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The Silent Impact of Pandemic: COVID-19 and Adolescent-Youth Reproductive Health in Acholi Sub-Region in Uganda

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Keywords:
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From a gender perspective, this study investigated the consequences of COVID-19 on adolescent and youth reproductive health in Acholi Sub-region, Northern Uganda. The study aimed to: i) analyse the impact of the COVID-19 lockdown on adolescent and youth reproductive health and gender relations, ii) explore treatment-seeking behaviours among adolescents and youth, iii) equip health workers with skills to address reproductive health challenges, and iv) enhance their capacity to conduct gender-sensitive research during crises. A qualitative approach and longitudinal design was used, employing one-on-one interviews, community engagement sessions, radio talk shows, and observations. The study involved participants from Gulu Regional Referral Hospital, Reproductive Health Uganda, outreach programs, and urban neighbourhoods, including adolescents, youth, health workers, and key informants. It was conducted across Gulu City, Gulu District, Obongi District, and Adjumani District, encompassing 34 schools, the Northern Uganda Youth Development Centre, Gulu Juvenile Prison, and Gulu University. Findings indicated a significant increase in gender-specific challenges, including a rise in teenage pregnancies, unwanted pregnancies, early marriages, and cross-generational sexual relationships. Male adolescents faced psychological stress due to unemployment and the inability to fulfil societal expectations, while female adolescents disproportionately experienced reproductive health risks. The study concludes that the COVID-19 pandemic severely impacted Ugandan youth's reproductive health, with adolescent females experiencing more disempowerment and risky behaviours. The study recommends implementation of targeted and gender-sensitive interventions, strengthening collaboration among health workers, adolescents, youth groups and community leaders, promotion of mental health empowerment programs, as well as continued strengthening of health system responsiveness to youth needs.

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INTRODUCTION

The COVID-19 pandemic and associated lockdown measures (2020–2022) substantially disrupted sexual and reproductive health (SRH) services and outcomes for adolescents and young people. Pandemic responses prioritised infection control, often deprioritising SRH service delivery and access, which disproportionately affected populations already vulnerable to service interruptions (WHO, 2020). School closures during the initial lockdown, affecting over 73,000 institutions and displacing approximately 15 million learners, including 600,000 refugees, exacerbated risks to adolescents' education, protection, and SRH (Tumwesigye, 2020; Namulondo et al., 2024). Such disruptions intersected with economic hardship, mobility restrictions, and weakened health systems to increase exposure to unintended pregnancy, sexually transmitted infections, and gender-based violence (GBV).

Adolescence, typically defined as ages 10–19, is a critical developmental period marked by rapid biological, cognitive, and social change; its boundaries and social endpoints vary across contexts (WHO, 1965; Sawyer et al., 2018). Policy frameworks, including Uganda's Ministry

of Health, often use overlapping terms (adolescents, youth, young people) to cover ages 10–24, reflecting the fluidity of transitions to adulthood and differing programmatic needs (Ministry of Health, 2000). GBV, encompassing intimate partner violence, sexual exploitation, early and forced marriage, and other harms, intensified under lockdowns in many settings as economic pressures and forced proximity increased household tensions (Henttonen et al., 2008; Otieno et al., 2021). This article examines how COVID-19–related service interruptions and socioeconomic stressors affected adolescent SRH outcomes, the gendered pathways of increased vulnerability, and implications for resilient SRH programming during future public-health emergencies.

Statement of the Problem

The COVID-19 pandemic severely disrupted global health systems, with marginalised populations, particularly adolescents and youth, facing significant reproductive health challenges. In Uganda, the pandemic led to lockdowns, school closures, and limited access to health services, disproportionately affecting young people (UNFPA, 2020; Ministry of Health, 2021). Evidence from the Acholi sub-region indicates

increased teenage pregnancies, early marriages, and reduced contraceptive access (Lubaale, 2021; Plan International, 2022). The effects varied by gender: girls faced higher risks of early pregnancy and violence (UNESCO, 2021), while boys experienced disempowerment, substance abuse, and risky sexual behaviour (UBOS & UNICEF, 2022). These gender-specific impacts remain under-researched, particularly in Northern Uganda's post-conflict context (Moro et al., 2023). Despite ongoing interventions, there is limited data on how COVID-19 inversely affected male and female adolescents. This study aimed to fill this gap by analysing the gendered impacts of the pandemic on adolescent reproductive health in the Acholi sub-region, to support more inclusive and effective policy responses.

