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RESEARCH ARTICLE

Sexual and Reproductive Health Issues among HIV Positive Adolescents in Gweru Rural District in Zimbabwe: A cross-sectional study

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ABSTRACT

Objective: The objective of the study was to investigate the Sexual and Reproductive Health (SRH) issues among Adolescents Living with HIV (ALHIV) in Gweru rural district in Zimbabwe.

Design: A cross sectional mixed method research design was used with qualitative and quantitative methods.

Setting: The study was conducted in Gweru rural district community. **Subjects:** A total of 112 questionnaires were administered to ALHIV, four focus group discussions (FGDs) were conducted with ALHIV in Gweru rural district, and six key informant interviews with key informants were held at district and national levels.

Results: All respondents were not in relationships, while 94 percent lacked general understanding of relationships. All respondents reported that they were not sexually active, although 62 percent intend to have sex in future. Seventy-eight percent lacked comprehensive knowledge of HIV transmission. Respondents were aware of few modern contraception methods namely female condoms (39 percent), male condoms (37 percent) and the pill (25 percent). Adolescents Living with HIV (ALHIV) mainly access HIV related services in Gweru rural district. There is limited access to SRH services besides HIV treatment as 41 percent of ALHIV reported talking to a health service provider about SRH issues such as sexuality, family planning, condoms, sexually transmitted infections, pregnancy and childbearing.

Conclusion: The key SRH issues facing ALHIV include lack of comprehensive knowledge on SRH issues, such as sexuality, relationships, prevention of HIV re-infection, pregnancy and childbearing and family planning. There is also limited access to SRH services. Adolescents living with HIV in Gweru rural district face barriers to accessing SRH services at policy, programmatic, community, family and individual levels.

Keywords: Adolescents living with HIV, Sexual and Reproductive Health, HIV and AIDS

Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ALHIV	Adolescents Living With HIV
ASRH	Adolescent Sexual and Reproductive Health
ESA	Eastern and Southern Africa
FGD	Focus Group Discussion
HIV	Human Immuno-deficiency Virus
ICPD	International Conference on Population and Development
IEC	Information, Education and Communication
MoHCC	Ministry of Health and Child Care
MoPSE	Ministry of Primary and Secondary Education
MRCZ	Medical Research Council of Zimbabwe
NAC	National AIDS Council
NGO	Non-Governmental Organization
PLHIV	People Living with HIV
SPSS	Statistical Package for the Social Sciences
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infections
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund

Introduction

Globally, 38 million people were living with the Human Immunodeficiency Virus (HIV) in 2020¹. An estimated 11.4 million people were living with HIV in nine countries of Southern Africa, including Zimbabwe¹, which is almost 30 percent of the global number of people living with HIV. Around 2.1 million were adolescents aged 10-19 years were living with HIV in 2016². Adolescents, especially adolescent girls, are the most at risk of HIV infection in the world and sub-Saharan Africa (SSA)². There were an estimated 260,000 new HIV adolescent infections in SSA². Three in four new HIV infections in adolescents aged 15–19 years occur in SSA¹. Adolescent girls and young women aged 15-24 years are at higher risk of infection, accounting for 1 in 4 infections, despite comprising 10 percent of the population¹. For every five adolescent boys living with HIV, there are seven girls (aged 10–19 years)². The gender disparity grows as adolescents enter young adulthood². Sub-Saharan Africa accounts for 9 in 10 adolescent HIV-related deaths².

It is estimated globally that around 34 percent of youths have comprehensive knowledge of HIV¹. In population-based surveys conducted across East and Southern Africa between 2011 and 2016, just 36 percent of young women and 30 percent of young men had comprehensive knowledge about HIV¹. In Zimbabwe, there is a divergence of levels of knowledge between national statistics and small-scale survey statistics. National level statistics are

much lower than small scale survey statistics. Less than half (47 percent of males and 46 percent of females) of the youth population have comprehensive knowledge about HIV and AIDS⁷. On the contrary, other small-scale studies in Zimbabwe reported higher levels of comprehensive knowledge of HIV averaging 78 percent, with females recording higher knowledge levels (81 percent) as compared to males (71 percent)¹⁵.

Although adolescents living with HIV have mostly the same dreams and hopes as all other adolescents, they often face several health challenges in their day-to-day lives because of their HIV status³. In general, adolescents are left behind in terms of HIV and Acquired Immune Deficiency Syndrome (AIDS)-related progress. Adolescents of both sexes are at high risk of contracting and transmitting Sexually Transmitted Infections (STIs), including HIV². In sub-Saharan Africa, evidence has shown that programmes to address Sexual and Reproductive Health (SRH) needs of Adolescents Living with HIV (ALHIV), aged 10-19 years, are lacking⁴. Where there are attempts to provide SRH services, evidence has shown that the programmes are often only limited to delaying sexual initiation⁵.

