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Adolescent Pathways to Abortion Care in Lusaka, Zambia: Evidence from Routine Data

Hambweka S Munkombwe[1*], Samson Chisele[2], Tizta Tilahun Degfie[1,3]

[1]Department of Public Health, School of Post-Graduate Studies, University of Lusaka, Lusaka, Zambia.
[2]University Teaching Hospital-Women and Newborn Hospital, Lusaka, Zambia.
[3]Department of Reproductive Health and Population Studies, Bahir Dar University, Ethiopia.

[*]Corresponding Author: Hambweka Munkombwe

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ABSTRACT

Background: Adolescents in sub-Saharan Africa face significant barriers to accessing safe abortion services. In Zambia, empirical data on adolescents' interactions with abortion services within the health system are limited. This study aimed to describe the characteristics and service utilisation patterns of adolescents seeking abortion care in Lusaka Province.

Methods: A retrospective, descriptive, observational study was conducted using routinely collected electronic medical records of adolescents aged 12 - 19 years who accessed abortion care between 2016 and 2020. A sample of 390 cases was selected by simple random sampling. Data were analysed using descriptive statistics to examine demographic characteristics, clinical management patterns, and post-abortion contraceptive uptake.

Results: The mean age of adolescents was 17.8 years, and the mean gestational age at presentation was 9.0 weeks. Service utilisation was concentrated in Lusaka District (90.0%). Diagnoses were evenly split between incomplete abortion (50.8%) and induced abortion (49.2%). Clinical management varied by diagnosis and facility level. Post-abortion contraceptive uptake was moderate; 21.8% of adolescents did not receive a contraceptive method. Uptake was lower among adolescents presenting with incomplete abortion and those managed at tertiary facilities.

Conclusion: Although adolescents who access formal services receive structured and guideline-aligned care, substantial gaps remain in equitable access and in the provision of post-abortion contraception. The high proportion of incomplete abortion cases may suggest continued reliance on informal abortion pathways. Strengthening the availability and readiness of adolescent-friendly services across different levels of care is critical to enhancing access to safe abortion.

Keywords: *Adolescent abortion; Abortion services; Post-abortion care; Contraceptive uptake; Health system utilisation; Zambia*

INTRODUCTION

Globally, about 1 in 10 births occur among adolescents, and 90% of these occur in developing countries **[1]**. In low- and middle-income countries (LMICs), annual statistics indicate that approximately 21 million adolescent pregnancies occur **[2,3]**, 50% of which are unplanned **[3]**. In addition, adolescents are identified as facing critical sexual and reproductive health care needs, with adolescent girls aged 15–19 having higher unmet contraceptive needs at 43% compared with all women of reproductive age at 24% **[3]**. Furthermore, adolescent pregnancy prevalence in Africa

as a whole continent is estimated to be 18.8%, while in sub-Saharan Africa (SSA), the prevalence is estimated at 19.3% **[4]**. According to a systematic review and meta-analysis, the weighted pregnancy prevalence rate among adolescents aged 10 to 19 years in Southern Africa was 22% **[5]**. Moreover, early sexual debut is common in Africa, with about 61% of girls becoming sexually active by age 18 years **[6]**.

Adolescent pregnancy is a significant public health concern in African countries because of its association with maternal and child morbidity and mortality **[1,2]**. These pregnancies are linked to elevated maternal risks and child health issues, including low birthweight and neonatal morbidity **[2]**. Adolescents face numerous barriers to contraceptive access, including fear of stigma related to sexual activity and partner pressure to conceive **[3]**. Unmarried adolescents, in particular, experience sociocultural stigma upon becoming pregnant, which may lead to unsafe abortion in cases of unplanned pregnancy **[7]**. In SSA, approximately 45% of pregnancies among adolescents aged 15 to 19 are unplanned, resulting in both unplanned births and unsafe abortions **[8]**. Contributing factors to unintended pregnancies include early sexual debut, attitudes toward contraception, and beliefs about abstinence **[2]**, as well as lack of parental guidance, early marriage, and religious influences **[9]**.