Theoretical Underpinning of the Study

The study was informed by the Social Determinants of Health Framework. It argues that health is influenced by social, economic, and environmental conditions, including culture, education, income, and access to care. This theory is relevant in the COVID-19 pandemic and lockdown situation in that it explains the disparities in access to education, healthcare, and food worsen during pandemics. The effect is among marginalised adolescents and youth who face greater health challenges. The pandemic itself and strategies developed to address the pandemic resulted in a dramatic shift in many fundamental social determinants of health (SDOH), including food and housing security, employment, dietary and sedentary behaviours (Russo et al., 2021, p. 1). However, less attention to date has focused on the consequences of COVID-19 for adolescents and youth reproductive health in Uganda in general and Northern Uganda in particular.

In 1999, the World Health Organization (WHO) published the first "Influenza Pandemic Preparedness Plan" as a strategy to manage a pandemic. This has since been used as a template to manage later pandemic preparedness plans at the national level as a strategy to respond early to outbreaks, identify risks, and outline workable

interventions for pandemic containment. To minimise risks and harm during a pandemic, pandemic preparedness planning is adapted, following the experience of new local epidemics and pandemics (Hoven, 2022, p. 1). Subsequent to the 2009 influenza pandemic, many countries, including Uganda, adapted their pandemic preparedness plans with major shifts focusing on intersectoral cooperation, collaboration, disease surveillance, quarantines and monitoring of countermeasures and strategies for exchanging and disseminating information and communicating risk. However, there was less attention to other health areas, including adolescent and youth reproductive health.

The situation was worse in developing countries, where the vast majority of women's employment, about 70 per cent, is in the informal economy with few protections against dismissal or for paid sick leave and limited access to social protection. "To earn a living these workers often depend on public space and social interactions", which were now being restricted to contain the spread of the pandemic. The Covid-19 pandemic showed that quarantines can significantly reduce women's economic and livelihood activities, increasing poverty rates, exacerbating food insecurity and escalating GBV (UN, 2020, p. 4).

Russo et al. (2021) noted that "Social Determinants of Health encompass systemic social and economic factors, outside of individuals' control, that influence health. The Healthy People 2030 SDOH framework outlines 5 key, place-based areas that impact overall health and well-being, including economic stability, social and community context, health and health care, neighbourhood and built environment, and education access and quality" (Russo et al., 2021, p. 2). The long-term pandemic developed, posing significant challenges to health systems and affecting people's daily lives worldwide (Hoven et al., 2022, p. 1). The COVID-19 lockdown witnessed the confinement of young people, exposure to Gender-Based Violence (GBV), lack of essential needs due to parents not being able to work, and lack of access to health services. The UN reported that there was a lack of "an

intentional gender lens to the design of fiscal stimulus packages and social assistance programmes to achieve greater equality, opportunities, and social protection” (UN, 2020, p. 3).

Education was viewed in the context of the direct effect on the young persons and the indirect effects on adults (parents and guardians) during the pandemic. Families were left with limited options for childcare, and parents, especially women, faced increased burden and pressure to manage their children’s care and needs while undertaking domestic and garden work. Economic stability is defined by employment, income, housing and food security, which was disrupted, affecting especially men. The social and community context witnessed weakened social cohesion, moral values, domestic violence and GBV. Health care access and quality were considered crucial drivers of health. Access to healthy foods, neighbourhood crime and violence, and environmental conditions were key features of the neighbourhood and built environment that influence health-promoting behaviours.

The major gender issues during the pandemic and lockdown included: the purported increase in teenage pregnancy, unsafe abortions, sexually transmitted infections (STIs), HIV, early marriages, and sexual and gender-based violence (SGBV). This created a ‘moral panic’ concerning the reproductive health of young people during the lockdown. This is closely connected to the long-standing popular and policy concern with teenage pregnancy in Uganda (Sekiwunga & Whyte, 2009). This intensified into a kind of ‘moral panic’ concerning the reproductive health (RH) of young people during the lockdown, focusing on incest, rape, teenage pregnancy, unwanted pregnancies, unsafe abortions, sexually transmitted infections (STIs), HIV, intergenerational relations, forced marriages and early marriages, and sexual and gender-based violence (SGBV).