Zimbabwe has 4 percent of all People Living with HIV (PLHIV) at global level while constituting 3 percent of all new infections⁶. The HIV prevalence for females aged 15-24 years is higher than that of males of the same age group at 6.7 percent and 2.9 percent, respectively⁷. The Adolescent Sexual and Reproductive Health (ASRH) Strategy 2016-2020 highlights that young people growing up in Zimbabwe face unprecedented challenges related to their sexual and reproductive health, including STIs and HIV⁸.

Fear, ignorance, and misinformation about HIV continue to circulate, despite four decades of advocacy and education. People living with HIV face multiple and intersecting forms of stigma and discrimination based on their HIV status that undermine their health, safety and dignity¹⁶. The 2021 United Nations Political Declaration on AIDS recommit countries to eliminate all forms of HIV-related stigma and discrimination, setting a target of less than 10 percent of people living with, at risk of, and affected by HIV having experienced stigma and discrimination by 2025¹⁶.

The prevalence of discriminatory attitudes towards people living with HIV varies widely. Across nearly all regions, there are countries where large proportions of adults continue to hold discriminatory attitudes towards people living with HIV¹⁶. In 52 of 58 countries with recent population-based survey

data, more than 25 percent of people aged 15-49 years reported holding discriminatory attitudes towards people living with HIV, and more than 50 percent held discriminatory attitudes in 36 of 58 countries¹⁶.

Individuals living with HIV and AIDS have been the subject of stigmatizing attitudes and differential treatment in nearly every part of the world, including the sub-Saharan African region¹⁷. For several years, widespread misconceptions about HIV and AIDS contributed to its portrayal as a result of divine punishment, witchcraft or an invariable outcome of promiscuous sexual behaviour which always resulted in death. Global and regional studies in USA, South Sudan, Democratic Republic of Congo, Tanzania, Uganda and Kenya^{18,19,20,21} have shown a persistent feature that generally societies have negative attitudes towards HIV and AIDS. Similarly, in Zimbabwe, studies^{15, 22, 23} also established negative attitudes towards people living with HIV, including the youth.

In Zimbabwe, there is general stigma regarding adolescent sexual activity and motherhood outside marriage, irrespective of their HIV status⁸. There is further stigma towards relationships and sexual activity among young people living with HIV. There is an assumption that adolescents living with HIV should abstain from sex and relationships. Studies on the SRH needs and concerns of PLHIV in Zambia, Uganda, Kenya, Malawi and Mozambique further confirmed that, being HIV positive does not remove the desires for sexual relationships or child bearing^{4,5,9,10}. In Kenya, 92 percent of those who never had sex intended to have sex in the future⁴. However, the fear of rejection based on HIV status often discouraged ALHIV from starting relationships and when they got into relationships, complications related to disclosure often meant relationships were short-lived⁴.

The HIV prevention with HIV-positive adolescents remains a critical component of the prevention package as the approach emphasizes that PLHIV should be empowered to protect their own health and avoid onward transmission of HIV¹⁰. Studies in Kenya and Uganda have highlighted abstinence and condom use as the most known ways of avoiding HIV re-infection and onward transmission by ALHIV⁴. Levels of contraceptive knowledge and use are key SRH issues for ALHIV. Nearly all (93 percent) of the ALHIV expressed the need for more knowledge about contraception⁴. Knowledge on source of contraceptives affects utilisation of contraception.

Knowledge of access to SRH services have been

reported to be lower among young people aged 10-14 years compared to older adolescents aged 15-19 years in Malawi, Mozambique, Zambia, Tanzania and Zimbabwe⁸. Research in different settings has shown that the pill and condoms are the most known contraceptive methods by ALHIV^{4,8}. Access to SRH services is a right for adolescents in general and more critical for ALHIV. Unfriendly conduct by health providers is a major barrier facing ALHIV in accessing sexually transmitted infection (STI) treatment^{8,11}. However, adolescents living with HIV are more comfortable talking about SRH issues to service providers/counsellors rather than parents or guardians⁴.

Adolescents living with HIV plan their lives beyond their HIV status, they construct their life on a bright future, their appearances, dating and loving issues⁵. Research have demonstrated that adolescents living with HIV have hopes to become professional scientists, medical doctors, lawyers and entrepreneurs^{4,5}. Despite adolescents living with HIV, having high aspirations about their future, they expressed concerns about their sero-status⁵. Most countries, including Zimbabwe, are signatory to the 1994 International Conference on Population and Development (ICPD) Plan of Action as well as the Eastern and Southern Africa (ESA) 2013 Ministerial commitment on comprehensive sexuality education and health services for adolescents and young people. Other countries also have policies that are related to adolescent health, though the majority of them have limited focus on ALHIV^{5,11}.

Zimbabwe has also developed policies and strategic frameworks that aim at facilitating the provision of sexual and reproductive health services to adolescents. These include the following: Zimbabwe National Youth Policy 2000; National Reproductive Health Policy 2002; HIV and AIDS Policy 1999, updated in 2005; National Skills Development Policy 2010; Zimbabwe National HIV and AIDS Strategic Plan 2011-2015; Life Skills, Sexuality, HIV and AIDS Education Strategic Plan 2012-2015; Zimbabwe National Health Strategy 2009-2013 and 2016-2020; Zimbabwe National Adolescent and Youth Sexual and Reproductive Health Strategy of 2010-2015 and 2016-2020; Zimbabwe School Health Policy of 2018; and the Zimbabwe National Development Strategy 1 2021-2025. In addition, the health rights of young people are enshrined in the following legal instruments: Sections 29, 76 and 81 of the 2013 Zimbabwe Constitution; Education Act 2019, Amendment Number 15, Section 64; and, the Public Health Act, [Chapter 15:17], Number 11 of 2018.