Globally, an estimated 3.2 million unsafe abortions occur annually among adolescents aged 15 to 19 **[10]**. Approximately 98% of unsafe abortions occur in developing countries, and 48% involve adolescents and young women aged 15 to 25 years **[7]**. Africa bears a disproportionate burden, as adolescent girls aged 15–19 account for 25% of the estimated 6 million unsafe abortions and 22,000 abortion-related deaths **[11]**. Across African regions, sexually active adolescents are more vulnerable to barriers to abortion access than women aged 20 and older **[7]**. Unsafe abortion is particularly prevalent among girls from disadvantaged backgrounds, younger age groups, and the unmarried **[7]**. Adolescents seek abortion to continue their education **[10]**. However, gender, stigma, and socioeconomic status complicate autonomous decision-making about abortion access **[7,12]**. Consequently, delays in accessing abortion services are common, with many adolescents seeking care in the second trimester **[7,10]**.

Adolescents are significantly more likely than older women to experience abortion-related complications **[10]**. They are also at increased risk of unsafe abortion, with approximately 70% requiring hospital care in Africa **[12]**. Bleeding is the leading cause of hospital admission after unsafe abortion, with other risks including sepsis, anaemia, and trauma **[7]**. These complications predominantly occur when abortions are performed by unprofessional or clandestine providers. Preventing unintended pregnancies and ensuring access to safe abortion services are critical **[7]**. Strategies to address these issues include expanding access to contraception, providing legal and safe abortion options, and delivering comprehensive sexuality education **[7,13]**.

The adolescent population accounts for approximately 24% of Zambia's total population **[8]**. The prevalence of adolescent pregnancy remains high, with estimates of 29.2% **[4]** and 29.9% **[8]**. Adolescent and unmarried girls face multiple forms of stigma related to accessing contraception, experiencing unintended pregnancy, and terminating an unintended pregnancy **[14]**. Unmet needs for family planning are substantial, particularly among unmarried women who wish to delay pregnancy **[15]**. Limited knowledge of abortion and contraception among adolescents has been documented **[16]**, increasing the likelihood that younger women will resort to unsafe abortions following unplanned pregnancies **[15]**. Unsafe abortion is a significant concern in Zambia, ranking among the top five causes of maternal mortality **[14]**. Although many public health facilities offer safe abortion services at all levels, the exact number of such facilities is unknown **[15]**.

A study in Ethiopia, Zambia, and Malawi found that approximately 66% of abortions among adolescents in Zambia are unsafe, and delays in accessing abortion services were reported in 73% of cases **[12]**.

Moreover, Zambia is recognised as one of the countries in sub-Saharan Africa with a more liberal abortion law **[15]**. Termination of pregnancy (TOP) is permitted for various reasons, including "the need to save the life of the woman, to preserve the physical and mental health of the mother, foetal impairment and economic or social reasons, including minors (under 18 years old)" **[17]**. Specifically, the TOP Act allows termination if "continuing a pregnancy involves a risk to the life of the pregnant woman, her physical or mental health or that of any of her existing children, greater than if the pregnancy were terminated; a child born of the pregnancy would suffer from physical or mental abnormalities as to be seriously handicapped or the woman was raped" **[15]**. This abortion law is considered progressive because it includes provisions for the physical and mental health of the pregnant woman's existing children and allows consideration of the pregnant woman's environment and age **[12]**. Despite laws that permit termination of pregnancy for health and socio-economic reasons, access to safe abortion is impeded by many factors, including legal provisions of the TOP Act that require 3 doctors, one of whom is a specialist **[14]**. In addition, the law requires that abortions be offered only in health facilities registered by the health professionals' governing body **[12]**.

