two sexual partners and illegal gold panning. Natalie only got tested for HIV at her ANC registration and she tested negative. She is currently on family planning which she was only able to access post-partum. Her son was up to date with his scheduled immunization. Natalie has no plans to go back to school as she has no one to pay for her school fees or look after her child while she is at school. Natalie's long term plans are to look for employment and look after her son. She has not intentions to marry.

CASE STUDY 2

Monica is a 15-year-old paternal orphan. Her life took a downward turn when her father, the sole breadwinner, died.

Soon after her father's death Monica and her mother relocated from Chitungwiza to Hopley a low-income residential location with makeshift houses as they could no longer afford to pay the rentals. Monica transferred to an informal school in Hopley. Two years after relocating her mother remarried and they moved in with her mother's husband in the same neighborhood. Monica got into a friendship with her classmate who was also her churchmate. Monica was doing well at school and had planned to finish her secondary level education.

When Monica turned 13 years her friend's neighbor proposed love, but Monica turned down the request despite his persistence. The 28 year old man connived with her friend's mother to set her up when Monica's mother had gone to sell her wares in Botswana.

"One Sunday I visited my friend who asked me to accompany her to her male friend's house who lived four houses away from my friend's house. I think they had something planned for me which I was unaware of. When we got there my friend left to go and buy bread and she locked us in that's when this man raped me"

Monica reported the rape to her friend's mother who seemed unbothered at the time but promised to call her mother.

"When this boy raped me, I told my mother's friend, my mother was away. When I told my friend's mother, she said she was going to phone my mother to tell her about my issue. Unfortunately, my mother's friend did not keep the secret, she went on to tell everyone in street and the rumors got to my school by one of my classmates. She was saying 'there is someone who was raped and is no longer a virgin' she said it to spite me. That same day we were supposed to write a test, but I ran away from school because people were laughing at me".

Her friend's mother arranged for her to elope without her consent or waiting or her mother's return. Her friend's mother took her to the man's place saying, 'we brought your wife'. The man confiscated Monica's cell phone and changed the password so that she could not contact her mother or her stepfather. When her mother returned, she started looking for her but could not find her. Her friend and her mother professed ignorance on Monica's whereabouts. Monica's mother reported the matter to the police and the police started looking for her. When the man got to know that the police were looking for Monica, he arranged for her to go to his rural home in Murehwa district. Monica stayed there for close to four months and during that time she still had no access to her cell phone or outside communication. Monica had no access to her family and was not allowed to go out of the rural homestead.

One day Monica got access to call her mother.

> *"One day I snooped on the new password on my phone, and I managed to retrieve my mother's phone number, but I did not use the phone to call. I then left the phone where it was. Then I went to his auntie and asked her for her phone so that I could call my mother, she asked me what I wanted the phone for, and I told her I wanted to call my mother. She gave me the phone and I called my mother'.*

When her mother finally managed to locate Monica with the help of Musasa project she was already 4 months pregnant. After the rescue the man was arrested, and they were notified about the court date. Monica and her mother went to the court three times and the case was not concluded. The Public Prosecutor told them that he was going to notify them of the next court date, but they never received any notifications. They heard that the man was acquitted as the complainant [Monica] had not attended court on three consecutive times.

> *"After I was rescued from Mutoko by the Musasa project, I returned home with my mother. The man was later arrested, and we were notified about it. We went to court three times and there was no ruling. When we were about to leave the courts on day three the Public Prosecutor told us that he was going to contact us with the scheduled court next date. He never did but we later heard that he was in jail for 5 months and he came out. My mother heard a rumor that his family paid the Public Prosecutor so that they will not inform us of the court dates until the case was dropped. When he came out, he used to come to our house and say I want to see my family and my mother told him that he had no family and that she never wanted to see him again. He kept coming until my mother threatened to report him to the police and that is when he stopped, and I don't know where he is".*

Interviewed key stakeholders also confirmed that corruption was rampant at the judicial services and that complainants were deliberately not being notified of the court dates.

> *"What I am saying is if someone marries an underage girl, especially if it's a forced marriage because rape is involved, the police come and arrest him, but the next day you see him walking free. There is a deliberate attempt not to alert the complainant (child) about the day of the court, 3 days in a row that happens, and the perpetrator is made to walk free as there is no complainant. We have had such kinds of cases happening when kids were raped by teachers and the cases go nowhere" (36 year old key stakeholder, KII, Umuguza district).*

Monica later learnt that this man was once convicted of rape charges.

> *"His brother's wife told me that he was previously prosecuted for rape. He raped his niece who was in grade two and he was prosecuted in Mutoko and when he came to live in our area, he was coming from the prison."*

Monica was referred for healthcare services as she was being sexually abused. She was referred for pregnancy termination services, but her mother refused citing religious beliefs. Monica had a hard time accepting her situation and at one time contemplated suicide. She received counselling from Musasa project and from her supportive family.

> *"At first it was difficult to accept but with time as days passed by it got better because of the way my mother was handling the situation. I didn't know about pregnancy, I had to ask my mother where the baby would come out from. I did not know anything because at that time at school I had only learnt about puberty."*

Monica had a difficult time accessing antenatal care because of the health care worker's attitude. They laughed at her because she was young and tiny.

> *"When I first went to scale [register pregnancy] I ended up running away because of the attitude of the nurses which I didn't like. There were some young nurses I think they are student nurses they wrote in my book and took me to a room where they were touching my tummy. They took me for a doll and were calling each other to come and touch my tummy, some were touching the tummy while other were pressing my breast, there were about six of them they were pressing my breast and tummy and laughing at me. They kept calling each other and passing on comments without helping me. I think I spent about three months without going for scale".*

Monica tried to access services from the Tariro youth center in Hopley, but she was referred to Harare Hospital where she had had a bad experience. Her mother looked for a nurse who could help her and that's when Monica started accessing antenatal care. Monica had never been tested for HIV before the rape encounter. She tested HIV negative when she was referred for health checkup. She doesn't know the HIV status of the father of her baby.

Monica has plans to re-enroll in school once she has a good person to look after her baby. She has received donations from the Family Support project (baby's clothes and counselling).

Monica stated that life was difficult now that she has the baby, and she sometimes struggles to get soap and other requirements for her baby.

> *"I never lacked anything when I was pregnant. Now life is difficult the goods that we sell are not being bought, sometimes I fail to get soap to do the baby's laundry, sometimes it's difficult and I ask myself a lot of questions to say what sin I have committed to end up in this situation but then again, I am grateful that at least I have a roof over my head".*

Through the Musasa project Monica was linked to an economic empowerment project where she received sewing machine which she shares with a group of other adolescent girls. She now survives of selling some of her products.

> *"I have learnt to sew through the Vel project, so I am sewing, skirts, pants, school uniforms, shirts, and shorts. They taught us to sew and gave us sewing machines. A group of us got the machine and we take turns to use the machine. Right now, someone has it; I'm going to ask for it as well so that I keep it for a while".*

CASE STUDY 3

Tendai is an 18-year-old- non orphan and was raised in a polygamous family in Rushinga district. Her parents are ardent members of the Johanne Marange Apostolic church.

Photo credit: Zivai Mupambirey/CeSHHAR Zimbabwe

Tendai's elder sisters never went beyond primary education and were married off when they were around 14 years old as per their church teachings and practices. Her elder sisters were married off as fifth or sixth wives to old men during the church's annual Passover festivals in which marriage ceremonies takes place. Tendai's father is one of the prophets and accorded

much respect by other church members. Tendai dropped out of school after completing primary level education. Tendai's father strongly believes that girls should not be sent to school as they will be married off.

Tendai eloped at the age of 15 years with her 19 year old boyfriend after running away from an arranged marriage. She has been married for 3 years. Tendai's father wanted to marry her off to a 39 year old man with a mental health challenge but who comes from a wealthy family. She ran away from home when the lobola negotiations were ongoing. Initially Tendai wanted to run away to Harare and look for job as a house maid, but she did not have any money. Her boyfriend also did not have any money to fund her trip to Harare. Her boyfriend promised to look for work to raise bus fare to Harare. Tendai's boyfriend planned for her to be accommodated at his neighbor's house while he raised the bus fare. The boyfriend took longer to raise the bus fare and the neighbor could no longer afford to accommodate her. Tendai moved in to temporarily stay with her boyfriend's aunt.

After failing to raise the bus fare, Tendai and her boyfriend agreed that they were going to stay together while Tendai was looking for a job. Tendai accepted the arrangement since she had no option. She didn't want to go back home and be sent off to her in laws, and she also didn't have anyone to fund her trip or look after her in Harare while she looked for a job. After staying at his boyfriend's house for a week her boyfriend started asking for sexual favors.

> *"When I moved in with him, we stayed for a week and he started asked for sex, at first I refused but he persisted that I ended up sleeping with him... no I was not using any contraception and that's when everything changed and he said that since you are now my wife, I can look after you and there is no need to go and look for a job".*

Tendai was not ready for marriage, but her situation forced her into an early marriage.

> *"I can say I ended up staying with him because didn't have a choice. I was not ready for marriage and at first, I thought we were going to raise the money I needed to go to Harare. I was very confused with the whole marriage thing especially when he started saying you are now my wife, I thought he was just joking and that he was still going to give me the money, but he changed and said there was no need for me to look for work. I was not ready for marriage, but I knew if I went home my father was going to send me off to that other man because they had accepted the lobola".*

Tendai's parents looked for her and even made a police report, but they were later informed by other community members that she was staying with her boyfriend. Tendai's father attempted on several occasions to take her from her boyfriend, but it was futile. When his father realized that Tendai was adamant he was very angry and blocked all communication with her. Tendai stayed with her boyfriend for eight months before the lobola negotiations were initiated. At first her father declined lobola negotiations with her boyfriend's family arguing that she was already married.

> *"My father came several times to take me home, but I refused. He sent my mother, and I and I told her that I was never going to stay with a mentally challenged man and that I was not coming home and that I didn't care what they were going to do with their person. My parents were angry that I was refusing to get married to a person who had money going to a person whose family had nothing".*

Tendai currently has two sons and is planning to have a third child after weaning. She is on contraception. Tendai first tested for HIV during her first pregnancy, and she is negative. She has good relationship with her in laws but is still not on talking terms with her father. Although her father accepted the lobola, he is still angry with her for marrying into a poor family. Her father doesn't know her sons and he has made it clear that they are not welcome in his home. She talks to her mother who keeps on assuring her that her father would come around but needs time.

> *"I talk to my mother, and I visit here and there when my father is not around, but the challenge is my father – he still doesn't want to see me or my children". I think he is still angry with me, and I am not sure when he will be able to forgive me. I was angry with him the first days because he made me run away from home, but I have since forgiven him".*

Although Tendai claims to be happy in her marriage her only regret was agreeing to stay with her boyfriend instead of looking for a job. She had hoped to marry around 25 years after working and buying clothes for herself. Tendai had no plans of going back to school as she feels that she now has a duty to meet her expected roles as a wife and mother. Her wishes are to be able to work hard and be able to send her sons to school and to reconcile with her father.