Comprehensive sexuality education plays a central role in preparing young people for a safe, productive and fulfilling life¹. It provides opportunities to learn and acquire complete, accurate, evidence informed and age-appropriate knowledge on sexuality and reproductive health issues¹. Comprehensive sexuality education has been shown to contribute to delayed initiation of sexual intercourse, decreased frequency of sexual intercourse, decreased number of sexual partners, reduced sexual risk taking, increased use of condoms and increased use of contraception among young people¹. While strides have been made to address ASRH issues, there is still a gap as adolescents are largely presented as a homogenous group in policies, strategies and service delivery. Thus, specific SRH needs of key populations such as ALHIV may not be adequately addressed using a generic approach for all adolescents. Given this background, hence the need for a study on ALHIV.

OBJECTIVES OF THE STUDY

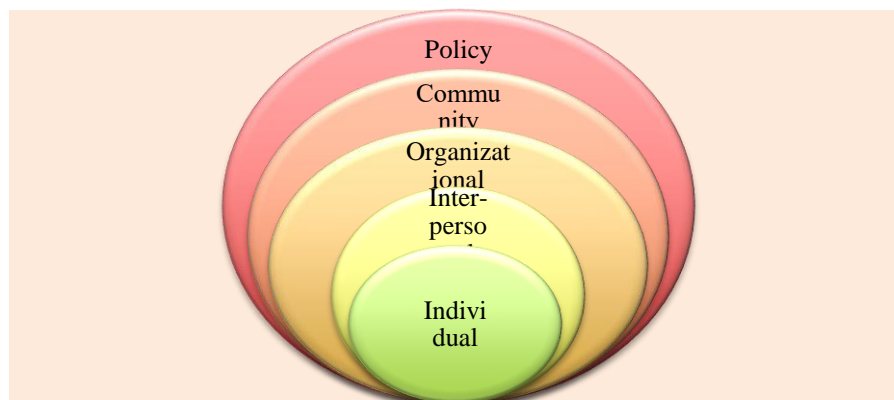
This study sought to investigate the SRH issues of ALHIV in Gweru rural district. The specific objectives were to: (i) Assess the SRH and HIV-related knowledge of adolescents living with HIV; (ii) Establish the SRH and HIV-related behaviours of

adolescents living with HIV; (iii) Ascertain the level of access to SRH services by adolescents living with HIV; and (iv) Establish barriers to accessing SRH services by adolescents living with HIV. This study would lead to improved information and ultimately access to SRH services by ALHIV in Zimbabwe, especially in rural areas. Availability of scientific evidence on ALHIV SRH issues at micro level strengthens advocacy initiatives and resource mobilisation for provision of specific SRH services for ALHIV.

CONCEPTUAL FRAMEWORK OF THE STUDY

This study used the Social-Ecological Model (SEM) adapted from McLeroy et al. (1988). The model provides a theory-based framework for understanding how the social determinants of health influence and maintain health and health-related issues. According to McLeroy et al., (1988), there are five levels of influence¹², as highlighted in Figure 1. The model has been adapted to account for individual, family, organisational community/cultural and policy influences. These factors operate at more than one level. The adolescent's behaviour is not affected at individual level only, but peers, family, community and national policies. These factors are explored in the study.

Figure 1: Social-ecological model



Source: Adapted from McLeroy et al. (1988)

Methods

STUDY DESIGN

The study used a cross-sectional research design, involving a triangulation of both quantitative and qualitative methods of data collection. A mixed methods approach complements quantitative and qualitative methods, while maintaining the strengths and improving on the weaknesses in both designs^{13,14}.

STUDY POPULATION

The study was conducted among adolescents living with HIV in Gweru Rural District in Zimbabwe. The participants were adolescents under the Zvandiri Programme. The Zvandiri programme, which is run by AfricAid in Zimbabwe, provides a support group for adolescents living with HIV. The programme seeks to ensure that children, adolescents and young people living with HIV have the knowledge, skills and confidence to live happy, healthy, safe, fulfilled lives. It provides differentiated care for children, adolescents and young people living with HIV (aged 6–24 years).

