











DEALING WITH TEENAGE PREGNANCY, ABORTION, AND DATA QUALITY IN HEALTHCARE FACILITIES IN UGANDA: CHALLENGES AND OPPORTUNITIES

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SUMMARY

A global analysis of abortion based on WHO data from 2010 to 2014 demonstrates substantial disparities between safe and unsafe abortions globally. Of the total abortions recorded, 30.6 million were classified as safe, while 25.1 million were unsafe, with 17.1 million considered less safe and 8 million deemed least safe. Notably, 97% of unsafe abortions occurred in low-income countries, indicating a significant public health concern. In Africa, the regional distribution of abortions varied, with Eastern Africa reporting the highest number (2.65 million), followed by Western (2.14 million), Northern (1.92 million), Southern Africa (510,000) and Oceania recording 144,000 abortions (Ganatra et al., 2017). The prevalence of unsafe abortions is reported to be markedly higher in low-income countries (49.5%) compared to high-income countries (12.5%), with restrictive abortion laws closely associated with increased rates of unsafe procedures (WHO, 2024).

In Uganda, teenage pregnancy and unsafe abortions are major public health challenges, with approximately 25% of teenage girls affected. Many abortions

occur outside formal healthcare systems, highlighting the need for strengthened legal healthcare infrastructure for post-abortion care management (Ochen, Chi, & Lawoko, 2019).

BACKGROUND AND CONTEXT

Introduction

Teenage pregnancy and unsafe abortion remain significant public health challenges in Uganda, despite existing frameworks such as the Sustainable Development Goals (SDGs), SDG 3 (Good Health and Well-being), and SDG 4 (Quality Education) which emphasize the importance of accessible health services and education in preventing adolescent pregnancies. Additionally, Uganda's National Development Plan (NDP III) and Vision 2040 align with SDG target 5.3, which seeks to eliminate child marriage and teenage 2030 through pregnancy by strengthened institutional frameworks. Districts such as Kamuli. Mayuge, and Wakiso contribute substantially to the prevalence of abortion and post-abortion care (Prada et al., 2016), making them important for CEHURD. Thus a retrospective study on teenage pregnancy and abortion was conducted (CEHURD, 2023).

Challenges including limited access reproductive health services. restrictive abortion laws, and social stigma continue to exacerbate maternal morbidity and mortality among adolescents (Atuhairwe et al., 2021). The COVID-19 pandemic further worsened these issues by increasing unintended pregnancies, unsafe abortions, early marriages, and school dropouts, leading to a cycle of poverty and poor health for affected young girls. The health risks associated with teenage pregnancy, obstructed labour. such as haemorrhage, postpartum maternal death, are severe (Musaba et al., 2020). Additionally, adolescents resorting to unsafe abortions face complications including infections, death. The infertility. and socio-economic impact is intense, with many girls dropping out of school, perpetuating cycles of poverty and reduced opportunities (Senkyire, Boateng, Boakye, Logo, & Ohaja, 2022).

CONTEXT

To understand the extent of this problem, this policy brief highlights key findings from two local research studies by Makerere University School of Public Health (MaKSPH) and the Center for Health, Human Rights and Development (CEHURD) respectively. The MakSPH study was undertaken in 2023 in collaboration with the Ministry of Health and Vital Strategies, USA. This study assessed the quality of post-abortion care data from 80 health facilities across Gulu. Mbarara, Mitvana, Kamuli, Nwoya, Kiruhura, Nakasongola, and Pallisa. The CEHURD retrospective study was undertaken in 2023 with a team of researchers from Mbarara University of Science and Technology (MUST). This study focused on teenage pregnancy and abortion in Kamuli, Mayuge, and Wakiso districts. Assessment of records on deliveries and post-abortion care across six health center IVs in these districts was done.

High rates of teenage pregnancy, combined with poor data quality in health facilities, hinder the effective monitoring of reproductive health outcomes, obstructing evidence-based interventions and policy development. Addressing these challenges is crucial for improving maternal health outcomes, reducing the strain on healthcare systems, and promoting gender equality by ensuring that teenage mothers have opportunities to return to school.