Reliable data on abortion in sub-Saharan Africa are limited due to the sensitive and legally regulated nature of abortion, as well as persistent stigma **[18]**. In many LMICs, abortion is frequently underreported, and comprehensive official statistics are often unavailable **[19]**. Existing data are typically incomplete, inconsistent, or of variable quality, reflecting deficiencies in reporting systems and documentation practices **[18]**. In Zambia, despite abortion being permitted under specific conditions, access remains restricted, and service provision is uneven, further complicating accurate data collection **[20]**. Studies indicate that the number of facilities providing abortion services is poorly documented, and routine data systems may not fully capture the true extent and patterns of abortion care **[12,15]**.

Facility-based routine data provides a practical and valuable resource for understanding adolescent abortion care, as they reflect actual service utilisation within the health system. These data offer insights into clinical characteristics, methods employed, and post-abortion care practices. Although routine data may be limited by incompleteness and variable documentation quality, they remain among the most accessible and systematic sources of empirical evidence in settings where population-level data are lacking. Analysis of facility records helps address data gaps and improves understanding of adolescent interactions with abortion services in the formal health system.

This study aimed to describe the characteristics and service utilisation patterns of adolescents seeking abortion care in Lusaka, Zambia, using retrospective facility-level data collected from 2016 to 2020.

MATERIALS & METHODS

Study design

This study employed a retrospective, observational design using routinely collected facility-level data from 2016 to 2020. The use of existing clinical records enabled analysis of service utilisation patterns and clinical practices within the health system **[18,19,20].** Such approaches are valuable when routine health data provide an accessible and practical source of evidence for understanding healthcare delivery and informing service planning **[21].**

Setting

The study was conducted in Lusaka Province, covering Lusaka and Chongwe districts. The dataset comprised health

facilities recorded in an electronic medical records database supported by Ipas Zambia in collaboration with the Ministry of Health. The database included facilities at tertiary, level-one, and primary healthcare levels. In total, the dataset comprised 2 tertiary hospitals, 7 level-one hospitals, and 7 primary healthcare facilities. These facilities are those included in the database and do not represent all facilities within the districts.

Population

The study population was adolescents accessing termination of pregnancy (TOP) and post abortion care (PAC) services as captured in medical records. Inclusion criteria were recorded cases of adolescents aged 12–19 years captured in the electronic medical records database. Records with available data on key study variables were included in the analysis. The electronic medical records were obtained from a database supported by Ipas Zambia in collaboration with the Ministry of Health, covering selected public health facilities for the provision and documentation of abortion-related services.

Sample

Electronic medical records (EMRs) for adolescent girls who sought abortion care between 2016 and 2020 were used and selected using simple random sampling to ensure equal probability of inclusion **[22]**. The sample size was determined to ensure adequate representation of cases in the available dataset, using a conservative approach based on a 95% confidence level, a 5% margin of error, and an assumed 50% proportion in the absence of prior data **[23,24]**. After applying a finite population correction and adjusting for potential incomplete records, a final sample of 390 EMRs was obtained. Data were analysed descriptively and presented in tables to highlight key patterns, without inferential statistical testing.

Variables

Variables included year of service utilisation, age, gestational age, facility, facility level, district, diagnosis (TOP or PAC), abortion method, and post-abortion contraception. Derived variables included trimester (from gestational age) and categorised post-abortion contraception (short-term methods, long-acting reversible contraception, none, and missing).

Analysis

Descriptive quantitative analysis was used. The purpose of the descriptive quantitative data analysis was not to test a hypothesis but rather to illuminate the contextual information of abortion services provided to adolescents by summarising documented patterns and characteristics from medical records **[25]**. Variables such as age, gestational age, type of procedure, post-abortion contraception, and others were analysed using simple descriptive statistics **[26]**. The quantitative descriptive analysis was conducted using SPSS version 16, and the results are presented in tables describing the variables using frequencies and percentages.