CASE STUDY 4

Portia is a 16 year old paternal orphan staying with her husband. Her husband is currently out of employment, and they are both being looked after by her in laws.

During data collection Portia was pregnant at 32 weeks gestation age. Before marriage Portia stayed with her mother and two young brothers. She is the third child in a family of 5 (3 girls, 2 boys). Her two elder sisters are married and staying with their husbands. She dropped out of school in form 2 as her mother could no longer afford her school fees and stationery. Her mother had no reliable source of income and survived on piece jobs. Her young brothers also ended up dropping out of school to look for work. One dropped out in form 3 and the other one failed to register for the ordinary level examinations.

Portia's relationship with her now husband started when she was in form 1 of her secondary education. Her mother and some of her paternal relatives were in support of the relationship. Her boyfriend would sometimes help with school fees and other requirements.

> *"I started going out with him when I was in form 1 and I was happy with the relationship because he is a good person and all the people, I inquired from confirmed that he was a good person... he was also very supportive as he would sometimes buy me books, pencils and even food. He would even pay schools fees".*

Responding to the question why she dropped out of school Portia felt that she was becoming a burden to her mother.

> *"I did not have enough things and I saw that I was making life difficult for my mother by going to school. Then I had someone who loved me and was able to take care of me. I just told myself that let me just agree and be with him".*

Photo credit: Zivai Mupambireyi/CeSHHAR Zimbabwe

Interviewer: "Why do you say you were making life difficult for your mother, is it something she told you?" Portia: "My mother never said anything, but I could see it. Just seeing the way, we were living, going for piece jobs so that all three of us could go to school. I was going to school, but I did not have books and other resources needed at school. My brothers were also struggling. She was struggling to get food and then raise fees for me and my brothers so I said maybe if I get married, I could help my mother look after my young brothers."

Poverty at home pushed her into an early marriage. Portia opted to marry her boyfriend so that she could help look after her young brothers. Portia started staying with her husband after all the lobola negotiations and traditional marriage rites were performed. Both families were happy with the marriage despite that she was underage.

"I started sleeping with him when I came here, so when I came here, I had to stay for three weeks at his brother's place as his father was away so they could not take me in without his father. I then started staying with him as husband and wife when her parents took me here, and that's when I became pregnant".

She was very happy when she discovered that she was pregnant and was content with the preparations that at the time of interviews she had almost everything she needed for the newborn.

"I was very happy when I got pregnant because I really wanted to have a baby. I had witnessed people getting divorced because they failed to conceive, so when I got pregnant, I was happy that at least I will get to stay with my husband and that I was not barren".

When asked whether she was facing any challenges with her pregnancy Portia mentioned that she did not want people in her village to know that she was pregnant as they had tried to interfere with her marriage. She thinks that her jealous neighbors had reported her to the case care workers. When the case care worker visited to find out about the marriage Portia denied being married and lied that she was working to raise her school fees and was resuming school the following year. By the time of data collection, she was very secretive about her pregnancy. During the interviews she first denied that she was married and pregnant but later opened up and shared her experiences as her pregnancy is now showing and is difficult to hide.

In addition to having to hide her pregnancy from other people, Portia was also having a difficult pregnancy. She experienced severe nausea and back pain that she could hardly perform some household chores. She registered her pregnancy during the first month mostly because of the health challenges. She had been to the clinic several times and was only given painkillers. She had several tests and almost all were negative. At four months she nearly had a miscarriage and ended up being admitted at the district hospital for a week. Portia and her husband tested HIV negative at ANC registration and was due to be tested at her next ANC visit.

Since her marriage Portia had not been able to help her mother as she had initially thought. Her husband was out of employment and could not buy food or assist with school fees. Despite things not turning out the way she expected it Portia was very grateful to her husband and content with her living conditions that she no longer had to work for food or worry about not having food at home. Portia had no intentions of going back to school as she was now married and had to look after her husband and in laws. Portia had no regrets of marrying young and very appreciative of the care and support she was receiving from her husband and his parents.

CASE STUDY 5

Panashe is a 16 year old mother of two from Chiredzi district. Panashe is a paternal orphan and the first child in a family of four.

Her father died when she was in grade 7. When she started secondary school, she was enrolled in the CAMFED program. Her mother got a job in the town nearby and she relocated to stay close to her workplace leaving Panashe on her own. Panashe remained as she was on a scholarship, and they didn't want to risk losing the scholarship. She started staying on her own when she was 12 years old. When she was 13 years of age, she moved in to stay with her uncle. Her uncle's wife was not happy with Panashe staying with them and she always passed negative comments about her that she was lazy, dull in school and was mischievous. She stayed with her uncle for one year and when she was 14 years old her uncle's wife reported that she was having boyfriends and that she should be sent back to her mother, but the uncle insisted that Panashe should stay until she finishes her secondary education. One day her uncle found her talking to her boyfriend and he sent her away.

"It was after a sport day at school, and I was talking to my boyfriend, and my uncle came and asked who he was. I told him that he was my friend and he insisted that because we were holding hands, I should just go with him. He said, 'don't come back home', that's how he chased me away from home and I ended up going to him".

Panashe had no option but to go with her boyfriend who was working in the sugarcane plantation and that was when she had her first sexual encounter and eventually got pregnant. After staying with her boyfriend for two months she awoke one day and realized that her husband had gone back to his family in Harare. Panashe narrated her desertion experience with so much sadness. She confessed that life was difficult.

"When I was pregnant that is when I regretted that I should have never done it. I was now suffering alone. I had cravings, I wanted fruits and boiled eggs, but I could not tell my mother that. Sometimes the food that was available would make me vomit and I would go hungry and could not ask my mother to cook something else. Life was very difficult for me, when I gave birth at the hospital, I didn't have enough sanitary pads. I had bought a small packet of cotton, but it was not enough. I was given pads by another patient at the hospital".

Panashe later found out that her partner was only posted in that area to cover up for someone who was on leave, but he was based in Harare and was married. At the time Panashe did not realize that she was pregnant and since she could not afford to pay the rentals and food she went to stay with her mother. She later with the help of her partner's workmates managed to get his contact details. Panashe's mother contacted him, and he refused responsibilities citing that Panashe had other boyfriends. Panashe's mother threatened to report him to his superiors, and that is when he agreed to a USD20 monthly allowance for child support. Panashe tested positive during ANC registration and is currently on ART. Panashe kept her HIV status a secret until one day when her mother stumbled upon her child's baby card. She didn't know how to disclose to her mother and was afraid of her mother's reaction.

At the time of data collection Panashe's daughter was 1 year 9 months of age. When Panashe turned 16, she got pregnant again this time to a man from her village and married him as his second wife. Although Panashe was not ready for marriage she eloped out of fear. She feared that her uncle was going to kill her for having a second pregnancy at home. She was concerned that her first child was too young and still needed attention and care.

At the time of data collection Panashe was 6 months pregnant and had not register her pregnancy. She could not raise the

ANC registration fees and was waiting for her husband to raise the money. She was planning to register her pregnancy as soon as she got the money.

> *"No, I have not registered I am waiting for the father of the baby to give the money to go and register at the clinic. I also don't have the maternity wear so I know the nurse will scold me for wearing tight clothes".*

Panashe had no intentions to go back to school as she is now expecting her second child and must look after her first child.

> *"I am not looking forward to going back to school but if I can get money maybe I can start a business or sell something. I have no one to look after my children and I cannot trust my co-wife enough to leave her with my child".*

Panashe has several regrets in her life. Firstly, she regrets falling for peer pressure from her friends which led her to have her first boyfriend. She regrets dating at a young age and having unprotected sex. Her friends continued with school while she unfortunately got pregnant and infected with HIV when she was born HIV negative.

> *"I regret being influenced by others to have a boyfriend. I regret that I shouldn't have dropped out of school; at least if I had continued with school, it could have been better. All my friends are still at school and now very soon I will be having two children and I am now HIV positive. I can only imagine if I had only focused on my school, I will still be at school now as CAMFED was paying for my school fees. If I knew that he was lying from the start I should have left him".*

Lastly, she regrets repeating the same mistake of falling for older men. After her first child Panashe acknowledged that she became vulnerable to older men in her community and because she was not on family planning, she ended up pregnant for the second time in less than three years.

> *"Men will start seeing you as a cheap person. They will be coming to you and wanting to sleep with you. If they know that you do not have a husband, they will start seeing you as an easy target and if you are not careful you get pregnant again like I did".*

CASE STUDY 6

Photo credit: Concilia Mutasa/CeSHHAR Zimbabwe

Maidei is an 18 year old adolescent mother who stays with her biological parents in Makonde district.

She dropped out of school when she was about to write her ordinary level exams because she was pregnant.

Maidei had her first boyfriend when she was 16 years and doing her form 2 secondary education. Her boyfriend was 20 years old when they started dating. Her partner used to stay with his uncle in the neighborhood. They dated for 3 months when they started having sex. Maidei used to sneak in her boyfriend at night when her parents had gone to bed, despite the fact that she was sharing the bedroom with her two young brothers. Her first sexual encounter was consensual, and she is the one who invited her boyfriend home.

Since their first sexual encounter the boyfriend would regularly come in every night. The boyfriend ran away when he realized that Maidei was pregnant. Maidei doesn't know the whereabouts of her partner to this day. Her daughter was 6 months old at the time of the interview. Maidei hid her pregnancy for 6 months and continued to go to school until she was almost due. She would tie her stomach with headscarves. Her maternal grandmother is the one who discovered her pregnancy when she was almost due. Her parents chased her away from home out of anger and she had to stay with her maternal grandmother until she gave birth. Maidei came back home after delivery as the grandmother could no longer afford to look after her and her baby. Her father wanted her to go to her partner's family, but the partner ran away. Her partner's uncle could not take her in since they were not sure that their nephew was responsible for the pregnancy. They accused Maidei of having several boyfriends. Maidei does not want to go back to school.

"Ah I don't want to go back to school because before I got pregnant, I was struggling with school, and I don't think if I go back I would produce anything. It will just be a waste of my parent's money. Moreover, I don't think my parents would be prepared to pay school fees because they still shout at me for wasting their money".

After weaning Maidei wants to look for employment as a housemaid and support her daughter. She is not sure if her parents would allow her to leave her daughter or to even go to work.

"My father keeps shouting at me saying that by the time you reach 40 you will be having a trailer of children. He shouts at me almost every day".

CASE STUDY 7

Stella is a 14 year old girl whose parents divorced when she was below five years. His father relocated to South Africa, and she last saw him when she was seven years old.