The UN (2020) observed that women and girls have unique health needs, but they are less likely to have access to quality health services, essential

medicines and vaccines, maternal and reproductive health care, or insurance coverage for routine and catastrophic health costs, especially in rural and marginalised communities. Restrictive social norms and gender stereotypes can also limit women’s [and girls’] ability to access health services. All of this has particular impacts during a widespread reproductive health crisis (UN, 2020, p. 10).

On 30 January 2020, the Director-General of the World Health Organization (WHO) declared the outbreak of disease due to a novel coronavirus, a public health emergency of international concern: WHO’s highest level of alarm. For health and care workers (HCWs) around the world, the pandemic caused a heightened risk of occupational exposure to a new fast-spreading disease and created the need to adapt roles and responsibilities for a wide range of tasks and professional settings (WHO, 2021, p. 2). The pandemic and lockdown created a social and psychological crisis for the health workers, which was worsened by the magnitude of Covid-19 deaths within the hospitals, the country and globally. Knowing its looming risk, health workers feared being infected through contact with those who had contracted COVID-19. This fear and the lockdown crisis had social and psychological effects on the health workers. They exhibited a negative attitude towards their patients and clients, including aggression and anger outbursts, not wanting to talk and handle them, and postponing seeing patients to the following day (WHO, 2021, p. 3).

Treatment-seeking behaviour, the actions and decisions individuals take when they feel unwell or experience symptoms of illness, is critical in handling adolescent and youth reproductive health-related issues. It includes how, when, where, and why a person seeks (or does not seek) healthcare. Sulakshana et al. (2012) noted that the transition from childhood to adolescence comes with major biological changes like physical growth, sexual maturity, and psycho-social development. Girls experience their first menstruation and related problems, which is marked by feelings of anxiety and eagerness to know more about this natural phenomenon

(Sulakshana et al., 2012, p. 23). Treatment seeking is often low in adolescents (Ghosh et al., 2014, p. 1377).

RESEARCH METHODOLOGY

This study adopted the qualitative approach with the case study and longitudinal design to accurately measure how reproductive health outcomes, behaviours and access to services changed before, during, and after the various stages of the pandemic and associated lockdowns. This allows researchers to track trends in unintended pregnancies, STI rates, and contraceptive use within the same group of individuals.

The study was conducted in Gulu City, Gulu District, Obongi District, and Adjumani District, encompassing 34 schools (both primary and secondary), the Northern Uganda Youth Development Centre, Gulu Juvenile Prison and Gulu University. These study sites were chosen because they were institutions with a large number of young people. Data collection methods used included: one-on-one interviews with health workers and adolescents and youth in schools and communities. Key Informant Interview (KII) was used to interview the Gulu Regional Referral Hospital management, teachers, and community leaders. Community engagement sessions were held to explore community perceptions on the effects of COVID-19 and lockdown on adolescent and youth Sexual Reproductive Health. During the community engagement and health outreach sessions held, health education was provided, in which photographs of nature and symptoms of STIs were shown. Radio talk shows were held to get a wider perspective from the Northern Uganda region.

The study covered the time scope 2019-2024, a period Northern Uganda registered increased cases of sexually reproductive health-related issues. The purposive sampling technique was used to select the study participants, who were considered information-rich cases because they have direct experience with the health services being studied, and a saturation point was reached at 77 participants. To ensure representativeness,

20 of them were adolescents and 20 were youth who were seeking treatment at either Gulu Regional Referral Hospital or the Reproductive Health-Uganda facility in Gulu City. Equally, four health workers (two each from Gulu Regional Referral Hospital (GRRH) and Reproductive Health Uganda (RHU), three members of the Gulu Regional Referral Hospital management committee, 15 teachers, and 15 community leaders. The study also included screened tests of individuals who tested positive during community medical outreach programs conducted jointly by the Gulu Regional Referral Hospital's Adolescent Clinic and Reproductive Health-Uganda.