The Approach

The retrospective study on teenage pregnancy and abortion covered 24 months between October 2019 and June 2023 (taking 6 months' time across each year). A total of six health centre IVs participated in this study across the three districts of Wakiso, Kamuli and Mayuge. In Wakiso district, data was collected from Kajjansi HC IV and Wakiso HCIV. In Kamuli district, data was collected from Nankanadulo HC IV and Namwendwa HC IV and in

Mayuge district, data was collected from Mayuge HCIV and Kigandalo HCIV Quantitative data collected from health centre records on teen deliveries and postnatal care and post-abortion care, including threatened abortion Qualitative interviews were held with healthcare. workers and through key co-creation of key stakeholders, meetings such as police, senior men and women, head teachers, parents and quardians, community development officers, NGOs, Local Government, and religious leaders.

Key Findings

1. High Rates of Teenage Pregnancy and Unsafe Abortion:

Within the period covered, a total of 13,162 deliveries were recorded, 27.8% (3,661) were adolescent girls and young women aged 10-20 years. Of the 683 women who sought post-abortion care (PAC) services from 4/6 of the health centres, 46% (314) were adolescents, 13-18 years. PAC data was not available in 2 of the six health centres, partly because healthcare workers preferred not to include such information in their records.

This study also explored the situation of school re-entry and re-integration by teenagers after pregnancy as part of the implementation of the Ministry of Education and Sports Revised Guidelines for the prevention and management of teenage pregnancy in school settings. Several factors were found to hinder school return after pregnancy - child care economic burdens on the family, many young girls forced into marriage to avoid stigma, shame and blame from the community and lack of awareness and strategies on prevention and management of pregnancy in school.

Findings revealed that the districts of Kamuli, Mayuge, and Wakiso recorded a high incidence of teenage pregnancies and unsafe abortions, exacerbated by the COVID-19 pandemic. The lack of access to sexual and reproductive health education, lack of support systems for teenagers, absence of fathers, coupled with poverty and other socio-economic factors, have contributed to these trends (CEHURD, 2023). Sexual gender-based violence and child marriages remain high, especially among girls and young women. Sexuality education and the use of contraceptives among adolescents and young women is vaguely communicated to the public.

To illustrate this, a health worker remarked:

"Banange, can you imagine teenagers are doing nothing at home for two years? You can't tell parents to supervise them because parents must work. We have those trading centres where these days people have phones where they are on social media and watching pornography. And even the sugar daddies were ready to use our girls. Of course, COVID 19 affected us ehhh..." Health worker. Kamuli.

Unsafe abortions are particularly prevalent due to legal restrictions, social stigma, and limited access to safe reproductive health services, leading to severe health complications and increased maternal mortality among adolescents (CEHURD, 2023)

"Peer pressure is a big problem, you find the friends have done it before or know someone who has done it before, and so they will encourage their friend also to abort. Remember already they are fearing that their parents will chase them from home and even stop paying school fees. So at that time, it is the best option, and they have their friends to help them." Health worker Mayuge.

2. Data Quality Challenges in Health Facilities:

A Data Quality Assessment (DQA) conducted by Makerere University School of Public Health (MakSPH) across 80 health facilities in different districts in 2023 established that significant discrepancies in the recording, reporting, and management of health data. Challenges such as incomplete records. inaccuracies in patient data, and inconsistent reporting practices were identified, undermining the reliability of health statistics used for policymaking and program implementation. Over-reporting in the context of the DHIS2 refers to reporting health data in a manner that exceeds the actual occurrence of figures. This can happen when health facilities or personnel report more cases, events, or outcomes than what has genuinely occurred. Over-reporting leads to poor data quality which may not be trusted and hinders effective monitoring and evaluation of reproductive health programs, leading to gaps in service delivery and resource allocation. In data quality assessment (DQA) for post-abortion care (PAC), accuracy was used to refer to how data recorded in the Ministry of Health's DHIS2 system correctly reflects data recorded in the health facility registers. Consistency on the other hand refers to the degree to which the same data is uniformly recorded, presented, and reported across different data sources or time periods. Timeliness refers to how promptly data is collected, recorded, and reported relative to the period post-abortion care management occurred.