After the divorce she stayed with her mother in Highfields. Her mother was a sex worker. When she was ten years her mother dropped her at her friend's house and that was the last time, she saw her. Stella has never been to school and is illiterate. Stella does not know any of her paternal or maternal relatives and she does not have any friends.

> *"Ah my mum did not show me anyone, she just told me that she also didn't know her mother. So, before she went away we used to stay the two of us. I don't have any friends and I can't even play with others. I grew up playing by myself in the house, my mother would sometime leave me alone for days and we also used to relocate a lot because we were not staying at our own house, so I never made any friends".*

Stella stayed with her mother's friend until she became pregnant. Stella was sexually abused by a 25 year old man who they co-shared the house with.

> *"At house I would also stay alone most of the times as my mother's friend was someone who liked to have fun and would go where she pleases without even telling me. At the house there was a boy who came into the house one night a rapped me. I told her and she did not believe me she said, 'it's someone we have stayed with for a long time, and we know he would not do anything like that'. She said I wanted to ruin their relationship and she ignored it. So, from that time the boy kept coming every time she was away, and he would sleep with me even during the day until got pregnant".*

When her mother's friend realized that she was pregnant, she chased her away from home. Stella went to the police who later took her to the Department of Social welfare. Her mother's friend and the men who sexually abused her relocated and the police could not locate them at the time. She also found out from Social Welfare that her mother was incarcerated when they tried to track her down. Stella stayed at the police station for six days while Social Welfare was looking for a place for her. She was later moved to Chitungwiza where she is currently staying with a foster parent. She is 7 months pregnant and has been attending ANC. She was tested for HIV and syphilis, and she tested negative.

Stella stated that her foster mother takes good care of her, and her only challenge is walking to the maternity clinic for her ANC checkup.

> *"The clinic is far, and I must walk to the clinic I feel tired or sometimes I feel pains when I walk, and another issue is I leave home without eating. Those are some of the things that makes it unbearable... Some of the food is given by the government and some of it comes from when we are vending. All six of us (foster children) have vending stalls and the money goes to our mother [foster parent].*

Stella requires assistance with baby clothes and utensils to use when the baby arrives. She currently doesn't have anything, and her foster parent advised her to wait for social welfare.

> *"I don't know what will happen, but mother said we should just wait for people from social welfare. Hmmm I need help with a lot of things, baby stuff, where the baby will take a bath, baby blankets. We need a lot of things, for instance the home we are living in, isn't it that everybody needs entertainment. Our house does not have a TV, it doesn't even have phones or anything. Previously at our home where I used to live, isn't it you heard me saying I don't have friends I would spend my time on the TV and from there I would sleep and that was it. But here because of lack of those things that is when you keep thinking about a lot of things because you have nothing better to do. If you are not vending, you are doing work at home."*

Photo credit: Concilia Mutasa/CeSHHAR Zimbabwe

Profiles of adolescents' sexual partners

Interviews with a subset of pregnant and adolescent mothers highlighted that their sexual partners were either their schoolmates or unemployed young men who roam around the villages preying on schoolgirls in their communities. Very few reported that they got impregnated by married men working in their communities.

> *"I later knew it when I was pregnant, when he was refusing to take me in that he was married and that he was lying to me that he would go with me. He lied to me about his age, but I later found out that he was 27 years old, but he would say that he was 22 years old" (16 year old adolescent mother, IDI, Bindura district).*

Most of the partners had incomplete ordinary level passes and were unemployed and being looked after by their parents or close relatives. Interviews highlighted that most of the partners coerced these adolescents into having sex, promising to marry or look after them.

> *"We only dated for a short period of time. I can say three months. After 3 months that is when he started saying he wants to know if the person he was going to marry can conceive and he said that he was going to marry only if he is assured that the person can conceive, and I fell for it and was confident that he was going to marry me. So, I took it lightly, thinking he meant it and that since he was staying in our area that was no way he was going to leave me" (18 year old adolescent mother, IDI, Zaka district).*

We explored provision of social, emotional, and financial support from the person responsible for the pregnancy or baby. Overall, 73% (248) adolescents aged between 10 and 19 reported that they received a form of support from the person responsible for the baby or pregnancy. There was no statistical difference in receiving support by age group. Out of the 248 who received support, 74.1% (188) received social support, 76.6% (203) received emotional support and 95.6% (237) received financial support (Table 39).

Table 39: Support from person responsible for the pregnancy or baby

	10 – 14 Years		**15 – 19 Years**		**10 – 19 Years**		**P Values**
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Have received any form of support from the person responsible for the baby or pregnancy							
No	2	49.3(10.8 – 88.7)	87	26.5(20.1 – 34.0)	89	26.8(20.8 – 33.8)	0.361
Yes	2	50.7(11.3 – 89.2)	246	73.6(66.0 – 79.9)	248	73.2(66.2 – 79.2)	
Social support							
No	2	100	58	25.2(15.6 - 38.0)	60	25.9(16.3 - 38.5)	0.028
Yes	0	0	188	74.9(62.0 - 84.4)	188	74.1(61.5 - 83.7)	
Emotional support							
No	2	100	43	22.6(12.6 - 37.2)	45	23.4(13.4 - 37.7)	0.025
Yes	0	0	203	77.4(62.8 - 87.4)	203	76.6(62.3 - 86.6)	
Financial support							
No	0	0	11	4.5(2.0 - 10.0)	11	4.4(1.9 - 9.9)	0.781
Yes	2	100	235	95.5(90.0 - 98.1)	237	95.6(90.1 - 98.1)	

Most adolescents reported that their relationship ended when their partner discovered that they were pregnant. Very few had partners who are supporting their children as the majority denied responsibilities. One adolescent mother stated that.

> *"Things didn't go down well with me, my boyfriend is now too slippery, he is no longer clear, yet he had promised to take care of me during this period. He is no longer supporting me as he used to do in the beginning, and he is avoiding me. Sometimes he does not answer my calls or visit like he used to ever since I told him that I was pregnant." (17 year old pregnant adolescent, IDI, Makokoba district).*

> *"The father of the baby refused to take part in supporting me and the baby, yet he knows that it's his baby and things are difficult and not going well for me". (16 year old pregnant adolescent, IDI, Nkayi district).*

Responses of parents, relatives and friends

Parents stated that they were angry and disappointed when they learnt about the adolescent.
pregnancies.

> *"I was so disappointed because it happened [got pregnant] when she was 14 years old, I was busy with secondary school preparations, I had bought the counter books, uniforms and almost everything and was now trying to raise the school fees and after all the sacrifices I discovered that she was pregnant.' (46 year old parent of adolescent mother, IDI, Hurungwe district).*

> *"Haa my grandma was furious, she could not believe it and wondered how I got pregnant. She went on to tell grandpa then grandpa came and asked me, and he was also very angry. I just kept quiet, and then they went and called some woman to come and ask me, she asked about the pregnancy, and I admitted, and they just asked me what I was going to do since I was still a school child, then with time, they were okay." (18 year old pregnant adolescent, IDI, Umuguza district).*

Parents' reaction included chasing adolescents away from home and cutting all communication.

> *"My father stopped talking to me from the time he was told about my pregnancy. Even if I greet him in the morning he does not respond. I guess he was very hurt and is still angry with me because he had just paid my ordinary level examination fees and he kept saying 'why did I waste my money, why did you not tell me that you had other plans'." (18 year old, adolescent mother, IDI, Makonde district).*

Adolescents also stated that pregnancy strained their relationships with their immediate and extended family members.

> *"Yes, it affected my relationship with my siblings at home. My siblings could not understand how I got pregnant when I was still young and at school, and they were angry, and they would shout at me whenever they called. Two of my brothers still do not talk to me to this day; they insisted that I should be sent to my boyfriend's family even though the family denied responsibility." (16 year old adolescent mother, IDI, Masvingo district).*

> *"My auntie shouted at me when my mother told her about the pregnancy. She was saying I was putting the family name into disrepute and that I was supposed to follow my sister's footsteps who get married the proper way and had a white wedding." (19-year-old adolescent mother, IDI, Nkayi district).*

Relationship with teachers

Adolescents also talked about strained relationships with teachers as well. Some stated that their teachers were disappointed as they had high expectation of them while some teachers felt that the adolescents were not being grateful of the scholarship opportunities.

"My teachers were angry that I was leaving school while I was under CAMFED, yah so they did not understand. They were saying I have should have been grateful for the opportunity to be on the CAMFED scholarship instead of wasting an opportunity that could have benefited someone more serious." (16 year old adolescent mother, IDI, Chiredzi district).

For some adolescents being pregnant disrupted their friendships as their friends were prohibited from interacting with them. They were now considered to be deviants, so they were socially excluded by their friends.

"As for my age mates they no longer want to play with me even if I greet them some don't respond. I don't know maybe it's because I have a baby or was impregnated that they fear I might badly influence them." (15 year old adolescent mother, IDI, Hopley district).

Social exclusion of pregnant adolescents came out strongly in almost all the interviews with pregnant and adolescent mothers. The stated that they are usually discriminated against and looked down upon, with even their parents also looked down upon for failing to properly raise their daughters.

Linkage of pregnant and adolescent mothers to health and social protection services

Interviews highlighted that pregnant and adolescent mothers are linked to both health and social services whenever cases are identified and referred in real time. Once case care workers who are the watchdogs identify pregnant and married adolescents, they refer them to Social Development Officers who then investigate and facilitate children's access to related services. Counselling and rehabilitation, educational subsidies, food, and free medical assistance if pregnant adolescents require medical attention which may not be offered at the local health facilities were some of the social services mentioned. Interviewed key stakeholder discussed some of the social protection services available to adolescents.

"As a department we have got the BEAM program. We have said that schools are a safe space, so we have got the BEAM program which helps to retain children who are not going to school or back to school. After assessments we pay fees for those that have faced challenges in payments of fees so that they do not drop out and become idle and more vulnerable to say adolescent pregnancy." (39-year-old key stakeholder, KII, Sanyati district).

In cases of sexual abuse, adolescents were referred for Post Exposure Prophylaxis, post abortion care and justice. In extreme cases children are also taken to safe places to protect them from further harm. One mother confirmed receiving social assistance to access antenatal care services at the City of Harare health facility.

"So, my mother could not raise the USD25 that was needed at the clinic. We went to Tariro clinic, and they told us to go to the police when we got there, we explained our case, that I first eloped and then came back home but am now pregnant and we now don't know how to go about the antenatal care visit. The police then wrote us a letter and we took it to Social welfare, and we saw the person who is in charge of rape cases there. She was the first one we talked to and then she was the one who enabled us to get a voucher that is how I was able to get my first antenatal checkup." (14 year old adolescent mother, IDI, Hopley district).

Interviewed key stakeholders confirmed that they have adopted a multi-sectoral approach in handling pregnant adolescents at all levels.