Health workers documented short follow-up cases over three weeks, focusing on clients presenting with SRH-related problems and survivors of gender-based violence (GBV) before (2019), during (2020-2022), and after the lockdown (2023-2024). These initial interactions provided perceptions of the immediate challenges faced by the young people in accessing SRH services before, during, and after the pandemic. In the second phase, the research team conducted six weeks of in-depth follow-up with clients to explore their perceptions of seeking treatment, treatment uptake, and overall journey to accessing SRH services. Observations and dialogue meetings were held in institutions and at the community outreach programs to capture broader community attitudes and engagement. These included patients and clients at GRRH and RHU, young people during the outreach sessions and in urban neighbourhoods, and key informants such as health workers. These activities aimed to understand the general and social factors influencing youth treatment-seeking behaviour. Future workshop (Troxler & Kuhnt, 2007, p. 484) was used as a method to collect data from the police on GBV by analysing the given, current GBV situation, developing visions of the future and agreeing on an action plan on how to reach the desired results of a secure and safe environment for both adolescents and youth.

The study also reviewed existing statistics at the two health facilities involved in the study, on young people's use of SRH services before,

during, and after the lockdown, to provide in-depth results that the research design was intended for. This provided a comparative baseline to identify changes in service utilisation trends over time. By combining interviews, follow-ups, and secondary data, the methodology offered a comprehensive understanding of the pandemic's impact on youth SRH and informed strategies for future interventions. Data was transcribed based on key themes, and respondents were coded to ensure confidentiality. To ensure safety, the transcribed and cleaned data were stored in the Institutional Repository. The study recognised the need to validate and localise research findings and priorities and therefore disseminated the research findings to the key stakeholders, including the Regional Referral Hospital, District Education Offices, Office of the Prime Minister (OPM), and implementing partners. The research protocol was cleared by Gulu University Research Ethics Committee (GUREC-2022-241).

FINDINGS AND DISCUSSIONS

The Intersection of Public Health Crises and Adolescent Vulnerability

Early Onset of Puberty and Adolescent Pregnancy

The study established that, whereas biological growth and development have historically had less influence on the perception of when adolescence ends than when it starts at 10 (Sawyer et al., 2018, p. 2), this study notes that there were cases of some girls showing signs of adolescence at 8 years old. During the lockdown, a participant noted that she observed her eight-year-old daughter had begun to develop breasts (thelarche) and attributed it to the good feeding and nutrition as the children were home and most of the time idle (Respondent 027/2022). A health-worker narrative (Respondent 004/2022) reported cases of pregnancy and maternal complications among very young adolescents, citing that:

We registered a child of 13 years old who had been conceived during the lockdown. However, due to prolonged labour at home, she could not make it to the hospital, as the child's mother died due to Postpartum hemorrhage, an excessive

bleeding after the birth of the baby, and the baby died of exhaustion.

The tragic case described by the health worker powerfully illustrates how a public health crisis like a lockdown can intersect with social vulnerabilities to create a fatal outcome. The deaths of a 13-year-old mother and her baby from preventable causes, postpartum haemorrhage and fetal exhaustion are a direct result of the restricted healthcare access during the lockdown. This case highlights the heightened risks faced by adolescent mothers and the critical importance of ensuring uninterrupted access to maternal care, even during emergencies, to prevent such avoidable tragedies. The specific details of this case offer a compelling narrative that can be compared with other similar cases or broader data sets to reveal the full scope of pandemic impacts on vulnerable populations.

In another narrative, in 2023, a 19-year-old adolescent developed a Puerperal sepsis condition after birth, which caused her death (HW001/2023). This was confirmed by the community leader, who noted that children today are exposed to risks and learn about sex from the internet and social media. Unfortunately, the young boys use the girls for sexual experimentation, resulting in these surprises of the unsuspecting girls getting pregnant (Respondent 003/2022). Sawyer et al. (2018) confirms that, “across different countries, cultures, and contexts this definition continues to be met with surprise, both about when adolescence starts (the notion that a 10-year-old person is a child, not an adolescent) and when it ends (the belief that a 19-year-old person is already an adult) (Sawyer et al., 2018, p. 1).

The development of the breast is triggered by a hormonal cascade that consists of adrenarche (the activation of adrenal stress hormones that starts between 6 and 9 years of age), the physical growth and gonad Arche (when pituitary gonadotropins trigger gonadal changes). Sawyer et al. further explain that, in well-nourished populations, the timing of peak growth occurs around age 11 years in girls and 13 years in boys. Most girls have signs

of thelarche (breast budding) at age 10 years (Sawyer et al., 2018, p. 2).