SAMPLING

The study used random sampling approach, which ensured that all 156 ALHIV benefitting from the Zvandiri programme in Gweru rural district were represented. The study inclusion criteria comprised of: adolescents between 10 and 19 years old; living with HIV; fully aware that they were living with HIV; willingness to participate; parental or guardian approval granted/parental consent and adolescent assent for those less than 18 years; consent provided by adolescents aged 18 to 19 years; and working under the Zvandiri programme. The sample size was estimated using a confidence level of 95 percent, an acceptable margin of error of 5 percent, a response distribution of 50 percent as well as a population size of 156 ALHIV benefitting from the Zvandiri programme in Gweru rural district. These preconditions yielded a statistically representative minimum sample size of 112 ALHIV, using the Raosoft sample size calculator. The sample size n and margin of error E were calculated using the following formulae:

$$X = Z(c/100)^2 * r(100-r);$$

$$n = N * x / ((N-1)E^2 + x); \text{ and } E = \sqrt{[(N-n)x/n(N-1)]},$$

Where: N is the population size; r is the fraction of responses that the researcher is interested in; and $Z(c/100)$ is the critical value for the confidence level c .

The calculation assumed a normal distribution. The sample size was further increased by 5 percent to account for contingencies, such as non-response or recording error which increased the sample size to 118 ALHIV. The sample size was equally distributed among males and females (i.e., 50 percent each).

DATA COLLECTION

Quantitative data was collected using the questionnaire and qualitative data from the Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs). The questionnaire comprised of eight components, namely: demographic characteristics; sexual behaviour and practices; HIV sero-status disclosure; preventive knowledge and practices; contraceptive knowledge and use; pregnancy and childbearing; self-esteem; and access to SRH services. There were 40 closed-ended questions on the survey. The questionnaire was translated into Shona. Data was collected using mobile devices. Data collection was conducted by trained enumerators. The training familiarized the enumerators with the background and justification for the study, objectives of the study, study methodology, ethical considerations and general research knowledge. Quantitative data was analysed using the Statistical Package for Social

Sciences (SPSS) version 20. Quantitative data was analysed using descriptive statistics and tests of independence/ association. Pearson's chi-square was used to test the statistical significance of the association between variables at the level of significance of 95 percent. Qualitative data was transcribed and analysed using content analysis and NVivo Version 11 software. These are presented as quotations in the report. No personal identifying information was collected. Interviewers were also trained on confidentiality issues. Adolescents were assured that what they said about their SRH issues was not to be divulged to their parents/guardians. Approval was sought from participants before using voice recorders. The research was approved by the Medical Research Council of Zimbabwe (MRCZ), with approval number: MRCZ/B/947 as observing the ethical principles.

DATA QUALITY ASSURANCE

Data quality and consistency was taken care of throughout the research process. To ensure quality data, qualified research assistants were recruited and effectively trained to ensure understanding of the study objectives, processes and expected outcomes for consistency and completeness. Also, the lead researchers participated in data collection and supervised the research assistants during fieldwork. The questionnaire, FGD and KII guides used were translated into Shona as most of the participants are comfortable speaking in their mother language. These were later translated back to English by the lead researchers.

Results

All 118 questionnaires were completed, yielding a response rate of 100 percent and all adolescent age cohorts were well represented.

SOCIO-DEMOGRAPHIC CHARACTERISTICS

The majority of the respondents (74 percent) were aged 10-14 years and 26 percent were aged 15-19 years. Most respondents were females (54 percent) whilst all respondents were never married. Eighty-five percent of the respondents were in school. The majority of the respondents were Christians (86 percent) while 12 percent were Apostolic.

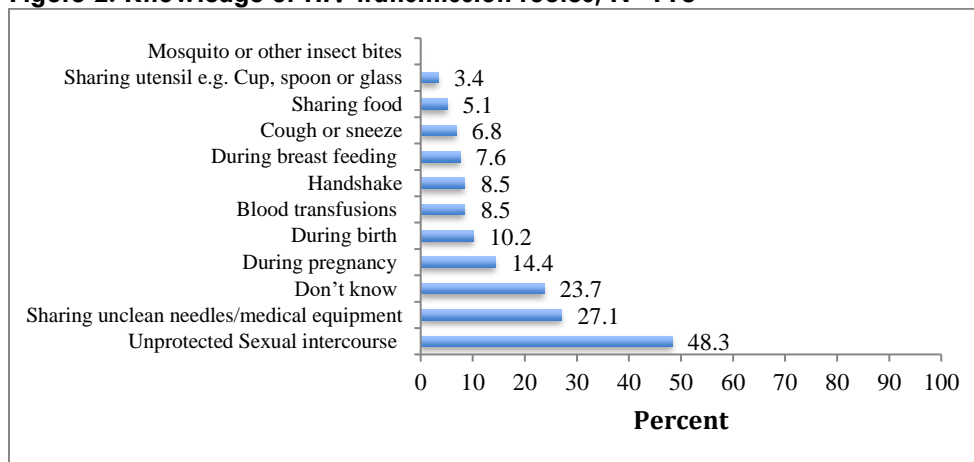
SEXUAL AND REPRODUCTIVE HEALTH AND HIV-RELATED KNOWLEDGE OF ADOLESCENTS LIVING WITH HIV

All respondents were not in relationships while 94 percent lacked general understanding of relationships. Most respondents knew that unprotected sexual intercourse (48 percent) and sharing unclean sharp objects, such as needles and medical equipment (27 percent) are the main HIV

transmission routes. Almost a quarter of respondents (24 percent) did not know HIV transmission routes. However, ALHIV reported misconceptions on HIV transmission routes such as casual contact, for

example, handshake (9 percent), cough or sneeze (7 percent) and sharing food (5 percent). See Figure 2.