Ethical Permissions

Ethical approval was obtained from the University of Lusaka with approval Ref No.: FWA00033228-00103/25. Additional permissions were obtained from the National Health Research Authority and the Lusaka Provincial Health Office.

RESULTS

A total of 390 adolescent abortion-related cases were analysed, with complete data across all variables. The cases spanned 2016 to 2020, with the highest proportion recorded in 2017 (26.4%), followed by 2016 (23.6%), 2019 (22.1%), and 2018 (21.3%). A smaller proportion was recorded in 2020 (6.7%). The sample was drawn from public health facilities across Lusaka and Chongwe districts, including health centres, Level 1 hospitals, and tertiary institutions,

representing different levels of care within the health system.

Demographic and Clinical Characteristics of Adolescents

A total of 390 adolescent cases were analysed (Table 1). The mean age was 17.8 years (SD = 1.4), ranging from 12 to 19 years. The age distribution was skewed towards older adolescents, with those aged 18 – 19 years constituting the majority (70.8%), while younger adolescents (12 – 15 years) represented a small proportion (7.4%) of the sample. The mean gestational age at presentation was 9.0 weeks (SD = 4.4), with a range of 1 to 27 weeks.

Manual vacuum aspiration (MVA) was the most commonly used procedure (54.1%), followed by medical abortion with mifepristone and misoprostol (45.1%), while misoprostol-only regimens were rare (0.8%). Slightly more than half of cases were classified as incomplete abortions (50.8%), with the remainder as induced abortions (49.2%) (Table 1).

Table 1: Age, gestational age, procedure method, and diagnosis (N = 390)

Variable	Category	Value
Age (Years)	Mean (SD)	17.8 (1.4)
	Range	12-19
Gestation Age (weeks)	Mean (SD)	9 (4.4)
	Range	1-27
Procedure Method	MVA	211 (54.1%)
	Mifepristone + Misoprostol	176 (45.1%)
	Misoprostol only	3 (0.8%)
Diagnosis	Incomplete abortion	198 (50.8%)
	Induced abortion	192 (49.2%)

Health System Distribution of Adolescent Abortion Care

The distribution of adolescent abortion cases was heavily concentrated in Lusaka (90.0%), with a smaller share from Chongwe (10.0%). All tertiary-level services were located in Lusaka, whereas facilities in Chongwe were limited to lower levels of care (Table 2). This pattern may reflect differences in facility availability and referral structures.

Table 2: Distribution of cases by facility type and district (N = 390)

Site Type	Chongwe n (%)	Lusaka n (%)
Health Centre	11 (12.8)	75 (87.2)
Level 1	28 (16.0)	147 (84.0)
Tertiary	0 (0.0)	129 (100.0)
Total	39 (10.0)	351 (90.0)

Clinical Management Patterns

Procedure method by gestational age and diagnosis

Clear patterns in procedure use were observed across gestational age and diagnostic categories. Among adolescents presenting with incomplete abortion, MVA was the predominant method at all gestational ages, accounting for 99.5% of cases. This pattern was consistent across the first and second trimesters.

In contrast, among induced abortion cases, medical abortion with mifepristone and misoprostol was the most common method. In the first trimester, it accounted for 91.3% of cases, while a small proportion underwent MVA (7.7%). All second-trimester induced abortion cases were managed medically (Table 3).

Table 3: Distribution of Procedure Method by Trimester and Diagnosis (N = 390)

Incomplete Abortion (n= 198)				
Trimester	**MVA n (%)**	**Mifepristone + Misoprostol n (%)**	**Misoprostol only n (%)**	**Total**
First Trimester	151 (99.3)	0 (0.0)	1 (0.7)	152
Second Trimester	45 (100)	0 (0.0)	0 (0.0)	45
Third Trimester	1 (100)	0 (0.0)	0 (0.0)	1
Total	197 (99.5)	0 (0.0)	1 (0.5)	198
Induced Abortion (n=192)				
Trimester	MVA n (%)	Mifepristone + Misoprostol n (%)	Misoprostol only n (%)	Total
First Trimester	14 (7.7)	167 (91.3)	2 (1.1)	183
Second Trimester	0 (0.0)	9 (100.0)	0 (0.0)	9
Total	14 (7.3)	176 (91.7)	2 (1.0)	192