Vulnerability and Systemic Failures

Whereas Uganda and the Ministry of Health is guided by both international and national policies and laws, the overwhelming effect of COVID-19 on reproductive health services to young persons was enormous. This was in spite Government's and Ministry of Health commitment to the principles deriving from the Constitution of Uganda, National Population Policy, The National Gender Policy and Local Government Act, The Universal Declaration of Human Rights, the Convention on the Elimination of All Forms of Discrimination Against Women, the International Conference on Social Development in Copenhagen, the Fourth World Conference on World Programme of Action for Youth for the Year 2000 and Beyond and other relevant statements of commitment to the health of young people (Neema, Musisi & Kibombo, 2004). A respondent noted that the government's focus was to mitigate the infections and spread of the virus, given that the novel coronavirus (SARS-CoV-2) has no clear treatment. Coupled with that, the restriction in movement created a challenge for the young people in accessing the health facilities.

The Nature of Reproductive Health-related Issues among Adolescents and Youth in the Acholi Sub-region in Northern Uganda

During the school visits and community health outreach, 5 to 6 out of 10 adolescent girls interviewed would disclose that they had ever experienced recurring burning urine, abnormal vaginal discharge, lower abdominal pain, wounds around the vagina, and discomfort during intercourse. The boys reported penile warts and discharge, and burning urine. The major signs and symptoms young adolescents interacted with presented included: Syphilis, Genital herpes simplex (GHSV), Lymphogranuloma venereum (LGV), Chancroid, and Granuloma inguinale (GI). There were also drips which included: Gonorrhoea, Nongonococcal urethritis, Chlamydia, Mucopurulent cervicitis, Trichomonas vaginitis and urethritis and Bacterial

vaginosis. Similarly, cases such as Pelvic Inflammatory Disease, Trichomonas vaginalis, HPV-associated cervical cancer, HPV penile warts, and HPV warts on the thigh. An adolescent who had contracted HPV warts confided that she had developed it after having an intimate relationship with a motorised bike rider (Boda-Boda) and did not know what it was.

Another young adolescent girl had a patch of depigmented white skin on her arm and was told that it was a result of witchcraft done on her by someone. In a primary school visited an adolescent boy reported he was having a foul-smelling "green pus" discharge and painful urine. Another reported having HPV penile warts after viewing the photographs of the various signs and symptoms of STIs during the health education session. The sexual reproductive health problems were more mentioned among the female adolescents and youth. This is attributed to the fact that the girls were more responsive to their personal health-related issues than the boys. Similarly, the girls had a positive health-seeking behaviour compared to the boys, who would seek treatment when either forced by peers and family or due to acute pain. The study established that 2 out of 10 boys and 6 out of 10 girls sought medical treatment whenever there was a need.

The media reported a rise in teenage pregnancy. Otto (2021) reported that in March 2020, when the schools were closed due to the lockdown, many girls returned home. During this period, the Acholi sub-region registered a rise in teenage pregnancy. Otto (2021) reported that one in every five households recorded a teenager below 18 years of age who either had a child or was pregnant. She further observed that "during the lockdown, homes became a den where men and young boys preyed on girls". 2,280 girls got pregnant in Gulu, a total of 640 girls got pregnant in Nwoya District, 6,549 in Amuru District, 3,855 in Omoro District, 1,359 in Kitgum District, 1,149 in Lamwo District, 910 in Agago District and 920 in Pader District (Otto, 2021). Most of the girls did not know what it meant to be pregnant and did not know how a woman gives birth, and what the labour experience was.

In a related study undertaken by Comboni Samaritan, a Faith-Based organisation in Gulu, it reported that more than 17,653 girls in the eight districts of the Acholi sub-region became mothers at a tender age (Otto, 2021). Musoke (2022) called it a “Covid-19 baby boom”. The Independent Newspaper further reported that the COVID-19 pandemic that kept schools in Uganda in lockdown between March 2020 and September 2021 led to thousands of school-going girls getting pregnant (Musoke, 2022). It confirms Friedman's (1994) observation that “the health and life of adolescent girls below the age of 17 are put at risk by pregnancy and childbirth (Friedman, 1994, p. 31). The Key Informant Interviews indicated that most of the teenage girls who got pregnant ranged from the ages of 14 to 16 years of age. The younger the adolescent, the greater the risks. Furthermore, her social, psychological and economic well-being, as well as that of her child, is likely to be disadvantaged if she gives birth during adolescence (Friedman, 1994, p. 31).

