Tengeru Community Development Journal
ISSN 1821-9853(Print) ISSN 2665-0584(online)
Vol. 10, No.1, 2026

Puberty Education Practices Communication and Knowledge Gaps among Adolescent Girls Parents and Educators in Tanzania

Joyce Mwanga[1], Sia Willy Machange[2] and Rose A. Mtei[2]
[1]Women Economy and Gender Support
jmwanga@wegstanzania.org
[2]Tengeru Institute of Community Development
sia.machange@ticd.ac.tz / siamachange08@gmail.com
[2]Tengeru Institute of Community Development
rose.mtei@ticd.ac.tz / mteirose@gmail.com
Corresponding Author: rose.mtei@ticd.ac.tz / mteirose@gmail.com

Article History
Received: 2025-August -20
Revised: 2026-January-02
Accepted: 2026-May-15
Published: 2026-June-20

Keywords
Puberty; adolescent girls; puberty education; parental communication; sexual and reproductive health

How to cite:
Mwanga, J., Machange, S.W. and Mtei R.A. (2024). Puberty Education Practices Communication and Knowledge Gaps among Adolescent Girls Parents and Educators in Tanzania. *Tengeru Community Development Journal,* 10(2): 51-65.

Copyright © 2024 The Author(s). This article is licensed under the Creative Commons Attribution–ShareAlike 4.0 International Licence (CC BY-SA 4.0).
https://creativecommons.org/licenses/by-sa/4.0/

Abstract
This study examined adolescent schoolgirls' awareness of their right to puberty information, the sources and adequacy of their education, their sexual and reproductive health knowledge, and their training priorities. A mixed-methods design combined a survey of 100 female students from five secondary schools in Arusha, Kilimanjaro and Manyara with key informant interviews. Although 95% of respondents knew their right to puberty information, 17% had received no puberty education. Teachers and parents were near-equal sources, and parental communication was almost exclusively maternal (87%). A majority (84%) judged their education insufficient, thus only 51.4% of knowledge responses were correct, and just 32% knew pregnancy can occur at first intercourse. Students prioritised relationships, gender-based violence and independence (86%) over biological content (12%). The study argues that awareness and satisfaction poorly indicate preparedness, and recommends dedicated, recurring puberty education, teacher training, greater involvement of fathers and civil society, and stronger safeguarding for girls.

1.0 Introduction

The saying, "If you educate a man, you educate an individual, but if you educate a woman, you educate a nation" holds significant truth. (Major & Rose, 2019). Educating girls extends far beyond simply enrolling them in school; it encompasses ensuring they learn in safe environments, develop essential life skills, and have access to accurate information that enables them to make informed

decisions about their lives (Kattan, 2021). Furthermore, according to Nigeria's former Minister of finance Ngozi Okonjo-Iweala and the United Arab Emirates' former minister of state for tolerance Sheikha Lubna Al Qasimi wrote that "educating a girl does far more than place a child behind a desk. It is the surest pathway to reducing infant mortality, mitigating high birth rates, slowing migratory pressures, and unlocking economic potential" (Carvalho & Evans, 2022). Puberty is a transformative period marking the transition from childhood to adulthood, bringing physical, emotional, and psychological changes (Prosperi & Chiarelli, 2023). Puberty is a period during which children attain adult secondary sexual characteristics and reproductive capability (Dunkel & Quinton, 2014). Adolescence, on the other hand, is a broader phase of self-discovery, increased autonomy, and identity formation (Betzler, 2022). It is typically divided into three stages: early adolescence (10-13 years), middle adolescence (14-17 years), and late adolescence (18-22 years) (Hashmi & Fayyaz, 2022). From a demographic perspective, young people are the world's fastest growing population group, which includes over 1.2 billion adolescents aged 10–19, the majority living in low- income countries (Teizazu et al., 2023). Nonetheless, Tanzania is home to 10 million adolescents in the age group of 10-19 years, accounting for 23% of the country's population. Further breaking this down, adolescents between ages 10-14 and ages 15-19 make up 13% and 10% of the total population respectively (Health & Development, 2022). Studies indicate that adolescents who receive comprehensive and accurate information about puberty are better prepared to make informed choices about their health and well-being. However, many Tanzanian adolescents still lack fundamental knowledge on puberty, while parents and educators struggle to provide adequate support due to cultural taboos, gender norms, and limited resources. Sex education is not part of the Tanzanian school curriculum, and when reproductive health topics are covered, the emphasis is often placed on abstinence rather than providing a holistic understanding (Ito et al., 2022). Furthermore, according Teizazu et al., (2023), most school- based sexual and reproductive health education in Tanzania occurs during secondary school (ages 14–17). As most girls reach puberty between the ages of 8 and 13, and boys between the ages of 9 and 14, the absence of puberty education during primary school (ages 7–13), when bodies begin to change, may lead to fear and confusion. Research by Amuri and colleagues (2017), found that many Tanzanian girls hold misconceptions about menstruation, with some believing it results from eating certain foods or is a sign of infection. Similarly, a study by Kihinga and colleagues (2021) highlighted that parents often avoid discussions on puberty due to cultural constraints. This study aims to explore the current state of puberty education in Tanzania, shedding light on communication barriers, myths, and knowledge gaps among adolescent girls, parents, and educators.