"If an adolescent is pregnant, we use a case management approach together with other stakeholders. We first open a file and conduct a needs assessment and establish the caregiving arrangements. Then we refer her to the hospital so that she gets medical assistance and at the same time we refer her to the Victim Friendly Unit (VFU) of ZRP to open a case especially if it is a rape case, so that a child can get justice. Then if she is supposed to be at school, we refer her to the Ministry of Education so that if she was going to school, she can resume where she was learning, if she wants to go back to school." (33 year old key stakeholder, Sanyati district).

"Like I said, we work with other departments as my department cannot give the pregnant adolescent services on its own because we are not in charge of some of the services. So, we refer her to the relevant departments, and we have monthly meeting where we follow up or catch up on reported cases." (46 year old key stakeholder, Chegutu district).

In addition to linkage to social assistance from the government departments, vulnerable pregnant adolescents were also linked to economic empowerment services, safe shelters and rehabilitation services provided by NGOs. In Nkayi district, stakeholders talked about the Bantwana Zimbabwe project which was conducting support groups for vulnerable pregnant adolescents and helping them with income generating projects.

"They will be teaching us about how to protect ourselves as women and how we should handle ourselves as single mothers so that we do not get pregnant again. They also help us to start group projects. For example, during Covid 19 our group used to make detergent and hand sanitizers." (19 year old adolescent mother, IDI, Nkayi district).

In Mbire district the Katswe Sisterhood project trained vulnerable pregnant and adolescent mothers in value addition, and they started making Masawu jam, petroleum jelly and liquid soap. Women also started sewing clubs and sew tablecloths, napkins, and masks. Interviewed adolescents confirmed that the livelihoods project was transforming the lives of young women in Mbire district.

"After the training we received a sewing machine and during the Covid19 pandemic we started sewing masks, petticoats, and garments for Apostolic churches. Our club is now receiving big orders say for $300 (USD). For example, recently we received an order from Africa and Wildlife Development of napkins and tablecloths. Some were given goats and they are now into goat rearing." (18 year old pregnant adolescent, IDI, Mbire district).

In Hopley, Epworth and Chitungwiza districts, adolescents also talked about the Vel project – an economic empowerment project targeting vulnerable pregnant and adolescent mothers assisting them to start income generating projects such as sewing clubs. Adolescents were given either sewing machines, peanut butter or candle making machines in groups of ten. An interviewed key stakeholder also talked about the various programs going on in different communities.

"In these projects they are taught to be self-sustaining, taught different projects, and they are equipped with a different entrepreneurial mind-set that helps them to be proactive about their situation and learn survival skills so that they can look after themselves and their children." (37 year old key stakeholder, KII, Sanyati district).

Barriers in uptake of social services

Although there are platforms to link pregnant and adolescent mothers to social protection services, uptake of such services has been limited. Barriers were noted from both the beneficiaries and the service providers. From the beneficiaries, pregnant and adolescent mothers and their parents were cited as failing to cooperate with service providers. Families were noted to be hiding information and pregnant girls, lying about their ages and parents consenting to have their adolescents married making it difficult for case care workers to refer the cases. Another barrier was that most vulnerable adolescents were not aware of the social protection services or do not have the means to access the services. Examples cited included forced marriages that most of the adolescents are not empowered enough to know their rights and to know where to turn to if they want to be rescued from such marriages.

"In our district adolescents are accessing the services, you would not see them coming to enquire about the services that the Department offers, so I don't know if its lack of knowledge of they are just not bothered." (44 year old key stakeholder, KII, Zaka district.

From the service providers, limited financial resources at community and district levels were also cited as affecting timeous follow up of identified cases. Limited resources also impacted on coverage, availability and access to services resulting in some deserving

cases failing to access the services. An example cited was the lack of designated vehicles and fuel shortages at district level which was School re-entry policy

We looked at adolescent girls' knowledge of the provision to continue with school during or after pregnancy. Overall, 59% (832) of the adolescents were aware of the provision to remain in formal school. Most adolescent girls 66.9% (982) and 77.9% (1166) either agree or strongly agree that pregnant adolescents should be given an opportunity to remain in school during or after pregnancy respectively. Seventy-four percent (1098) either agree or strongly agree that allowing girls to continue with school is a necessary initiative. It is worth noting that there was a statistical difference in perceptions of adolescents on school re-entry policy with age group in all aspects ($p < 0.05$).

Table 40: School re-entry policy awareness

	10 – 14 Years		15 – 19 Years		10 – 19 Years		P Value
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Are you aware of a provision/law to go either remain in school or to be readmitted after delivery?							
No	340	62.4(55.5 - 68.9)	246	27.5(22.4 - 33.4)	586	41.5(36.1 - 47.1)	< 0.001
Yes	227	37.6(31.1 - 44.5)	605	72.5(66.7 - 77.7)	832	58.5(52.9 - 63.9)	
Girls who fall pregnant should be given an opportunity to go back to school during pregnancy?							
Strongly agree	122	19.7(14.8 - 25.7)	281	30.4(26.1 - 35.0)	403	26.1(22.9 - 29.6)	< 0.001
Agree	196	34.2(28.6 - 40.3)	383	45.2(41.5 - 48.9)	579	40.8(37.9 - 43.7)	
Neither Agree nor Disagree	27	6.1(3.4 - 10.5)	17	2.7(1.7 - 4.2)	44	4.0(2.9 - 5.6)	
Disagree	153	28.0(23.3 - 33.2)	122	15.3(12.6 - 18.5)	275	20.4(17.5 - 23.6)	
Strongly disagree	69	12.1(9.1 - 15.9)	48	6.5(4.1 - 10.1)	117	8.7(6.5 - 11.5)	
Girls who fall pregnant should be given an opportunity to go back to school after delivery of the baby							
Strongly agree	163	25.6(20.8 - 31.1)	352	37.9(32.5 - 43.5)	515	33.0(29.4 - 36.7)	< 0.001
Agree	234	39.7(34.9 - 44.6)	417	48.4(42.2 - 54.7)	651	44.9(40.4 - 49.5)	
Neither Agree nor Disagree	18	4.4(2.0 - 9.6)	14	2.4(1.4 - 4.0)	32	3.2(2.2 - 4.7)	
Disagree	103	20.2(15.7 - 25.6)	49	7.6(5.6 - 10.3)	152	12.7(10.2 - 15.7)	
Strongly disagree	49	10.0(7.1 - 13.9)	19	3.8(2.0 - 6.8)	68	6.3(4.1 - 9.4)	
The law in Zimbabwe allows pregnant adolescents to go to school during pregnancy and after deliver do you think it's a necessary initiative							
Strongly agree	160	26.8(21.7 - 32.6)	382	44.3(38.9 - 49.9)	542	37.3(33.6 - 41.2)	0.001
Agree	211	36.0(31.1 - 41.2)	345	37.7(31.4 - 44.5)	556	37.0(32.6 - 41.7)	
Neither Agree nor Disagree	37	8.4(3.5 - 18.6)	41	5.4(3.5 - 8.3)	78	6.6(4.6 - 9.3)	
Disagree	112	21.0(16.3 - 26.7)	60	8.5(6.3 - 11.2)	172	13.5(10.9 - 16.6)	
Strongly disagree	47	7.9(5.0 - 12.1)	23	4.1(2.3 - 7.0)	70	5.6(3.8 - 8.1)	

We also explored knowledge of the school reintegration policy among service providers, and most were aware of the policy and its provisions and implementation. Schools have been readmitting pregnant or adolescent mothers.

> *"Yes, they are coming back to school. We have a few that have come back to different schools where they were learning, whilst some simply go to the next school after delivery." (62 year old key stakeholder, Hurungwe district).*

> *"They come back. If the uniform is too small, I talk to the parent to say let's look for the uniform, we get it sewn at our department, just come with the material. We get it sewn so she can have a uniform that fits her." (53 year old key stakeholder, Umguza district)*

Despite public awareness of the school re-entry policy only 7% (19/337) of the adolescents who are or have been pregnant are in school. Of the7 % who are in school only 2% (8) remained in school during pregnancy and 11 rejoined after delivery. 55% (179) reported intending to go back to school when their babies are old enough to be left with childminders. Of the adolescents that dropped out of school only 49% were socially, emotionally, and financially prepared to go back to school, 50% were not prepared at all and 1% were not willing to go back to school. Thirty percent (33) of the adolescent girls wanted to go back to same school mainstream, 25% (48) wanted a new school mainstream, 35% wanted to go to a new school non- formal, 7% wanted to go to a same school non-formal and 2% preferred other options.

Table 41: Re-entry in schools

	10 – 14 Years		15 – 19 Years		10 – 19 Years		P Value
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	
Did you return to school after delivery							
No	3	75.8(22.6 - 97.1)	315	93.5(83.5 - 97.6)	318	93.2(83.5 - 97.4)	0.023
Yes	0	0	11	4.8(1.4 - 14.8)	11	4.7 (1.4 - 14.6)	
I never stopped going to school	1	24.2(2.9 - 77.4)	7	1.8(0.6 - 5.5)	8	2.1(0.7 - 6.2)	
Do you intend to go back to school?							
No	0	0	139	45.6(37.8 - 53.7)	139	45.1(37.4 - 53.0)	0.122
Yes	3	100	176	54.4(46.3 - 62.2)	179	55.0(47.0 - 62.60	
How prepared are/ were you to go back to school?							
Fully prepared (emotionally and financially)	2	77.0(21.4 - 97.6)	91	48.2(38.1 - 58.4)	93	48.8(38.8 - 58.8)	0.002
Not prepared at all	0	0	93	51.0(40.9 - 61.0)	93	50.0(40.2 - 59.8)	
Not willing	1	23.0(2.4 - 78.6)	3	0.8(0.2 - 2.8)	4	1.3(0.5 - 3.3)	
If you are to go back to school what is your preferences in terms of the school							
Same school mainstream	0	0	33	30.2(15.7 - 50.1)	33	29.5(15.2 - 49.4)	0.290
Same school non formal	0	0	16	7.6(3.8 - 14.6)	16	7.4(3.7 - 14.3)	
New school mainstream	3	100	45	23.7(17.2 - 31.8)	48	25.4(18.5 - 33.8)	
New school non formal	0	0	77	36.2(25.5 - 48.4)	77	35.4(25.1 - 47.2)	
Other options	0	0	5	2.3(0.9 - 6.2)	5	2.3(0.8 - 6.1)	
You are now in school right; can you please tell me which of the following							
Same school mainstream	0	0	9	93.8(43.8 - 99.7)	9	93.8(43.8 - 99.7)	N/A
New school mainstream	0	0	1	0.7(0.0 - 14.5)	1	0.7(0.0 - 14.5)	
New school non formal	0	0	1	5.5(0.2 - 58.50	1	5.5(0.2 - 58.50	
How did you feel about going back to school?							
Happy	0	0	9	70.1(29.3 - 93.0)	9	70.1(29.3 - 93.0)	N/A
Somewhat happy	0	0	2	29.9 (7.0 - 70.7)	2	29.9(7.0 - 70.7)	

Among the adolescents that were fully integrated back into school after dropping out, 9 went back to the same formal schools they were before pregnancy, and 1 went to a new school mainstream while 1 went back to new non formal schools. Of these 9 were happy to go back to school and 2 were somewhat happy. Interview with adolescents who went back to the same formal schools revealed limited options as the main reasons why they went back to the same school. Given an option adolescents stated that they would have preferred to go to new formal or new non-formal school to avoid stigma and discrimination.