Procedure method by facility type

Procedures varied across care levels. At the health centre level (n = 86), the majority of adolescents were managed with medical abortion using mifepristone and misoprostol (96.5%), with minimal use of manual vacuum aspiration (2.3%). At Level 1 hospitals, both MVA (53.1%) and medical abortion (46.9%) were commonly used. In contrast, tertiary facilities predominantly used MVA (89.9%), with limited use of medical abortion (8.5%) (Table 4).

Table 4: Distribution of procedure methods by facility type (N = 390)

Site Type	**MVA n (%)**	**Mifepristone + Misoprostol n (%)**	**Misoprostol only n (%)**	**Total**
Health Centre (n=86)	2 (2.3)	83 (96.5)	1 (1.2)	86 (100)
Level 1 (n=175)	93 (53.1)	82 (46.9)	0 (0.0)	175 (100)
Tertiary (n=129)	116 (89.9)	11 (8.5)	2 (1.6)	129 (100)
Total	211 (54.1)	176 (45.1)	3 (0.8)	390 (100)

Distribution of Diagnosis by Facility Type

Diagnoses varied markedly by facility type. At the health centre level, nearly all cases were induced abortions (97.7%), with very few incomplete abortions (2.3%). At Level 1 hospitals, the distribution was relatively balanced. In contrast, tertiary facilities predominantly managed incomplete abortions (86.8%), with a smaller proportion of induced abortions (13.2%) (Table 5).

Table 5: Distribution of diagnosis by facility type (N = 390)

Site Type	**Incomplete n (%)**	**Induced abortion n (%)**
Health Centre (n = 86)	2 (2.3)	84 (97.7)
Level 1 (n = 175)	84 (48.0)	91 (52.0)
Tertiary (n = 129)	112 (86.8)	17 (13.2)
Total (N = 390)	198 (50.8)	192 (49.2)

Post-Abortion Contraception

Overall uptake

Most adolescents received a contraceptive method after abortion care. Short-term methods were the most commonly provided (61.0%), followed by LARC (13.6%). However, 21.8% of adolescents did not receive any contraceptive method, and documentation was missing in 3.6% of cases (Table 6).

Contraceptive uptake varied by diagnosis. Among adolescents presenting for induced abortion, most received short-term methods (69.3%), and a smaller proportion received long-acting reversible contraception (16.1%). Only 12.0% left without a contraceptive method. In contrast, among those presenting for incomplete abortion, uptake was lower, with 53.0% receiving short-term methods and 11.1% receiving LARC. Notably, nearly one-third (31.3%) of adolescents with incomplete abortion had no documented contraceptive method (Table 6).

Table 6: Overall post-abortion contraception uptake and by diagnosis (N = 390)

Contraception Category	Overall n (%)	Incomplete abortion n (%)	Induced abortion n (%)	
LARC	53 (13.6)	22 (11.1)	31 (16.1)	
Short-term	238 (61.0)	105 (53.0)	133 (69.3)	
No method	85 (21.8)	62 (31.3)	23 (12.0)	
No data	14 (3.6)	9 (4.5)	5 (2.6)	
Total	390 (100)	198 (100)	192 (100)	

Uptake by facility type

In addition to variation by diagnosis, contraceptive uptake was examined across facility levels to assess differences in post-abortion care provision within the health system. Short-term contraceptive methods were the most commonly reported across all facility types, accounting for 81.4% at health centres, 62.9% at Level 1 hospitals, and 45.0% at tertiary facilities. The proportion of adolescents leaving without a contraceptive method was highest at tertiary facilities (37.2%), compared with 20.0% at Level 1 hospitals and 2.3% at health centres. Uptake of long-acting reversible contraception (LARC) was relatively low but comparable across facility levels, ranging from 12.8% at health centres to 14.0% at tertiary facilities (Table 7).