Figure 2: Knowledge of HIV transmission routes, N=118



A fifth of the respondents had comprehensive knowledge of HIV transmission routes. A significantly higher proportion of older adolescents aged 15-19 years had comprehensive knowledge on HIV transmission routes (52 percent) compared to 8 percent of younger adolescents (10-14 years) ($p=0.000$).

Male FGD participants in the 15-19-year age group highlighted the following preventive knowledge gaps:

We lack knowledge about sexuality.

We lack information on how to use condoms.

A fifth of ALHIV (19.5 percent) had comprehensive knowledge of contraceptive methods. ALHIV were aware of female condoms (39 percent), male condoms (37 percent) and the pill/oral contraceptives (25 percent). Other modern family planning methods such as Intra-uterine Device (IUD) (loop), lactational amenorrhea, vasectomy and tubal ligation were not mentioned. Adolescents living with HIV aged 15-19 years had higher comprehensive knowledge of contraceptive methods (58 percent) compared to younger adolescents aged 10-14 years (8 percent) ($p=0.000$). See Table 1.

Table 1: Comprehensive knowledge of contraceptive methods by background variables

Background Characteristic	No omprehensive Knowledge	Comprehensive Knowledge	Total Percent	Number	P-value
Age group					
10-14 years	92.0	8.0	100.0	87	0.000
15-19 years	41.9	58.1	100.0	31	
Sex of respondent					
Female	78.1	21.9	100.0	64	0.842
Male	79.6	20.4	100.0	54	
Level of education					
Incomplete Primary	91.4	8.6	100.0	81	0.000
Completed Primary	100.0	0.0	100.0	7	
Some Secondary	46.2	53.8	100.0	26	
Completed Secondary	0.0	100.0	100.0	4	
Religion					
Christians excl. Apostolics	77.5	22.5	100.0	102	0.591
Apostolics	85.7	14.3	100.0	14	
Total	80.5	19.5	100.0	118	

SEXUAL AND REPRODUCTIVE HEALTH AND HIV-RELATED BEHAVIOURS OF ADOLESCENTS LIVING WITH HIV

Six percent of the respondents reported that they were in a relationship. Older adolescents aged 15-19 years were more likely to be in a relationship

(16 percent) than those aged 10-14 years (2 percent) ($p=0.005$). Female participants were more likely to be in relationships (11 percent) compared to their male counterparts (0 percent) ($p=0.012$). Level of education attained and religion were not associated with being in relationships. See Table 2.

Table 2: Percentage of adolescents living with HIV currently in a relationship by background characteristics

Background Characteristic	Not in a Relationship	In a Relationship	Total Percent	Number	P-value
Age group					
10-14 years	97.7	2.3	100.0	87	0.005
15-19 years	83.9	16.1	100.0	31	
Sex of respondent					
Female	89.1	10.9	100.0	64	0.012
Male	100.0	0.0	100.0	54	
Level of education					
Incomplete Primary	95.1	4.9	100.0	81	0.512
Completed Primary	100	0	100.0	7	
Some Secondary	88.5	11.5	100.0	26	
Completed Secondary	100	0	100.0	4	
Religion					
Christians	93.1	6.9	100.0	102	0.558
Apostolics	94.9	5.1	100.0	14	
Total	94.0	6.0	100.0	118	

The main reason for not being in relationships emerged from the FGDs. Both male and female FGD participants in the 15-19 years age group were not sure on relationships due to their HIV-status as highlighted below:

As an ALHIV, can I be in a relationship? I am not confident to approach a girl due to my HIV positive status. (Male FGD participant)

Can I be in a relationship with someone who is HIV positive only or I can also be in a relationship with someone HIV negative? (Female FGD participant)

All respondents, including those who were in relationships, reported that they never had sex. Table 3 shows the desire to have sex by background variables. The majority of respondents reported that they never had the desire to have sex (80 percent) while 14 percent of respondents reported that they sometimes had the desire to have sex and 5 percent had the desire most of the times. Older adolescents aged 15-19 years were more likely to have desire to have sex (13 percent) than the younger adolescents aged 10-14 years (2 percent) ($p=0.023$).