From the one-on-one interviews and the Focus Group Discussions (FGD) with the adolescent boys, they reported that during the lockdown, access to drug shops and clinics was difficult due to the restricted movement. Some of the adolescent boys disclosed that they had a belief that sex was like eating sweets which were wrapped and would not be enjoyed. Therefore, they had unprotected sex, which often resulted in Sexually Transmitted Infections (STIs) and unplanned pregnancy for the girls. In FGD, the girls reported that they feared using protection because of the misinformation that the condom being rubber would slip into the womb and require an operation. The young girls in the urban areas reported that some of their clients did not want to use protection, resulting in their infection and conception (Respondent A009/2023). A teenager who conceived at 14 years of age confided that despite being pregnant, she was forced to the streets for survival, where the older men would have an intimate relationship with her without protection (Respondent A012/2023). Friedman (1994) noted that sexual relations in adolescence, particularly in developing countries, are likely to

take place without the use of modern contraceptives or protection against sexually transmitted diseases (STDs), including human immunodeficiency virus (HIV) infection, leading to acquired immunodeficiency syndrome (AIDS) (Friedman, 1994, p. 31).

The Gulu District Antenatal Clinic (ANC) first visit for women of 10-19 years of age in the five years (2019-2023) were: 1,122 in 2019, 1150 in 2020, 1261 in 2021, 1403 in 2022 and 1019 in 2023 (Gulu District Statistics, 2019-2023), showing a systematic rise in adolescent pregnancy. The study acknowledges the 2023 decrease as not a reduction in pregnancies but rather a drop in the number of young women seeking formal care, attributing it to a shift toward traditional birth attendants or home deliveries, which would not be captured in official clinic statistics. The use of contraceptives was not widely practised among both married and unmarried adolescents in the age bracket 10-19 years. Most of them remain relatively powerless concerning decisions about childbearing, contraception, or the timing of sexual relations (Friedman, 1994, p. 31) in a patriarchal society. The study further established immense relational and sexual patriarchy among sexually active adolescents, whether married or not, in the communities, leaving the adolescents powerless and vulnerable and not so privileged to their sexual and reproductive health-related rights.

During the health outreaches and community engagements, the community reported that there were increased incidences of crude abortion among the adolescents. Too early or unwanted pregnancy is often followed by an induced abortion in hazardous circumstances or risky childbirth. The girls had less knowledge, less experience and fewer resources to protect themselves or to obtain knowledge and services which could otherwise help them. Sexual education is highly limited in the communities, as is information about contraceptive use or contraceptive or abortion services (Friedman, 1994, p. 31). During the school visits, the girls reported that the pregnant teenage girls were misinformed that the foetus could be terminated

by inserting a sharp stick to rupture the amniotic sac that holds the foetus during pregnancy, which ended up being fatal. A father of an adolescent reported that the girl had resorted to using the poisonous Wandering Jew plant (*Spiderwort Tradescantia genus*) to induce abortion. The shoot of the plant would be inserted through the cervix, and the lethal sap would terminate the foetus. However, it turned out that the lethal sap destroyed the womb, and some of the teenage girls lost their womb. A woman reported that her daughter, who was only 15 years used the lethal plant, and unfortunately, she died due to the abortion after keeping in hiding until her condition deteriorated (Field narratives, 2022-2024).

The one-on-one interviews and Focus Group Discussion with the teenage girls indicated that there was misuse and abuse of, as well as misinformation on contraceptives. Out of every 10 adolescent girls interviewed, 7 disclosed having used contraceptives and emergency pills. A section of the girls admitted not having used contraceptives, but were told that having sex within the three days after their menstrual period would not result in pregnancy. Whereas for some it worked, others said they got pregnant during the claimed safe days. Another adolescent girl disclosed that she was told that using an overdose of an Ampicillin capsule during an unsafe period would prevent conception (Respondent T102/2024). The lockdown, therefore, witnessed the lack of information, as well as misinformation and disinformation on sexual reproductive health.

Painful cramps, Dysmenorrhea, which occur before or during menstruation, was a common condition reported among female teenagers and youth. They reported that they were advised to have intercourse to end the pain. An adolescent in a school visited confided that she had tried the claimed solution, but instead got infected with an STI, and she opted out of the practice because the painful cramp persisted. She advises her peers to desist from using sex as a solution to Dysmenorrhea.