Table 7: Post-abortion contraceptive uptake by facility level (N = 390)

Facility Level	LARC n (%)	No Method n (%)	No Data n (%)	Short-term n (%)
Health Centre (n = 86)	11 (12.8)	2 (2.3)	3 (3.5)	70 (81.4)
Level 1 Hospital (n = 175)	24 (13.7)	35 (20.0)	6 (3.4)	110 (62.9)
Tertiary Facility (n = 129)	18 (14.0)	48 (37.2)	5 (3.9)	58 (45.0)
Total (N = 390)	**53 (13.6)**	**85 (21.8)**	**14 (3.6)**	**238 (61.0)**

DISCUSSION

This study examined the characteristics and service utilisation patterns of adolescents seeking abortion care in Lusaka Province, using EMR facility-level data. The findings show that service utilisation was largely concentrated in Lusaka District, with most adolescents presenting early in pregnancy. Clinical management and post-abortion contraception provision varied by diagnosis and level of care. Manual vacuum aspiration (MVA) and medical abortion with mifepristone plus misoprostol were the primary methods, while misoprostol-only regimens were rarely used. Diagnoses were evenly split between incomplete and induced abortion. Although post-abortion contraception was commonly provided, a significant proportion of adolescents did not receive any method. Notable differences in post-abortion contraception uptake by diagnosis and facility type suggest missed opportunities for pregnancy prevention and inconsistent service integration across the health system. Similar patterns have been reported in other studies, with post-abortion contraception uptake higher after induced abortion than after post-abortion care. These differences reflect variations in service integration and continuity of care **[3,15]**.

The pronounced concentration of cases in Lusaka District, an urban city, compared with Chongwe, a peri-urban district, indicates that access to facility-based abortion care is geographically uneven. Adolescents utilised services at all levels of care; however, the higher number of cases at Level 1 hospitals and tertiary facilities likely reflects disparities in service availability, provider capacity, and referral systems. This distribution aligns with evidence that, despite a relatively liberal legal framework, abortion service provision in Zambia remains inconsistent and is constrained by resource and implementation challenges **[12,15]**. As a result, adolescents in peri-urban areas may face additional barriers, including distance, transport costs, and limited awareness of available services, which have been identified as key constraints to accessing abortion care in similar settings **[12,15,18]**. These findings

underscore the need to improve the availability and readiness of adolescent-friendly abortion and post-abortion care services at lower-level facilities **[18,20]**.

The mean age of adolescents was 17.8 years, with a clear skew towards older adolescents, who constituted the majority of cases (70.8%). Younger adolescents were minimally represented. This pattern aligns with existing literature indicating that younger adolescents face greater barriers to accessing sexual and reproductive health services, including dependence on adults, fear of disclosure, and heightened stigma **[10,14,16]**. It may also reflect differences in sexual exposure, as older adolescents are more likely to be sexually active **[6]** and therefore more likely to require abortion-related services. As a result, the observed age distribution may partly reflect both differences in access to services and underlying patterns of need.

Adolescents predominantly presented early in pregnancy, with a mean gestational age of 9.0 weeks. This finding should be interpreted with caution, as routine data do not capture adolescents who do not access formal services. Notably, despite early presentation, more than half of the cases were classified as incomplete abortions, suggesting that some adolescents may have initiated abortion outside the formal health system before seeking facility-based care. This observation aligns with evidence that incomplete abortion cases in facilities often stem from prior attempts at termination in informal or unsafe settings, driven by stigma, limited knowledge, and implementation barriers within legal frameworks **[7,12,14,15]**. The coexistence of induced abortion services and a high burden of post-abortion care underscores ongoing gaps in the utilisation of safe abortion services.