We qualitatively explored reasons for not intending to go back to school, and childcare responsibilities, financial challenges and stigma and discrimination came out strongly as barriers to re-entry in schools among pregnant and adolescent mothers. Adolescents

stated that they now have caring responsibilities at home which was at odds with the need to go back to school.

> *"I'm a now failing to go back to school, even if I say I want to go back to school, but the person who was taking care of the baby was so reckless you would find pampers and baby's clothes all over. Sometimes you would find the person on WhatsApp while the baby is crying. These days my baby is refusing people for fear of being left alone. I asked my mother if I could stop going to school and take care of the baby and then go back to school when the baby is a bit older. It's not easy to leave your baby with people. The fact that the person would be on WhatsApp while the child cries is what bothers me." (15 year old adolescent mother, IDI, Hopley district).*

> *"Even if I wanted to go back to school, I have no one to take care of my baby or pay my school fees. My grandmother refused to look after my baby. She said she is too old and cannot handle babies. My mother is in South Africa and doesn't want to hear anything to do with me and my baby. She said it was my choice to become a mother so I should act like one." (17 year old adolescent mother, IDI, Mwenezi district).*

Adolescents dreaded being teased or laughed at by their peers and teachers at school. Although they had not witnessed anyone being teased, expectations of stigma prevented them from going back to school.

> *"I don't want to go back to school because I know that I will become the talk of the whole school. People will laugh at me, so I am scared to face my classmate or teachers." (16 year old adolescent mother, IDI, Masvingo district).*

FGDs with adolescent boys confirmed that stigma was an issue within schools.

> *'Then there will come a time when they tease you by the name of your child once you raise your hand to contribute in class, the other students start to mockingly clap hands saying, 'look this one she knows everything, bedroom issues and school' and the whole class will laugh at you so going back to school is difficult for most girls." (19 year old boy, FGD, Bindura district).*

> *"I don't want to lie to you my sister we do laugh at you to the extent that you will drop out of school. Imagine if someone can be teased for having a big head what more of a pregnant girl? I remember in my class the boys teasing, one boy saying his head is the first to enter the classroom and find a seat while his body is still outside. They boy transferred. It was too much for him and we heard that he is now in Bulawayo." (17 year old boy, FGD, Umuguza district).*

FGDs with parents highlighted reservations with reintegration of pregnant and adolescent mothers into formal schools. Interviewed parents felt that sending pregnant and adolescent mothers to school were a waste of scarce household resources and that their reintegration will negatively influence other adolescents to engage in risky behaviors.

> *"I know that the government is allowing them [pregnant/adolescent mothers] back in school, but I don't think it's proper for them to mix with other girls as they will influence or spoil the others to think that they can become sexually active and remain in school. So, if government wants them back, they should establish centers specifically meant for them." (57 year old male, Parent's FGD, Zaka district).*

> *"The disadvantage of allowing them back in school is that those who are left in school are seeing this one who has become pregnant today and tomorrow is back at school so they will think they can also do the same, I think it now has bad influence on those who are left in school. It's good for them to go back, but they should have their own schools or if they go back to the same school, they should have their own class." (54 year old councilor, FGD, Chitungwiza district).*

Very few parents were supported the reintegration into mainstream schools arguing that pregnant and adolescent mothers should be given a second chance.

"I do not think that it is fair to call these girls bad apples and deny them the opportunity to complete their education, yet we are not treating the boys the same. I strongly feel that they should be given a second chance and allow them chance to finish their school" (49 year old parent, Parent FGD, Chiredzi district).

Laws and policies that address child protection

The government of Zimbabwe instituted several national legal and policy frameworks to guarantee the protection, maintenance, and welfare of children. We examined some of the laws and policies to see if there were any gaps that needed to be addressed to provide holistic child protection services.

Zimbabwe Education Health Policy

The Zimbabwe school health Policy was informed by the 1999 Presidential Commission of Inquiry into Education and Training known as the Nziramasanga commission. The policy was operationalized in June 2018 as a strategic means to promote positive health determinants while preventing and mitigating health risks among learners. The policy provides guidance on the delivery of health promotion intervention including the delivery of CSE in schools. With regards to CSE, the policy approves the teaching of age-appropriate sexual and reproductive health and life skills education. In trying to align with the age-appropriate content, the delivery of CSE in primary schools have largely focused on abstinence despite the evidence showing that children are becoming sexually active as young as 11 years of age. This largely means that primary school children, regardless of being sexually active will miss out on SRHR services as the assumption is that they are not sexually active. Secondly, although the policy is functional, its implementation has been hampered by limited resources. Insufficient training, guidance and support of the teachers have been the main challenges resulting in some schools not fully implementing CSE.

"I think CSE is good but here we have not heard about it, and I am not sure when it will be Implemented." (46 year old teacher, KII, Hwange district).

"I think you are aware of the updated curriculum. Guidance and counselling is supposed to be part of the curriculum, but we don't have teachers who have been trained in colleges to take on guidance and counselling, so what has been happening is that the school heads simply look at a teacher's load and add on guidance and counselling. So that for some they can achieve their mandated load, but whether the teacher is the right fit or is passionate about it it's another thing" (62 year old key stakeholder, Hurungwe district).

School re-entry policy

The Zimbabwean government embraced the call to give access to education for highly marginalized pregnant and adolescent mothers in response to international and regional recommendations. The school re-entry policy was introduced in 1999 (MoESC Policy Circular Minute P. 35) and made legal in 2020 though the Education Act amendment section 4, subsection 2b. MoPSE actively monitor and track school re-entry through the Annual School Census (EMIS). The indicator "Readmission of girls who fell pregnant". Although the policy has been widely disseminated, there have been limited investments in making communities and mainstream schools conducive to promote re-entry. Pregnant and adolescent mothers face stigma from their peers, parents, community members and teachers. Parents also need to be continually educated on the advantages of giving adolescents a second chance and not to castigate them. Secondly, the policy focus on the adolescent mother and does not make provision for the infant, which makes it difficult for adolescents to balance their caregiving responsibilities with attending school. The current education system has no formal provision for children less than 3 years of age, especially in rural communities where most of the pregnancies are happening; making it difficult for breastfeeding mothers to access school.

Corporal punishment policy

Corporal punishment was outlawed as a disciplinary measure in schools in 2017. The policy has been received with reservations by both parents and school authorities. Parents and school authorities felt that the policy does not provide alternative disciplinary measures thereby contributing to indiscipline in schools. There is need to continually engage parents to raise awareness on the provision of the law as some parents were misinterpreting it to mean that corporal punishment is not permissible at home. Article 7 of the Children's Act [Chapter 5:06] currently under review affords parents and guardians the right to "administer reasonable punishment.

Marriage Act

In 2016, a landmark ruling outlawed child marriages in Zimbabwe and set out 18 years as the legal age of marriage. Previously girls could be married at 16 years while boys could marry at 18 years. In December 2018, the First Lady of Zimbabwe launched the National Action Plan (NAP) and Communication Strategy on Ending Child Marriage. In 2022 the President of Zimbabwe signed into law 'the Marriage Act' which prohibit the marriages of minors under the age of 18. This was in response to years of evidence-based advocacy on the need to put in place institutions, law and policies that guard against child marriages in the country. We explored knowledge on the legal age of marriage and out of the 1418 adolescent girls only 38 did not know about the legal age of marriage. Among the 1380 who knew, the median age selected was 18 years old with an interquartile range of 1 year. About 135 adolescent girls were not aware of the legal age of consent for sex, among the 1283 who knew the median age selected was 18 years with an interquartile range of 0.

Qualitative interviews highlighted some parents were still forcing their children into early marriages despite the Act clearly stating that "no person shall be compelled to marry against their will". Although the Marriage Act aligns well with section 26(1) of the Constitution to ensure that no marriage is entered into without the free and full consent of the intended spouses its enforcement has been very limited. Adherence to the policy at community level has been difficult especially among the Apostolic churches as adolescent girls continue to be victims of forced and or early marriages.

> *"In this community we continue to witness child marriages even though its illegal. In my class there is a girl that was married of at the start of grade 7, I heard she went to live with her husband. The CCWs went and took her back home, without time I heard that her parents received her bride price, so you see that the parents are the ones that force their children to get married so that they have money" (46-year-old, Teacher, Hwange district).*

The magnitude of the problems is not fully understood as many cases go unreported with some parents covering up by inflating their adolescent girls' ages, making it difficult to get accurate estimates. There is still a need for targeted information dissemination of the law in churches and hotspots of child marriages. One challenge has also been the long turnaround time taken to investigate cases reported by the case care worker. Reported cases were reported to be taking a long time to be resolved, resulting in the communities losing trust in the act and its provisions. The Domestic Violence Act works hand in hand with the marriage act as it outlaws the pledging of girls and forced child marriages.

One critical gap remains the age of consent to sex which remains at 16 years. Although the legal age of marriage has been reviewed upwards, the legal age of consent to sex has not been passed into law. On 24 May 2022, Zimbabwe's Constitutional Court ruled that the legal age of sexual consent be increased from 16 to 18 years old t it has not been signed or ratified at the courts for operationalization making it difficult to prosecute anyone having sex with children.

> *"They say that the Act is there, but it has not been signed at courts for their use. So, you will find that while we are talking of 18 years, the courts are still talking of 16 years. So even if you want to take up a case with a child who is 16, 17 or 18 years of age or even a 14 year old, if it is a case that she fell pregnant while they were in courtship the case will go nowhere. You fight for it, then you go to court but all you can end up doing is to remove the child and place them on a safe place or back*

home, but no justice will be done because they cannot use the act until the bill has been ratified in court." (44-year-old key stakeholder, KII, Zaka district).

Public Health Act

The Public Health Act (Chapter 15-17) affords all citizen and permanent resident of Zimbabwe the right to have access to basic health-care services, including reproductive healthcare services. The Act further stipulates that all children under the age of 18 years, to have the right to education, health care services, nutrition and shelter. Although such provisions are outlined in the ACT it restricts unmarried adolescents under the age of 16 years from accessing SRH services such as contraceptives and emergency family planning pills without parental consent because they are below the age of consent. Although the law prohibits sex before the age of 18, adolescents still engage in sex. Adolescents miss the opportunity of getting SRHR services as they are required to bring in their parent or caregiver.