As the data collection progressed into 2023, more adolescents began to open up about their HIV status and a number requested an HIV Test. In a joint health outreach with the Reproductive Health Uganda, Gulu Regional Referral Hospital and the Project team, out of the 181 adolescents who turned up for the screening, six (3.3%) were HIV reactive and were referred to the Referral hospital for further management.

CONCLUSION

There is a disproportionate effect of COVID-19 on adolescent and youth reproductive health than the older categories of the population. Equally, there is an uneven effect of COVID-19 on adolescent and youth reproductive health by gender (male vs female). The males have suffered more disempowerment than their female counterparts, driving them into reckless lifestyles and negatively impacting their reproductive life and health. To mitigate the effect of the pandemic on youth and adolescent reproductive health, there is a need for an integrated approach that focuses on the health workers, adolescents, youth, and the community. Much can be done to promote the health and well-being of adolescents of both sexes and to protect them to a greater degree from too-early pregnancy and childbirth, abortion, STD and HIV infection, within every health and cultural framework, but not without adequate attention to the needs of young people and a greater degree of their involvement in planning, implementing and evaluating action to help them. Up-to-date information is essential since the social and economic conditions in which they live are rapidly changing, and action will help only if it is based on current reality.

RECOMMENDATIONS

To safeguard and improve adolescent reproductive health in the wake of the COVID-19 pandemic, this study recommends several strategic strategies and approaches:

- Implement targeted and gender-sensitive interventions. This could be effected through designing reproductive health programs that recognise the distinct challenges faced by

adolescent males and females. Special attention should be given to addressing the disempowerment and risky behaviours among adolescent males, while continuing to support female adolescents against early pregnancies, STDs, and other reproductive risks.

- Adopt an integrated, multi-stakeholder approach by strengthening collaboration among health workers, adolescents, youth groups, families, educators, and community leaders to provide a holistic response to the reproductive health challenges posed by COVID-19. This approach should include awareness campaigns, counselling services, and culturally appropriate reproductive health education.
- Enhance youth participation in health program design, with active involvement of adolescents and young people in the planning, implementation, and evaluation of reproductive health policies and interventions. Their voices, perspectives, and lived experiences are crucial for developing responsive and effective strategies.
- Strengthen access to accurate and timely information by ensuring that adolescents have access to up-to-date, age-appropriate, and evidence-based reproductive health information. This includes the use of digital platforms, youth-friendly health services, and school-based programs to disseminate knowledge on contraception, STDs, HIV, and healthy relationships.
- Promote mental health and empowerment programs through the introduction of support programs aimed at improving the mental well-being and self-esteem of young people, particularly males affected by the social consequences of the pandemic, to help youths make informed decisions and avoid harmful behaviours.
- Monitor and address changing socio-economic conditions by continuously assessing the socio-economic realities faced by adolescents and youth and adjust

interventions accordingly. This includes addressing poverty, unemployment, and education disruptions that indirectly affect reproductive health outcomes.

- Strengthen health system responsiveness to youth needs. Healthcare providers could be trained and equipped to deliver youth-friendly and non-judgmental reproductive health services. This includes building capacity to handle the unique needs of adolescents during and beyond the pandemic.

Ethical Approval and Consent of Participants

The research protocol was cleared by Gulu University Research Ethics Committee (GUREC-2022-241). All participants provided informed verbal consent prior to data collection, and only those who consented were included in the study.

Availability of Data

The datasets/transcripts used and/or analysed during the current study are available from the corresponding author upon reasonable request.

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Conflict of Interest

The authors declare that there is no conflict of interest regarding the writing and publication of this paper.

REFERENCES

- Friedman, H. L. (1994). Reproductive health in adolescence. *World Health Statistics Quarterly*, 47(1), 31-35.
- Ghosh, M., Gupta, R., Arya, S., Rathee, S., & Rawat, V. (2014). Factors associated with treatment seeking behaviour in adolescent substance abuser in a de addiction centre in North India. *Int J Med Sci Public Health*, 3(11), 1376-80.