Clear differences in clinical management were identified across diagnoses, gestational ages, and facility levels. MVA was employed almost exclusively for incomplete abortion cases, whereas induced abortion was primarily managed with medical abortion using mifepristone plus misoprostol. These patterns suggest that clinical management may be influenced by diagnosis, facility level, and the organisation of services. While MVA was primarily used for incomplete abortion in this dataset and medical abortion mainly for induced abortion, this should not be interpreted as a strict clinical separation, as both MVA and medical abortion are recommended options for early induced abortion **[27]**. The observed pattern likely reflects underlying differences in case mix, provider practices, commodity availability, and referral pathways across levels of care.

Facility-level variations, with health centres mainly utilising medical abortion and tertiary facilities predominantly employing MVA, likely reflect differences in case mix, provider expertise, and referral processes. The concentration of incomplete abortion cases at tertiary facilities may further suggest that adolescents with complications are more frequently referred to higher levels of care. Although global evidence demonstrates low complication rates for safe abortion within formal systems **[7,10]**, this analysis is focused on service utilisation patterns rather than clinical outcomes.

Post-abortion contraceptive uptake was moderate, with most adolescents receiving a method; however, over one in five left without a documented method, representing missed opportunities to prevent repeat unintended pregnancies. Uptake varied considerably by diagnosis and facility type. Adolescents undergoing induced abortion were more likely to receive contraception, whereas nearly one-third of those presenting with incomplete abortion did not have a documented method. The proportion leaving without contraception was highest at tertiary facilities, where incomplete abortion cases were most prevalent. These findings suggest that post-abortion family planning is more consistently integrated into induced abortion services and lower-level facilities, whereas gaps persist in post-abortion care pathways, particularly at higher levels of care. Although short-term methods were most

commonly provided, uptake of long-acting reversible contraception (LARC) remained low across facility levels (12.8%–14.0%), underscoring the need to enhance counselling, expand method choice, and improve service integration **[3,15]**.

Collectively, these findings reveal a persistent gap between Zambia's relatively liberal abortion law and adolescents' access to timely, safe, and comprehensive care. The concentration of services in Lusaka, the high proportion of incomplete abortion cases, and the inconsistent provision of post-abortion contraception indicate that structural, social, and health-system factors continue to shape adolescents' access to care **[12,14,15]**. The observed distribution of services likely reflects variations in facility readiness, service availability, and partner-supported implementation across districts. Addressing these challenges will require strengthening service readiness at lower-level facilities, enhancing referral systems, reducing stigma, and ensuring the consistent provision of post-abortion contraception and adolescent-friendly counselling **[3,15]**.

Limitations

These findings should be interpreted in light of the limitations inherent in routine facility-level data. Although such data are valuable for assessing service utilisation, they do not capture adolescents who do not access formal care or whose cases remain undocumented. Consequently, the results reflect patterns within the health system rather than the full burden of adolescent abortion. In addition, the retrospective design limited control over data quality and completeness, introducing potential biases and confounding. As a descriptive study without a comparison group, it does not permit causal inferences, and the findings should be interpreted accordingly.

CONCLUSION

This study offers important insights into adolescent abortion care within the formal health system in Lusaka Province. Although adolescents who access services receive structured, guideline-aligned care, gaps persist in equitable access and provision of post-abortion contraception. The high proportion of incomplete abortion cases suggests that some adolescents may rely on informal or unsafe pathways before reaching health facilities. Variations across facility levels further indicate inconsistencies in service integration. Addressing these gaps requires strengthening the availability and readiness of adolescent-friendly services and improving the integration of post-abortion family planning across levels of care. These efforts are critical to improving access to safe abortion and reducing reliance on unsafe practices among adolescents in Zambia.

Declaration by Authors

Ethical Approval: Approved

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