Children's Act

The Children's Act 5.06 restricts the employment of children and young persons under the age of 18 years in Zimbabwe. The study found that some children were n involved in vending at roadsides and shops and in artisanal mining which predisposes them to sexual violence, exploitation, and drug use. The prevailing economic decline was driving children into paid work.

"I used to go to work in the area called Round which is in this community, and I was working at the gold mine with my friend. We would wait for the other people to wash their gold ore and we will go after them and start to work from there." (13 year old adolescent mother, IDI, Hurungwe district).

"Children are now involved in all sorts, yes, they come to school but during weekends they go and mine, sometimes they can go to mine and fail to get anything, and on their way back they meet with these boys with money, so you see the children become exposed at an early age." (41 year old key stakeholder, KII, Shamva district).

Although the government has established laws and regulations related to child labor, its implementation was flawed because of the lack of resources and criminal prohibitions. In most cases these children were self-employed, making it difficult to deter them from engaging in child labor. The limited reach of social protection interventions means that these children have no functional safety nets to rely on, hence they will continue to engage in artisanal mining or illegal vending to supplement household incomes. The document review has shown that although social assistance increased to 37% in 2021, most vulnerable household did not benefit from any social assistance programs.

National Adolescent Sexual and Reproductive Health Strategy, 2016 – 2020

The ASRH II strategy aims to address adverse SRHR outcomes among adolescents and young people. Core to this is an increase in the uptake of quality youth friendly integrated SRHR and HIV services and a strengthened protective environment for adolescents and young people. The persistence in the judgmental attitudes of service providers and the limited uptake of SRHR services by unmarried adolescents especially in rural communities point to challenges in the implementation of the strategy.

Discussion

In the secondary analysis we looked at the trends in adolescent pregnancy for the past four years by year and by province. The findings shows that the burden of adolescent pregnancy is among adolescents aged 15-19 years at 21% compared to 0.2% among the age groups 10-14 years. The pregnancy prevalence varied between provinces with Harare and Bulawayo having the lowest rate compared to predominantly rural provinces. The findings confirms that the huge disparities in the distribution of adolescent pregnancy by geographic location across Zimbabwe, and substantial between rural areas and urban areas and across provinces is still dominant.

We observed an increase in the number of ANC bookings among both adolescent groups during the COVID-19 pandemic compared to pre-COVID- 19 phase. This confirms that anecdotal evidence that Zimbabwe recorded an upsurge in adolescent pregnancy during the COVID-19 pandemic. The COVID-19-related containment measures such as prolonged school closure might have had unintended consequences on adolescent pregnancy. The findings are in line with what has been reported in sub-Saharan Africa [55-57]. A study in Kenya found that the COVID-19 pandemic and related school closures had significant harmful effects on schooling and girls' sexual activity, including increased adolescent pregnancy. Adolescent girls whose schooling was disrupted due to COVID-19, experienced a threefold risk of dropping out of school and had twice the risk of falling pregnant before completing school than adolescent girls who never experienced COVID-19 [55]. School closures may have inadvertently intensified barriers to education and SRHR vulnerabilities, of adolescent girls in debuting sex or increasing sexual activity and increased risk of pregnancy, sexual violence, and exploitation.

Survey findings shows that age, religion, and level of education attained were independently associated with adolescent pregnancy. The prevalence ratio increased with age with much older adolescents being 71 times more likely to be pregnant compared to very young adolescents. This finding is consistent with studies conducted in Ethiopia [58] South Africa [59] and Zambia [60] which indicated that as the age of the adolescent increased, the odds of an adolescent pregnancy also increased. This may be explained as age increases the probability of sexual intercourse and marriage also increases; as a result, the risk of exposure to pregnancy and childbearing also increases.

Experiences of violence was also associated with pregnancy. Adolescents who experienced violence were 1.33 times more likely to pregnant compared to those who did not. A study in five African countries found that pregnant adolescents were more likely to have experienced forced sexual initiation and physical violence [61-62]. The findings have shown that 31% of the sexually active adolescents experienced sexual violence on their first sexual encounter and cases studies unpacked the lived experiences of pregnant and adolescent mothers who experienced violence. Emerging evidence is showing that sexual violence among adolescents is increasing [63] but sadly it goes unreported due to the lack of education and awareness. This lack of education has been made worse by the social and cultural contexts that makes it a taboo to talk about sex and consent with adolescents. The fact that parents/ caregivers were not teaching sex and sexuality issue at home coupled with CSE being limited to "have sex and you'll get pregnant or catch a sexually transmitted infection," many adolescents don't a proper understanding of what consent is. This gap therefore increases their vulnerability to sexual violence and subsequently pregnancy. The findings bring out the need to introduce the concept of sexual consent and safe sex at an early age. Contrary to popular parental belief that this will not encourage adolescents to have sex, but it will ensure that they are appropriately educated and prepared when they do decide to engage in sexual activity. Addressing sexual violence among adolescents becomes a human rights and public health imperative.

Parent child communication on SRHR have been shown to lessen the burden of adolescent pregnancy. Global evidence has shown that parent-child communication about SRHR, especially at the onset of puberty, shapes what adolescents believe, think, and modifies their behavior regarding their sexual health [64, 65]. Studies have shown that parent child communication is most effective at reducing sexual risk-taking when it occurs early and prior to sexual initiation and when conducted in a skilled, open, and receptive manner (also known as parental responsiveness) [64]. Our findings have shown that adolescents who did not discuss abstinence with their parents or guidance were 4.81 times more likely to become pregnant than those who reported discussing with their parents. Although parents have been found to be important influencers of adolescent attitudes, intentions, and values around sexuality, parent-child communication on SRHR remains limited. As discussed above interviewed parents and caregivers are not ready to engage in sex and sexuality discussions with their adolescents or even talk about contraception at home. It becomes imperative to address parent's fears and concerns. For example, the pervasive fear that talking to children about sexual issues will encourage sexual activity and the perception that their children were not ready or too young to receive information about sexual issues. Given the unique influence PCC has on risk reduction, the study recommends scaling up PCC interventions to reduce adolescent pregnancy.

Implementation of CSE among adolescents aged 10-14 years was found to be predominantly about abstinence. Most primary level students have not heard of contraception, had limited knowledge on conception and pregnancy prevention as they are deemed

too young to be sexually involved. This is despite evidence showing that some are sexually active and vulnerable to unsafe sex and unplanned pregnancy. The findings have shown that for some adolescents, sexual debut is as early as 12 years. Although not all are currently sexually active, providing accurate age-specific information on contraception use is critical to inform attitudes and behaviors that have profound implications for long-term health and well-being. There is, therefore, a need for early introduction of targeted information provision so that sexually active adolescents in primary schools have access to information that suits their sexual health needs. Taking a one size fit all approach will disadvantage the sexually active very young adolescents.

The findings highlighted a huge gap in the delivery of CSE as most schools were not resourced to effectively deliver CSE. Teachers were not trained and lacked training materials or manuals making it difficult for the school to implement CSE. There was also limited uniformity and consistency in the delivery of CSE with some schools not prioritizing CSE and using the allocated time to make up for the lost time for academic activities disrupted during the Covid-19 pandemic. When schools resumed, CSE sessions in schools were less prioritized as school authorities wanted to make up for the lost time for academic activities. This is a missed opportunity which deprives adolescents of adequate age and development-appropriate sex education. The findings point to the need for MoPSE to invest in resourcing schools to deliver CSE sessions and training teachers as well as developing reliable mechanisms to enforce and monitor the delivery of CSE in schools to ensure uniformity and consistency in the CSE delivery. While CSE remain one of the key interventions to improve adolescent sexual health outcomes, new efforts are needed to strengthen its implementation and overall impact. For example, incorporating information that speaks to the cognitive, hormonal, emotional, and physical changes that accompany the onset of adolescence. This has the potential to address adolescents' attitudes related to sexual behavior. Which has shown been shown to play a significant role in aspects of adolescent sexual risk taking.

The study found several pathways to adolescent pregnancy with the greatest challenge being the declining economic conditions which has increased parent migration, long working hours and erosion of family savings resulting in abject poverty among both rural and urban populations. Economic decline has resulted in limited parental supervision of adolescents thereby increasing their vulnerability to sexual violence or risky sexual behaviors. Evidence has shown that parental migration causes untold suffering on children left behind. The findings have shown that some adolescent girls were sexually abused by proxy caregivers who were entrusted to provide care.

Child marriages because of poverty was also shown to contribute to adolescent pregnancy. Despite legislative efforts to prevent child marriages, the practice persists across several provinces. This study shows that child marriage contributed to adolescent pregnancy which is consistent with studies carried out in sub-Saharan Africa [35-38]. These studies have shown that child marriages are a great risk for adolescent pregnancy as a result of the strong pressure by society for conception within the early years of marriage. Some of the case studies presented highlighted this societal pressure to conceive. Continued advocacy to end child marriages and protecting adolescent girls against the negative consequences of early marriage is important. This requires more than just legislation but a multisectoral approach that brings together the adolescents, their parent/caregivers all and stakeholders.

More recently Zimbabwe has witnessed a growing drug and substance use epidemic among adolescents and young people aged 10-24 years of age [33]. The findings have highlighted how drug and substance use consumed mostly during adolescent organized social events such as the Vuzu and leaver's parties have led adolescents to engage in risky sexual behaviors, predisposing them to pregnancy. The findings resonate with findings from other studies in both low and high-income settings [32]. A study conducted by Paquette et, al, found that adolescents who had used drugs such as marijuana, cocaine and amphetamines, were 26% more likely to be currently sexually active and 14% more likely not use protection during sex [66]. This confirms that adolescents who engage in drug and substance use are at high risk of unintended pregnancies and STIs including HIV infection. The assessment points to the need to strongly invest in preventive campaigns against drug and substance use and strengthen early identification of at-risk adolescents and offer support and preventive services before initiation.

The findings have shown that emergence of the Covid-19 pandemic was felt by communities and stakeholders to be a key driver of adolescent pregnancy. The pandemic disrupted schooling, decreased access to SRHR services, and compounded pre-existing socio-economic vulnerabilities. As shown in the findings, adolescents especially from resource constrained households had limited access to online educational services. Evidence across the world indicates that school closures, socio-economic distress, and disruptions to

SRHR services contributed to adolescent pregnancy and child marriages during the Covid-19 pandemic [67]. The need to bridge the learning gas with online lessons have also brought about some unintended challenges. Increased access to cell phones to support educational effort has been shown to increase access to pornographic and sexually oriented materials. The findings underline the need to invest in robust health, social and educational systems that respond to emergency situations and ensure continuity of services, especially for children and adolescents. Investing in the development of equitable remote learning approaches to ensure that adolescents, especially girls, continue to engage with educational services or are connected to schools to mitigate the risk of idleness becomes important.