Table 3: Desire to have sex of adolescents living with HIV by background characteristics

Background Characteristic	Never	Rarely	Sometimes	Most of the time	Total Percent	Number	P-value
Age group							
10-14 years	85.1	2.3	10.3	2.3	100.0	87	0.023
15-19 years	64.5	0.0	22.6	12.9	100.0	31	
Sex of respondent							
Female	85.9	0.0	10.9	3.1	100.0	64	0.185
Male	72.2	3.7	16.7	7.4	100.0	54	
Level of education							
Incomplete Primary	81.5	2.5	11.1	4.9	100.0	81	0.498
Completed Primary	100.0	0.0	0.0	0.0	100.0	7	
Some Secondary	65.4	0.0	26.9	7.7	100.0	26	
Completed Secondary	100.0	0.0	0.0	0.0	0.0	4	
Religion							
Christianity	78.4	2.0	15.7	3.9	100.0	102	0.456
Apostolic	85.7	0.0	0.0	14.3	100.0	14	
Total	79.7	1.7	13.6	5.1	100.0	118	

Table 4 shows the intention to have sex in future by background variables. The majority of respondents intend to have sex in future (62 percent). A higher proportion of older adolescents aged 15-19 years were more likely to have the intention to have sex in future (87 percent) compared to younger

adolescents aged 10-14 years (53 percent) ($p=0.023$). Adolescents with incomplete primary school were less likely to have sex in future (53 percent) compared to those with complete secondary education (100 percent) ($p=0.025$).

Table 4: Intention to have sex in future by background variables

	Don't intend to have sex	Intend to have sex	Total Percent	Number	P-value
Age group					
10-14 years	47.1	52.9	100.0	87	0.023
15-19 years	12.9	87.1	100.0	31	
Sex of respondent					
Female	42.2	57.8	100.0	64	0.185
Male	33.3	66.7	100.0	54	
Level of education					
Incomplete Primary	46.9	53.1	100.0	81	0.025
Completed Primary	28.6	71.4	100.0	7	
Some Secondary	19.2	80.8	100.0	26	
Completed Secondary	0.0	100.0	100.0	4	
Religion					
Christianity	39.2	60.8	100.0	102	0.517
Apostolic	35.7	64.3	100.0	14	
Total	38.1	61.9	100.0	118	

ACCESS TO SEXUAL AND REPRODUCTIVE HEALTH SERVICES BY ADOLESCENTS LIVING WITH HIV

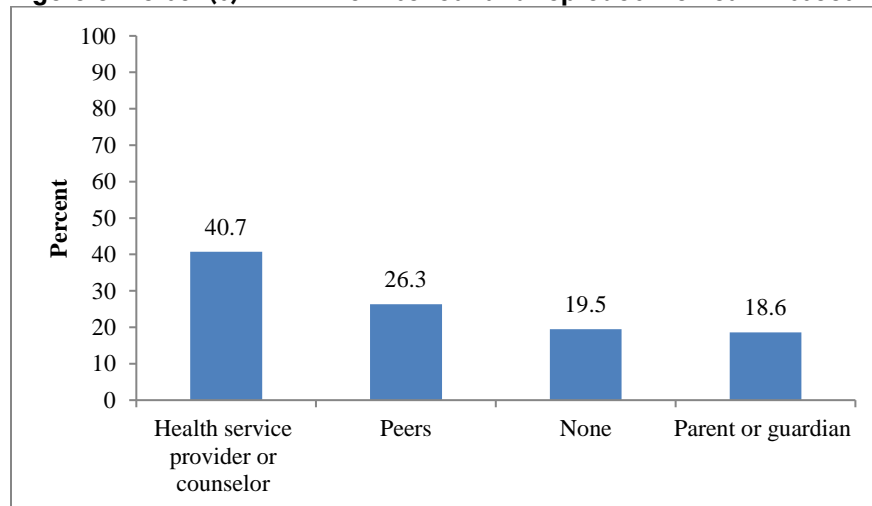
Less than half of the ALHIV (41 percent) reported talking to a health service provider about SRH issues including sexuality, contraceptives, condoms, STIs, pregnancy, and childbearing. One health staff had this to say about access to SRH services and related information by ALHIV:

There is general lack of access to SRH services by ALHIV, for example,

contraceptives, pregnancy and childbearing services.

Figure 3 shows the person(s) with whom SRH services were discussed. Forty-one percent of the ALHIV accessed SRH services from health service providers or counsellors. The least proportion of respondents talked to parents or guardians about SRH issues (19 percent) while 20 percent did not talk to anyone about SRH issues.

Figure 3: Person(s) with whom sexual and reproductive health issues were discussed



BARRIERS TO ACCESSING SEXUAL AND REPRODUCTIVE HEALTH SERVICES BY ADOLESCENTS LIVING WITH HIV

Adolescents living with HIV face policy, institutional, community/socio-cultural and individual (intra-personal) barriers in accessing SRH services as indicated below:

Policy level barriers

It was reported that the national policies are not clear on the access to SRH services by adolescents.

There is an overwhelming need for SRH services by adolescents in general, including ALHIV. However, national policies are not clear on the access to SRH services by adolescents. Access to SRH services is still a grey area at policy level. Access to SRH services by ALHIV is left to the discretion of the individual health worker. (National/Policy Level Family Health Staff)
The government policy does not allow us to ask or get SRH services. (15-19-year-old male FGD participant)

Institutional level

Barriers cited at institutional level include lack of ALHIV-friendly environment/services at health centres and SRH IEC materials which are not specific to ALHIV. The following comments came from the qualitative data.