- Henttonen, M., Watts, C., Roberts, B., Kaducu, F., & Borchert, M. (2008). Health services for survivors of gender-based violence in northern Uganda: a qualitative study. *Reproductive health matters*, 16(31), 122-131.
- Hoven, H., Dragano, N., Angerer, P., Apfelbacher, C., Backhaus, I., Hoffmann, B., ... & Söhner, F. (2022). Striving for health equity: The importance of social determinants of health and ethical considerations in pandemic preparedness planning. *International journal of public health*, 67, 1604542.
- Lubaale, Y. (2021). *Teenage Pregnancy and the COVID-19 Pandemic in Uganda*. Makerere Institute of Social Research.
- Ministry of Health (2000). National Policy for Adolescent Health for Uganda. Government of Uganda.
- Ministry of Health Uganda (2021). *Annual Health Sector Performance Report 2020/2021*.
- Moro, J., Okello, T., & Acana, C. (2023). *Youth, Gender, and Health in Post-Conflict Northern Uganda: Implications of COVID-19*. Journal of African Health Studies, 45(2), 115-132.
- Musoke, R. (2022). "Covid-19 baby boom". The Independent News. April 24, 2022, Kampala, Uganda.
- Namulondo, V., Najjuma, R., Kasirye, G. K., & Walimbwa, M. (2024). Exploring Affordances of Online and Offline Strategies for Continuity of Learning in Secondary Schools during Pandemics: Lessons from Uganda's Response to the COVID-19 Pandemic. *East African Journal of Education Studies*, 7(2), 348-363.
- Neema, S., Musisi, N., & Kibombo, R. (2004). Adolescent sexual and reproductive health in Uganda: a synthesis of research evidence. New York: Alan Guttmacher Institute..
- Otieno, G. O., Ouedraogo, L., Nkurunziza, T., Asmani, C., Elamin, H., Muriithi, A., & Adegbayega, A. A. (2021). Continuity of essential sexual and reproductive health services during Covid-19 pandemic in the WHO African region.
- Otto, I. O. (2021). Teenage pregnancies spike in Acholi as Covid lockdown bites. The Monitor Paper. Monday, June 14, 2021.
- Plan International (2022). *COVID-19 Aftershocks: The Impact on Girls and Young Women in Uganda*.
- Russo, R. G., Li, Y., Doan, L. N., Ali, S. H., Siscovick, D., Kwon, S. C., & Yi, S. S. (2021). COVID-19, social determinants of health, and opportunities for preventing cardiovascular disease: a conceptual framework. *Journal of the American Heart Association*, 10(24), e022721.
- Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. *The lancet child & adolescent health*, 2(3), 223-228.
- Sekiwunga, R. & SR Whyte. 2009. Poor parenting: teenagers' views on adolescent pregnancy in eastern Uganda. *African Journal of Reproductive Health* 13 (4): 21-35.
- Sulakshana, B., Naik Vijaya, A., & Mallapur, M. D. (2012). Treatment seeking behaviour of rural adolescent girls—a community based cross-sectional study. *International Journal of Medicine and Public Health [Int. J. Med. Public Health]*, 2(2), 24.
- Troxler, P., & Kuhnt, B. (2007). Future workshops. The unthinkable and how to make it happen. *Hands-on knowledge co-creation and sharing: Practical methods & techniques*, 483-495.
- Tumwesigye, J. (2020). COVID-19 Educational Disruption and Response: Rethinking e-Learning in Uganda. Konrad Adenauer Stiftung
- UBOS & UNICEF (2022). *National Survey on Adolescent Wellbeing in Uganda*.

UNESCO (2021). *Keeping Girls in the Picture: Addressing the Impact of COVID-19 on Girls' Education in Uganda*.

UNFPA (2020). *Impact of the COVID-19 Pandemic on Family Planning and Ending Gender-based Violence, Female Genital Mutilation and Child Marriage*.

United Nations (2020). Policy brief: The impact of COVID-19 on women. Available from: <http://www.un.org/theimpactof COVID-19onwomen/publications/en.pdf>

World Health Organisation (1965). Health problems of adolescents. Technical report series 308. Geneva: World Health Organization, 1965.

World Health Organisation (2021). The impact of COVID-19 on health and care workers: a closer look at deaths. Health Workforce Department – Working Paper 1. Geneva: World Health Organization; September 2021 (WHO/HWF/WorkingPaper/2021.1).
Licence: CC BY-NC-SA 3.0 IGO. Accessed on July 7, 2025.

World Health Organization (2020). WHO Director-General's opening remarks at the media briefing on COVID19, WHO, 2020 11 March. Available at: <https://www.who.int/dg/speeches/detail>.