Pregnancy experiences

The study found a high uptake of maternal and child health services among pregnant adolescents regardless of age or disability. Increased uptake of maternal and child health services even in the Apostolic religion dominated district was a notable achievement. This is commendable considering that evidence shows that pregnant and adolescent mothers were three times less likely to utilize ANC compared to adult mothers [68,69]. High uptake of maternal of maternal health services by adolescents is imperative to reduce maternal mortality caused by complications during pregnancy childbirth. Although uptake of maternal services was high only 4% of the pregnant adolescents registered their pregnancy within the recommended 12 weeks gestation age and only 48% managed the recommended 8 ANC visits. Late registration of pregnancy and failure to meet the recommended visits is persistent. This strips the adolescent mothers an opportunity for early identification of some of the disorders such as hypertensive disorders that can be identified and proactively managed throughout ANC. Adolescents need to be educated on the importance of early pregnant registration and meeting all the recommended ANC visits for both the mother and the infant.

Although breastfeeding was high among adolescent mothers, the study found that exclusive breastfeeding for the first six months was limited, and mothers reported introducing solids and non- prescribed traditional medicine /herbs within weeks. This resonates with findings in sub-Saharan Africa which have consistently shown that exclusive breastfeeding remains below the World Health Organization's goal set of 90% [70, 71]. Globally, studies showed that adolescent mothers were less likely to practice exclusive breastfeeding as compared to their older women and were unprepared for motherhood tasks including exclusive breastfeeding [71, 72]. Our findings have shown that breastfeeding was challenging and the challenges included not knowing the correct breastfeeding position, producing insufficient milk, cracked nipples, lack of social support for breastfeeding, infants failing to suckle, and difficulty knowing how to regulate the breastfeeds. The study outlines the need to intensify knowledge on maternal health and infant and young child feeding practices to ensure pregnant and adolescent mothers have comprehensive and accurate information on ANC registration, early initiation of breastfeeding, exclusive breastfeeding, introduction, management of complementary feeding to avoid late diagnosis of manageable conditions, and malnutrition among infants born to adolescent mothers. Establishment of community-based support groups for pregnant and adolescent mothers to provide a safe space for young mothers to make friends and gain support for themselves and their infants becomes important.

The study found that pregnant and adolescent mothers were found in all geographical locations but mostly concentrated in rural areas, mining and farming communities and were more likely to be from single parent households or staying with non-biological parents. Adolescents either voluntarily engaged in sex or were coerced by their partners while some were sexually abused. Their sexual partners were mostly their schoolmates or unemployed young men in their communities. It is therefore important to advocate for the provision of life skills development and economic empowerment activities for out of school adolescents and young people, regardless of gender, to provide activities to holistically address information and economic vulnerabilities that put adolescents and young people at risk of adolescent pregnancy or early fatherhood.

School re-entry policy

The study found that though adolescents were aware of the school re-entry policy, very few remained in school after pregnancy and the majority had no intention of going back to school. Childcare responsibilities, lack of financial support and fear of stigma were some of the reasons cited for not wanting to go back to school. Studies elsewhere reported similar barriers among pregnant and adolescent mothers [73, 74]. There is therefore a need for relevant authorities to invest in creating conducive non-stigmatizing

school environments that facilitate reintegration of pregnant and adolescent mothers. Parents and some community leaders had reservations regarding reintegration of the pregnant adolescent in schools citing that it will result in more pregnancies in the schools. Addressing beliefs and attitudes that hinder pregnant and adolescent mothers' full integration in schools requires multi-sectoral interventions and practical supports that goes beyond the education sector alone.

The findings point to the need for investments in fighting harmful social and gender norms within schools and communities. Policies need to go beyond simply allowing adolescents to return to school by addressing the supportive conditions required to enable adolescent girls to return to and stay in school. School awareness campaigns becomes important to promote change in behavior and attitude among peers of adolescents who would have fallen pregnant. Interventions and education systems may need to ensure equitable access to interim alternative non-formal routes to education for pregnant and adolescent mothers in both urban and rural areas, while the longer term norms, attitudes and supports are being addressed. This requires gender-transformative programming to increase the confidence and voice of this often socially marginalized group as well as assure platforms for their engagement. Listening to pregnant and adolescent mothers becomes important to promote tailor individualized support and deliver responsive programming that are human, and adolescent centered. At national level this becomes important to inform the design of effective policy, legislation, and practice.

Recommendations on pregnancy prevention and response These recommendations build on the ideas, experiences and views of adolescent girls who took part in this study.

Adolescent girls' agency building and strengthening family recommendations.

1. Empowering parents and guardians to become supportive and effective communicators on SRHR issues with their children including on sexual behavior and risk-reduction. The study highlighted limited parent child communication on several SRHR issues including pregnancy prevention, sex, sexuality and gender.

    a. Introducing awareness campaigns to normalize discussion of sex and sexuality, pregnancy prevention, and contraceptive use at family level.
    b. The campaigns would also target the removal of stigma and empower parents to fully understand that simplistic messages about abstinence exacerbate children's risks.

2. There is need to educate children on their rights and responsibilities as a way of developing well-rounded and responsible children, who respect others, think critically, and make informed decisions. Parents also need to be educated on children's rights so that they fully understand the provisions of children's rights especially around the abolishment of corporal punishment in schools.

    a. Introduction of awareness campaigns and community dialogues targeting both children and their parents.
    b. Developing culturally and age-appropriate alternative forms of disciplining children in schools and at home and indigenous positive parenting programs as some of the westernized approaches such as the 'naughty corners might not work well in a Zimbabwean context considering the class sizes.

3. Educating parents on the importance of establishing sound alternative caregiving arrangements when considering regional or international migration. The study has highlighted increased vulnerability to sexual abuse among children who are left behind when parents migrate.

    a. Intensify information dissemination on the negative effect of lack of parental care and supervision on adolescents, the increased vulnerability to risky sexual behaviors and drug and substance abuse.
    b. Provide counselling services to children to increase their resilience and equip them with risk assessments so as to avoid sexual abuse and exploitation during the prolonged absence of parents/caregivers in the homes.
    c. Crafting policies that ensure the safety and protection of children left behind by migrating parents.

4. Equipping adolescents with information on drug and substance abuse before initiation especially around the negative consequences of drug and substance abuse on their health and wellbeing.

    a. Relevant government departments and related partners to strongly educate adolescent girls to abstain from drug and substance abuse.
    b. Developing effective preventive campaigns against drug and substance abuse and strengthening early identification of at-risk adolescents and offering support and preventive service before initiation.
    c. Educating adolescents on the effects of unsupervised social events such as the Vuzu and leavers parties.
    5. Educating adolescents on responsible use of technology as well as on the dangers of accessing harmful platforms that share pornographic or sexually oriented materials.
    6. Educating parents or caregivers on the importance of adolescents' access to post-partum contraception to minimize repeat pregnancies.

7. Educating parents on the role of social protection services to increase uptake and minimize resistance and lack of cooperation from both parents and their pregnant or adolescent mothers.

Prevention and response recommendations at community, school and Health facility level

8. Adaptation of a differentiated model of SRHR service provision for adolescents which is client centered and addresses known facility-based challenges. Differentiated models have been shown to work well in the provision of ART service among adolescents as these are delivered using community and facility peer-based models. This might entail age appropriate out of facility contraception provision to adolescents through peer led models.

    a. Capacitating youth centers to provide comprehensive family planning services.
    b. Piloting targeted and tailored youth-led community-based distribution of family planning services.
    9. Capitalizing on the increased proliferation of cell 'phones, community radios and social media platforms to accelerate the spread of age-appropriate information on contraceptive use and to scale up interventions to enhance adolescents' SRHR skills and agency including community, facility based and peer based education and mentorship programs. This therefore entails:
    a. Creation of safe and confidential spaces in and out of schools for adolescents to interact, ask questions and share experiences on SRHR.
    b. Inclusion of very young adolescents in SRHR programming through adoption of targeted and tailored approaches.
    c. Developing implementing community radio programs such as talk shows where adolescents and service providers can be invited to lead sessions.
    d. Partnering with mobile service providers to send clear and consistent short messages targeting adolescent cell 'phone users with SRHR and contraception messaging.
    e. Designing and adopting participatory learning action methodologies to evade social and religious expectations that limit the delivery of CSE among the very young adolescents in some communities.
    f. Establishing youth friendly recreational facilities for adolescents in rural areas.
    g. Strengthen the inclusion of adolescents with disabilities in SRHR programming through the development of educational materials that meets their diverse needs. For example, availing materials in Braille, and including them as peer leaders in adolescent programs.
    h. Expanding the access, availability, and utilization of comprehensive family planning services for vulnerable adolescents such as the adolescent in hard-to- reach rural communities and with disabilities.
    i. Scaling up of innovative interventions that have been shown to work in reducing adolescent pregnancy such as the DREAMS model.
10. Enhancing the provision of in-schools CSE through the development of curriculum and materials and implementing capacity strengthening trainings to equip teachers and community-based facilitators with comprehensive SRHR information, CSE

facilitation skills and on strategies to build life skills and confidence of adolescents. MoPSE therefore need to:

a. Invest in CSE in schools to provide in school adolescents with high quality information, knowledge, skills, and attitudes needed to make informed choices now and in the future.
b. Implement capacity strengthening training to equip teachers with comprehensive SRHR information, CSE facilitations skills, and on strategies to build life skills and confidence in adolescents.
c. Develop reliable mechanisms to enforce and monitor the delivery of CSE in schools to ensure uniformity and consistency in the CSE delivery.

11. Schools needs to strengthen systems for early detection and support of children that maybe at risk of getting pregnant and link them with appropriate services and early safety nets for prevention of pregnancy in school.

12. There is need to invest in robust health, social and educational systems that respond to emergency situations and ensure continuity of services especially for children and adolescents.

a. There is need to invest in developing equitable remote learning approaches to ensure that adolescents, especially girls, continue to engage with educational services or are connected to schools to mitigate the risk of idleness.
b. Partnering with mobile service providers to ensure access to online and offline educational platforms such as the Ruzivo/ Akello Edutech or Learning passport digital platforms, and on the development of platforms that can work well with limited data to reduce the costs of data.
c. Establishing community-based educational hubs that students can easily access in case of restricted movement due to epidemics or humanitarian emergencies such as the Covid-19 pandemic.
d. Educating children on navigating e-learning platforms so that they are continually engaged and supported to receive educational services.