In the assessment, data for post-abortion care (PAC), antenatal care (ANC), total admissions, and live births were compared since ANC services often reflect the broader demand for reproductive health services, including PAC. It was envisaged that an imbalance between ANC and PAC data may indicate challenges with service availability, access to care, or data reporting. For instance, high ANC attendance but low PAC cases could point to poor referral systems or inaccuracies in data capture. Furthermore, comparing facility-level data with the DHIS2 system is essential for ensuring that services provided at health facilities are accurately reflected at the national level. Discrepancies, such as more PAC cases recorded at the facility than in DHIS2, may highlight gaps in data flow or reporting errors.



Figure 1: Accuracy of reporting ANC visits

Figure 1 shows that there was general overreporting of health facility ANC data in the DHIS2, although there was some underreporting in May 2022 for the first ANC visit. The total number of ANC visits seems to be the most overreported, especially in October 2021. Save for the 8th ANC visit, data for the 1st and 4th visit were almost in tandem for the health facility and HMIS data.

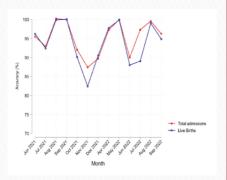


Figure 2: Accuracy of total admissions and live births.

Figure 2 shows a similar pattern of overreporting of total admissions and live birth data in the DHIS2 system. Overreporting occurred most frequently in November 2021. Also, the data pattern for accuracy of total admissions and live births was like ANC data where health facility data was almost a mirror image of what was found in the DHIS2.

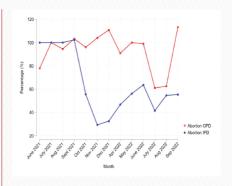
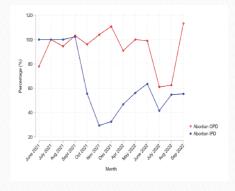


Figure 3: Accuracy of post-abortion care data

Figure 3 shows that post-abortion care (PAC) data is the least accurate of the maternal health indicators, with over-reporting in the DHIS2. This challenge stemmed from duplicate entries in some health facilities, heavy workload of health workers leading to inaccurate entries in facility registers, the presence of multiple registers at certain facilities, and a lack of sufficient registers at others.



Key emerging issues on postabortion care

- 1. A big number of adolescents seek PAC services
- 2. Consistency of reporting data related to post-abortion care in the HMIS was found to be below the WHO expected standards. This is driven by
- Minimal use of this data within the health system
- Little or no feedback on PAC indicators
- Lack of communication between team members
- Inadequate incentives for staff
- 3. Factors affecting the completeness of PAC data in the country include:
- Heavy workload of the health workers where managing patients competes with data entry.
- Inadequate primary data collection tools.

- Uncoordinated data compilation points.
- 4. Factors affecting the accuracy of PAC data include:
- When data is collected and forwarded to the center (MoH), there is hardly feedback to health facilities to facilitate data use for planning and service improvement.
- Knowledge gap on documenting medical records and poor handwriting.
- Health workers are afraid of being associated with abortions. Some of the Health Centre IVs were found not to capture data on PAC – the HMIS MCH 006 integrated maternity register, the category of diagnosis under final diagnosis (section 43) is stated as: abortion" and not PAC.
- The HMIS forms need to capture post-abortion care and not abortion.

Policy Recommendations

- 1. Enhancing Reproductive Health Education and Services:
- Action: Implement age-appropriate comprehensive sexual and reproductive health education in schools and communities to equip adolescents with the knowledge and skills to make informed decisions and choices about their sexual health. Expand access to youth-friendly health services, including safe post-abortion care and contraception.

- Actors: Ministry of Health, Ministry of Education and Sports, Health development partners, community leaders.
- Action: Collaborate with the Maternal and Child Health (MCH) division of the Ministry of Health to develop standard operating procedures (SOPs) for identifying appropriate data sources for post-abortion care (PAC) and extracting data in a standardised format.
- Actors: Ministry of Health (MCH division), healthcare providers, data managers at health facility and district level.

2. Strengthening Data Management Systems in Health Facilities:

- ▶ Action: Improve data management practices in health facilities through regular training of health workers on accurate data collection, recording, and reporting. Introduce or augment digital health information systems to reduce errors and enhance real-time data capture.
- Actors: Ministry of Health, District Health Offices, health facility managers, data management experts.

3. Conducting Regular Data Quality Assessments (DQA):

- Action: Institutionalize regular Data Quality Assessments in all health facilities to identify and address gaps in data accuracy and reliability. Use the findings from DQAs to inform continuous improvement in health data management.
- Actors: Ministry of Health, District Health Offices, health facility managers, data quality auditors.