There is lack of ALHIV-friendly environment at health centres, as adolescents mix with adults in accessing SRH services. (Health Staff)

Adolescents living with HIV mainly access HIV-related treatment. There is limited access to other SRH services besides treatment". (Support Group Chairperson)

Available SRH IEC material is generic and not specific to ALHIV. (Health Staff)

Community (socio-cultural) level

Factors affecting access to SRH services by ALHIV cited include stigma from the community, including health staff, and cultural practices where SRH issues are not openly discussed.

Cultural practices, where SRH issues are not openly discussed. This is even worse for ALHIV due to their HIV positive status, as community does not expect them to have sex. (Health Staff)

Family level

At family level, the main barrier to access of SRH services was the belief in social norms and values of non-discussion of SRH issues with the children.

Individual level

The study found that the barriers to access of SRH services at individual level include lack of knowledge of SRH, non-discussion of SRH issues as they were shy, felt that they were too young, and believed that there was no need to discuss SRH issues.

Discussion

The study was conducted among adolescents living with HIV in Gweru Rural District in Zimbabwe to investigate SRH issues among ALHIV. The study was cross-sectional and used a mixed method research design of qualitative and quantitative methods. Research tools used were the questionnaires and FGDs with ALHIV and key-informant interviews at district and national levels.

Sexual and reproductive health and HIV-related behaviours of adolescents living with HIV

The study shows that most of the adolescents living with HIV were not in relationships (94 percent). The fear of rejection after disclosing their HIV status to their partners discourages them from starting relationships¹⁰. The few relationships can also be a result of stunted growth due to HIV. The small percentage of ALHIV who were in relationships is unusual and inconsistent with the fact that dating is normal among adolescents, as demonstrated by other studies among adolescents in Kenya, Tanzania, Uganda and Zambia^{4,5,10}. The finding suggests social desirability bias where the general context in which adolescents in general are socially not expected or are discouraged to date, although they do it. Sexual activity is a key determinant of SRH for ALHIV. All respondents reported that they never had sex. The absence of sexual engagement among the adolescents is abnormal as seen from other studies in other countries, ranging from 10 percent to 50 percent⁵. The fact that they never had sex could be explained by their not being in relationships or never having been in relationships.

Although ALHIV had never had sex, a fifth had the desire to have sex currently while the majority of respondents intended to have sex in future. These findings substantiate other studies in Zambia, Uganda, and Kenya^{4,5}. This shows that, being HIV positive does not remove the desires for sexual relationships, just like any other adolescent. The intention by ALHIV to have sex in future demands that interventions addressing SRH issues for ALHIV should focus on safe sex. The fact that ALHIV were not sexually active could be a blessing in disguise, given their limited knowledge about contraception as well as about HIV transmission. However, in a strategic context, low levels of comprehensive knowledge of contraceptive methods poses a major risk factor as it will mean ALHIV will not have

sufficient information to make protective decisions when they decide to engage in sexual activity.

Sexual and reproductive health and HIV-related knowledge of adolescents living with HIV

Adolescents aged 15-19 years had more comprehensive knowledge of HIV transmission as compared to the young adolescents aged 10-14 years. This is attributed to the fact that some information about sexual transmission is often provided to those who are relatively older and most likely to have sex. It also points to the gaps in SRH programming for ALHIV, which predominantly focuses on adherence to treatment without corresponding focus on HIV prevention. The importance of interventions that prioritise addressing SRH issues for ALHIV is underlined by the fact that 80 percent of the ALHIV in this study lacked comprehensive knowledge of HIV transmission routes and positive prevention. Lack of comprehensive knowledge on HIV transmission routes, positive prevention and related misconceptions increase the likelihood of engaging in unsafe sex, exposes ALHIV to HIV reinfection, treatment failure and consequently, overall waste of resources invested in treatment. Most of the ALHIV were not familiar with the modern contraceptive methods. The finding is valid given challenges around access to information for adolescents, especially in a rural context. In addition, low levels of knowledge about contraceptive methods could be attributed to the fact that adolescents were not sexually active. There are even lower proportions of ALHIV with knowledge on modern contraceptive methods in Gweru rural compared to findings from other studies in Uganda and Kenya^{4,5}. Lack of knowledge on modern contraception exposes ALHIV to unwanted pregnancies. The ASRH Advocacy Package for Zimbabwe sufficiently captures the challenges related to lack of comprehensive SRH knowledge by concluding that, limited comprehensive SRH education leads to uninformed decisions that result in poor SRH outcomes among young people⁸.

Access to sexual and reproductive health services by adolescents living with HIV

Adolescents Living with HIV mainly access HIV-related services in Gweru Rural District. The study shows that there is limited access to other SRH services besides HIV treatment in Gweru Rural District, as less than half of ALHIV reported talking to a health service provider or counsellor about SRH issues. Findings are consistent with other studies in Kenya and Zambia which reported limited access to SRH services^{4,10}. However, access to SRH services for ALHIV is higher in Kenya, where nearly all

respondents reported having talked to service providers/counsellors mostly about living life as a young person with HIV⁴. Reasons for limited access to SRH services included the general lack of service, especially in rural areas, the services were not youth-friendly, and stigma and discrimination.