13. Investing in community sensitization and guidance to support pregnant and adolescent mothers to remain or return to school, as well as addressing structural barriers that hinder their full integration in schools.

a. Investing in creating conducive non-stigmatizing school environments that facilitate reintegration of pregnant and adolescent mothers.
b. Educating parents and caregivers on the importance of the school re-enrolment policy of pregnant and adolescent mothers.
c. Providing non-formal schools and vocational training centers to cater for pregnant and adolescent mothers who do not wish to return to mainstream formal schools.
d. Establishing play centres and ECD centres where adolescent mothers can leave their infants while they attend school.

14. Engaging community leaders as change agent and capacitating them with information on harmful social-cultural and religious norms to end harmful practices such as child marriages or prioritizing boys over girls' education.

15. Investing in fighting harmful social and gender norms through community sensitization and guidance to support pregnant and adolescent mothers to remain in or return to school as well as addressing structural barriers that hinder their full integration in schools.

16. Ensuring provision of mental health and psychosocial support throughout the pregnancy to adolescent girls who are survivors of gender based violence and abuse to address trauma that comes with unintended pregnancy and motherhood.

17. Empowering health care workers and student nurses to provide tailored non-judgmental and non-stigmatizing antenatal care services to pregnant and adolescent mothers.

18. Intensifying knowledge on maternal nutrition and health and infant and young child feeding practices to ensure pregnant and adolescent mothers have comprehensive and accurate information on ANC registration, early initiation of breastfeeding, exclusive breastfeeding, and introduction and management of complementary feeding to avoid late diagnosis of manageable conditions and malnutrition among infants born to adolescent mothers. Routine ANC for pregnant adolescents should include discussions on diet and nutrition.

19. Scaling-up of HIV testing and care service for adolescents as they are the most vulnerable to new HIV infections.

Prevention and response recommendations at policy level

20. Removing age restrictions and scaling up inclusive, age appropriate access to SRHR information and services and intensifying contraceptive use messaging among in and out of school adolescents. This should not exclude primary school going children on the pretext that they are not sexually active.

21. Advocating for government to increase domestic resources allocated to social protection, education, and health services to improve on the provision of essential services such as the social protection of children from sexual exploitation by artisanal miners or from child labor.

22. Enhancing access to non-formal education platforms in both rural and urban areas and addressing norms, attitudes that limit pregnant and adolescent mothers from accessing formal mainstream schools. Establishing and financially supporting community based infant day care to ensure adolescent mothers attend school knowing that their infants are well taken care of.

23. Reviewing the provision of guidance and counselling and life skills education as compulsory taught learning areas.

24. Investing in life skills development and economic empowerment activities for out of school adolescents and young people regardless of gender to reduce idleness, and as a way of holistically addressing their information and economic vulnerabilities that put adolescents and young people at risk of early and unplanned pregnancies.

Conclusion

The findings show that adolescent pregnancy is a social and health problem that affects already vulnerable adolescents who reside mostly in rural areas, in child headed households, or staying with non-biological parents. Factors associated with adolescent pregnancy included age, residence status, and staying with non-biological parents. The study identified several pathways to adolescent pregnancy which included early exposure to pornographic material caused by increased access to cell 'phones among adolescents, drug and substance use, and economic challenges that have seen parents migrating to neighboring countries in search of employment opportunities. Most of the pregnancies were unintended, highlighting the unmet need for family planning among adolescents. The findings point to the need for government and its related partners to invest in interventions that counter some of the identified pathways to adolescent pregnancy. There is need to capitalize on the available opportunities for pregnancy prevention.

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Annex 1: Organization implementing pregnancy preventive and mitigation programs			
	Mandate	**Type of service**	**Coverage**
Government Departments			
Ministry of Health and Child Care	Implementation of youth-friendly environment services at hospitals and clinics. Inform policies and create programs to increase knowledge and utilization of integrated HIV prevention, SRHR, and SGBV services among adolescents and youths.	Preventive & mitigation	Nationwide
Ministry of Primary and Secondary Education	School-Based Life Skills Empowerment and Support Program -The Life Orientation Program provides skills for problem-solving, self-management, communication, and age-appropriate Comprehensive Sexuality Education, for in-school girls and boys.	Preventive & mitigation	Nationwide
Ministry of Women Affairs, Gender, and Community Development	Women's Empowerment program funded under the Women's Development Fund - loans to parents/caregivers, and the fund target parent so that they can support their children by alleviating poverty. Economic strengthening program for out-of-school adolescents and young women - Skills and information dissemination on GBV, and SRH	Preventive & mitigation	Nationwide
Ministry of Youth, Sports, and Culture	Sports and recreational activities for in and out of school adolescents - district and provincial level activities	Preventive	Nationwide
Ministry of Public Labour and Social Welfare	Child protection activities for vulnerable children - CCWs Education Assistance Module (BEAM) to keep vulnerable young boys and girls in school. Food assistance program for vulnerable households	Preventive & mitigation	Nationwide
Zimbabwe Republic Police	ZRP Victim Friendly Unit (VFU), provides safety for the victims of sexual nature crimes committed against women and children.	Preventive & mitigation	Nationwide
National AIDS Council	Provision of HIV testing and counselling services Key population program DREAMS project	Preventive & mitigation	Nationwide
Civil Society Organizations			
CAMFED	Paying school fees for vulnerable young girls in rural areas to keep them in school. Leadership trainings for adolescents so that they can stay in school learn, thrive, and lead change.	Preventive & mitigation	Nationwide
SAFAIDS	SRHR training to adolescents in school, to cultivate their leadership and decision-making skills	Preventive	Masvingo, Chiredzi
USAID Dreams	DREAMS project to empower adolescent to access SRHR services	Preventive	Nationwide
ChildLine Zimbabwe	Provision of social support to victims of abuse including sexual abuse of young children and adolescent girls through counseling and comfort and protection. Assist in the reporting and prosecution process of the perpetrators of sexual violence against minors	Preventive & mitigation	Nationwide

Annex 1: Organization implementing pregnancy preventive and mitigation programs			
	Mandate	**Type of service**	**Coverage**
World Vision	Girls Education Mentoring Support (GEMS) program Education Initiative (AMEI) which is advocating for adolescents' mothers to stay in school to minimize the chances of a repeat pregnancy. In partnership with AWANA they have positive parenting skills that are helping on parent caregiver communication	Preventive & mitigation	Hwange, Nkayi
SAY WHAT	SRHR program for adolescents in and out of school through peer-to-peer engagement • SRHR information • Contraceptive • HIV self-testing kits on campus and in communities.	Preventive	Hopley, Epworth
CHRISTIAN CARE	Economic empowerment for out-of-school adolescents. Provision of menstrual pads	Preventive	Masvingo, Chiredzi
CeSHHAR Zimbabwe (Programme)	DREAMS project program, providing young female sex workers with family planning, and HIV services.	Preventive	Harare, Bulawayo,
Population Solutions Health	Provision of family planning and contraceptives adolescent girls. Free booking for pregnant adolescent girls	Preventive & mitigation	Hopley, Epworth
Musasa Project	- Counseling, medical care, temporary shelters, and legal support to women and young adolescent girls' survivors of GBV, - Skills trainings to live violence-free lives.	Preventive & mitigation	Nationwide
ZiCHIRe	Sista2stista clubs among adolescents	Preventive	Hopley
Caritas	SRHR information dissemination for adolescents on ART	Preventive	Harare and Bulawayo, and Masvingo, and Hwange.
Bantwana World Education Zimbabwe	DREAMS implementing partner. ASPIRES/ Siyakha girls' program builds the economic assets of young women and helps AGYW have a bridge from secondary school to employment.	Preventive	Bulawayo, Hopley, Lupane, Nkayi
Youths Advocates	Financial resources for economic empowerment of adolescents Advocacy to advance women and youth's sexual and reproductive health and rights	Preventive	Bulawayo, and Masvingo,
Zimbabwe Women Lawyers Association (ZWLA)	- Legal aid and education to women and communities, on women's and children's rights.	Preventive & mitigation	Nationwide
ZACH	- HIV&AIDS prevention, treatment, and care services within church-related hospitals and clinics for vulnerable groups including adolescents.	Preventive	Hurungwe, Kadoma, Zvimba, Makonde, Mount Darwin, Tsholotsho, Lupane, Nkayi

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	Mandate	**Type of service**	**Coverage**
WILSA	Fight against violation of girls' rights such as early and child marriages, rape, and adolescent pregnancies and legal reforms and policy changes on laws, practices, and policies which discriminate and disadvantage women and children.	Preventive & mitigation	Masvingo and Chiredzi
Adult Rape Clinic (ARC)	ARC provides comprehensive medical and psycho-social support services to adult rape survivors.	Mitigation	Epworth, Hopley, Chitungwiza
ActionAID	Empowered adolescent girls for Improved Quality of Life project an SRHR focused project. Economic empowerment for girls		Shamva, Hopley, Chitungwiza
FACT	Fights against GBV and SGBV in the communities and protects children from child marriages and child sexual abuse. Spotlight Initiative supported the building of a safe shelter in Hurungwe for women and children experiencing abuse. Families Matter Program that seeks to build strong healthy relationships between parents and their children.	Preventive	Hurungwe
Katswe Sisterhood	SRHR and GBV programming for adolescents and young people Income lending and saving schemes for pregnant and adolescent mothers. Pachoto men's clubs for adolescent boys and young men	Preventive & mitigation	Mbire
JF Kapnek	SRHR and GBV program among adolescents promotes disability inclusion in information and accessing health services. The Strengthening Sciences for Women (SSW) program in-school adolescent girls to pursue sciences subjects	Preventive	Makokoba, Epworth, Chitungwiza, Zvimba, Sanyati, and Mwenezi
Higherlife Foundation	Educational scholarships for orphans, vulnerable children - Providing Access to education, - Improving the Quality of education, - Providing Lifelong Development.	Preventive	Nationwide
HOCIC	Provision of HIV and SRHR services to adolescents	Preventive	Umguza
Plan International	Economic empowerment project is helping to fight child marriages and discrimination. Supporting Adolescents Girls Education (SAGE) Program offers out-of-school adolescent girls between the ages of 10-19 with education support and life skills training.	Preventive	Chiredzi
AWANA Zimbabwe	Focus on teaching bible centered information to in and out of school very young adolescents and adolescents. They have a positive parenting skills program working with World Vision that is helping parents/caregivers communicate with their children.	Preventive	Mt Darwin, Hwange, Nkayi

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	Mandate	**Type of service**	**Coverage**
Community-Based Organizations			
Silwiza	Gives children and adolescents information on Child rights, and ASRH to out-of-school adolescents in the communities.	Preventive	Hwange
Youth Tariro	Girl child empowerment program and SRH information provision for in and out of school.	Preventive	Zaka
Private organizations			
Portland Cement (PTC)	Corporate social responsibility, help with the construction of Tariro youth Centre	Preventive	Hopley

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