4. Integrating Community and Family Support Structures:

- ▶ Action: Engage communities and families in supporting adolescent mothers, reducing stigma, and promoting gender equality. Community leaders and local government officials should work together to create supportive environments that encourage the return of teenage mothers to school and access to health services.
- Actors: Community leaders, religious and cultural institutions, NGOs, local governments.
- 5. Enhancing Accountability and Transparency in Health Data Reporting:

- Action: Strengthen accountability mechanisms within health facilities to ensure accurate and timely reporting of health data. This can be done by embedding lower and upper limits of reported post-abortion care cases in the DHIS2 system. Establish clear guidelines and accountability structures for health workers responsible for data management.
- Actors: Ministry of Health, District Health Offices, health facility managers.

6. Strengthen legal support for reproductive health rights:

- Action: Establish clear legal guidelines and protection for healthcare workers providing PAC services. This will reduce fear and stigma surrounding post-abortion care, promote accurate data reporting and improve overall data quality in healthcare facilities.
- Publish and publicise what is allowable concerning provision of PAC to frontline health workers in the facilities.
- Encourage partnerships between the justice system and health ministries to ensure laws support the ethical delivery of reproductive health services. This promotes an environment where health data collection is not hindered by fear of legal repercussions.
- Actors: Ministry of Justice and Constitutional Affairs, Uganda Police Force and Ministry of Health

7. Advocate for comprehensive training on reproductive health:

- Action: Professional associations should champion continuous professional development programs focused on reproductive health, using Manual Vacuum Aspiration (MVA) kits, data management and ethical considerations in PAC services. These programs can improve both the accuracy of data collection and patient care.
- Actors: Professional associations such as the Association of Gynaecologists in Uganda (AOGU), Civil Society Organisations and Ministry of Health.

8. There is need to define data indicators and specify a process for their extraction:

 Action: Ministry of Health and stakeholders need to define and roll out valid case definitions such as define Post Abortion Care vs threatened abortion, Manual Vacuum Aspiration vs electric and medical evacuations,

- discuss the validity of the indicator labelled "abortion due to other causes (can we profile what the "other causes" are?).
- ► The absence of an indicator for induced abortions to save lives needs to be addressed
- Professional associations should champion continuous professional development programs focused on reproductive health, using Manual Vacuum Aspiration (MVA) kits, data management and ethical considerations in PAC services. These programs can improve both the accuracy of data collection and patient care.
- Actors: Professional associations such as the Association of Gynaecologists in Uganda (AOGU), Ministry of Health (Maternal and Child Health division and the Health Management Information Systems division)

9. There is need for training pertinent staff within the health system

- There is an urgent need to train health workers involved in collecting and filling data registers including the hard copy HMIS forms
- We also recommend frequent internal basic data quality assessments at facility level facilitated by HMIS to detect any abnormalities and errors to data submitted to district biostatisticians
- ► There is a need to improve the use of data by training frontline health workers in data for decision-making
- Improve the remuneration of people managing the data processes

10. Specifying a process for data extraction and standardizing how missing data and non-provision of service is documented

- There is need to work with the MCH division of the Ministry of Health to develop standard operating procedures for identifying the appropriate data sources for PAC and extracting data in a standardized format
- There is a need to ensure that the registers and forms needed to collect data are in constant supply.
- Activities to strengthen the health data system- data review workshops, training and supervision focused on PAC need to be intensified.
- Streamline data sources OPD, maternity register, PAC register, GBV register

CONCLUSION

Improving PAC data quality is essential for effective planning of maternal health, family planning, sexually transmitted infections (STIs) management, and life-saving interventions. Strengthening PAC services could significantly reduce maternal mortality and enhance adolescent and youth health outcomes. Addressing teenage pregnancy and unsafe abortion, alongside improving data management and community support is crucial for advancing reproductive health in Uganda. The CEHURD study found that the COVID-19 pandemic exacerbated high rates of teenage pregnancies, unsafe abortions, and child marriages in Kamuli, Mayuge and Wakiso. Limited access to reproductive health services, peer pressure, and socio-economic challenges significantly hindered school re-entry for adolescent mothers. To address these issues, there is a need for acceptable sexuality education and improved access to reproductive health services, particularly post-abortion care.

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