Barriers to accessing sexual and reproductive health services by adolescents living with HIV

Study findings show that adolescents living with HIV face barriers to accessing SRH services at policy, programmatic, community, family and individual levels. At individual level, the key barriers to accessing SRH services are lack of knowledge of SRH issues, shyness to discuss SRH issues, feeling too young to discuss SRH issues and feeling that there is no need to discuss SRH issues. At community level, beliefs and cultural issues that do not accept the importance of SRH issues for adolescents were mentioned as key barriers. The situation is further complicated for ALHIV as community does not expect them to have sex because of their HIV sero-status. National policies are not clear on access to SRH services by adolescents. This undermines initiatives to enhance access to HIV prevention, treatment and care services for adolescents and young people. As a result, provision of SRH services by ALHIV is left to the discretion of the individual health worker. Health workers reiterated that they can only selectively provide SRH information to ALHIV but not SRH services. Absence of SRH information and services for ALHIV could be attributed to the absence of policy prioritisation, as well as health service provider capacities and attitudes. The findings point to key structural factors affecting access to SRH services in general and further constraints related to ages of adolescents who are considered too young to access some of the SRH services. Their positive HIV sero-status means that they face additional barriers, although they have elevated risks of being affected by various SRH challenges, including unplanned pregnancies, STIs as well as re-infection. A similar nationally representative study focusing on SRH issues for ALHIV in both rural and urban districts of Zimbabwe is recommended.

Noting that young people are socialized first in the family, then in the community where there are secondary socialization entities such as schools, religious groups and other social groups, the model must aim at reaching all adolescents and all communities. Hence, the target population must include parents. Note that parents also lack adequate knowledge on the negative effects of some sexual practices, and how to prevent diseases that might be caused, while at the same time they might be pushed by economic, religious pressures

and other cultural norms and values that perceive early child marriages as a solution. The second target group are adolescents out of school who are either staying idle at home or are already in the informal sector, including performing sex work, which makes them more susceptible to STIs including HIV. Another important group are religious and community leaders who are generally respected in their respective communities, hence important in addressing issues of norms and values regarding SRH in this case. Changes in norms and values from this group are more acceptable granted that these groups are perceived as custodians of tradition.

Limitations

The study was on ALHIV, and it was difficult to identify the participants. This was achieved by engaging the Zvandiri Programme which deals with ALHIV. However, there could be bias on the fact that this group was benefiting on the services provided. The study was conducted in one district of the country. However, the results could provide information on SRH issues among ALHIV.

Conclusion

The study has clearly shown that adolescents in Zimbabwe are still facing numerous barriers which prevent them from taking protective actions against HIV even though four decades have now elapsed with the HIV pandemic. Adolescents living with HIV face key structural challenges that affect their access to SRH services. Challenges faced are at the intrapersonal, interpersonal, community, health facility and national/policy levels. At the personal level, ALHIV struggle with relationships and lack of comprehensive SRH knowledge, which are likely to result in them not having sufficient competencies to respond to situations that expose them to SRH challenges. At the interpersonal as well as at community level, ALHIV often face challenges related to stigma and discrimination which ultimately result in them not having sufficient information and failing to access key SRH services. Health facilities and health workers are not equipped to support young people and more specifically ALHIV, which means that even if ALHIV are equipped with information and seek services, they are unlikely to be provided with the services in a friendly manner that strengthens retention. The limited clarity of national policies on access to SRH services by adolescents has contributed towards challenges noted by the study. The study concludes that limited access to SRH services by ALHIV exposes them to negative SRH outcomes, such as unplanned pregnancies, STIs and HIV re-infection. In addition, they are likely to infect others, especially

as their positive sero-status make them potential vectors of the epidemic.

The following recommendations intend to facilitate improved access to SRH services by ALHIV in rural Zimbabwe:

- The MoHCC and stakeholders to finalize an evidence-informed clear policy on access to SRH services for adolescents in general, incorporating specific sections on unique SRH needs of ALHIV;
- The MoHCC and Ministry of Primary and Secondary Education (MoPSE) to implement the Eastern and Southern Africa (ESA) Ministerial commitment on comprehensive sexuality education and health services for adolescents and young people;
- The MoHCC and stakeholders to establish and revitalize youth-friendly centres based on rigorously tested models like the Zvandiri Programme and ensure their approaches and discussions move beyond psychosocial support and treatment adherence towards including discussions on dating, family planning along with ways of preventing HIV transmission and (re)acquisition;
- The MoHCC and stakeholders to develop harmonized adolescent SRH materials with specific focus on ALHIV SRH issues including family planning, condom use, disclosure, and secondary prevention; and The MoHCC and its partners should implement multi-sectoral awareness/education interventions on SRH issues and services for adolescents in general with a component on ALHIV.

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Declarations

ETHICS APPROVAL

The study received ethics approval from the Medical Research Council of Zimbabwe.

COMPETING INTEREST

There were no competing interests declared by authors of this study.

Authors' Contributions

Amos Milanzi contributed to this paper by participating in the study's methodology, data collection, data analysis and write-up. Naomi

Wekwete contributed by providing the background, literature review and discussion sections.

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