2.0 Literature Review

Contextual definitions

Puberty

Puberty is the process of physical changes by which adolescents reach into physiological and sexual maturity (Sagar et al., 2023). In this study, puberty it is a significant transitional phase in an individual's life, marked by various physical, emotional, and psychological changes.

Understanding puberty is essential for adolescent girls to navigate this transformative period successfully.

Adolescent

Adolescence is the phase of life stretching between childhood and adulthood (Lucas, 2023). In this study adolescence is characterized by significant physical, cognitive, emotional, and social changes as individuals' transition from childhood into adulthood. During adolescence, individuals undergo a process of self-discovery, identity formation, and increased autonomy. They often grapple with issues such as self-esteem, peer relationships, sexual identity, career choices, and moral development. The duration of adolescence can vary, but it generally spans from the early teenage years until the late teens or early twenties.

2.1 Theoretical framework

Social Cognitive Theory (SCT)

Albert Bandura developed the Social Cognitive Theory based on the concept that learning is affected by cognitive, behavioral, and environmental factors (Academic Technology Services, 2015). In this reciprocal triadic relationship, behavioral factors, cognitive (personal) factors, and environmental factors continually interact with each other, and as a result of this interaction the human behavior is formed (Yakut, 2019). The environment is a factor that can affect a person's behaviour. There is a social and physical environment. The social environment includes family, friends, and colleagues. The physical environment is the size of the room, the ambient temperature, or the accessibility of certain foods (Govindaraju, 2021). Subsequently, (Yakut, 2019) Personal factors consist of basic cognitive and affective human capacities such as self- efficacy, personal characteristics, expectations, self-regulation and reinforcement. In the personal factor, the theory stresses the importance of individual characteristics such as knowledge, attitude and self-efficacy beliefs. The research intended to understand these aspects on adolescent girls and their educators to provide insights into their understanding and behavior toward puberty. Subsequently, in the environmental factors, the theory entails that aspects such as social norms, cultural influences, and educational settings, shape behavior. The research intended to also analyze the adolescence girl school and home environment in relation to their impact on their understanding on puberty. Furthermore, the research examined the educational practices and resources available to adolescent girls to identify any gaps or limitations in providing comprehensive and up-to-date information.

2.2 Empirical review

Myths and Misconceptions Surrounding Puberty in Tanzania

Puberty in Tanzania is often accompanied by several myths and misconceptions that influence girls' perceptions and experiences. For instance, one common myth suggests that menstrual blood is impure and can cause harm. A study by Nkuba et al., (2018) found that many Tanzanian girls believed this myth, leading to feelings of shame and embarrassment during menstruation. Furthermore, girls often face restrictions during their menstrual periods, such as being prohibited

from participating in certain activities or entering places of worship, as highlighted by Mchome et al. (2016). Subsequently according to (UNICEF, 2019) research in Tanzania, participants in the qualitative interviews revealed that menstruation reduces their academic performance due to reduced school attendance, class disruption to manage menstruation, reduced attentiveness, and psychological impact. Not being able to afford sanitary pads, the severity of menstrual symptoms, limited support from some parents and teachers, girls' fear about the durability and effectiveness of Menstrual Health and Hygiene (MHH) materials used and fear of shame and stigmatization at school during menstruation were the main reasons cited to impact class attendance, consequently reducing the academic performance of girls. These misconceptions not only perpetuate stigma but also hinder girls' ability to manage their menstrual hygiene effectively.

Cultural and Social Factors Influencing Puberty Understanding

Several cultural and social factors contribute to the myths and misconceptions surrounding puberty in Tanzania. Traditional beliefs and practices play a significant role in shaping girls' understanding of this phase. A qualitative study by Mgongo et al., (2019) emphasized the influence of cultural norms on girls' puberty experiences, highlighting the significance of community elders and mothers in providing information, often based on traditional beliefs. These beliefs can reinforce harmful practices and contribute to the perpetuation of myths and misconceptions about puberty. Furthermore according (Mulubwa et al. (2023), there are mixed opinions and concerns regarding girls' accessing contraceptives, on the assumption that they are too young and exposing them to contraceptives at a young age might have severe reproductive health complications in future

Role of parents/guardians and teachers in promoting morals and support to adolescent girls Both Parents, guardian and teachers play a crucial role in promoting morals and providing support to girls during puberty and adolescence. This transitional period is marked by significant physical, emotional, and social changes, and parents and teachers can have a profound impact on the development of girls by offering guidance, understanding, and a nurturing environment. Here are some ways parents can fulfill their role effectively. A study by Lahmi et al., (2020) emphasizes the role of parents being the most important foundation in maintaining and developing children's morals towards a better direction. The study further recommends parental guidance, guidance and supervision of children as an alternative in anticipating moral generation

Role of interventional school programs on Reproductive health and sexual education: A study by Jamia et al. (2023) explored the impact of a school-based intervention that provided comprehensive sexual and reproductive health education to adolescent girls. Based on the recommendations school programs have potential to address the problem of limited information and the traditional myths and misconceptions. This highlights the importance of implementing comprehensive sexual education programs that provide accurate information in a safe and supportive environment.

Research gap

Studies reveal that adolescents engage in high-risk sexual behaviors and experience its adverse consequences. A scoping review on sexual and reproductive health behaviors among Tanzanian adolescents by (Nkata et al., 2019) recommends a need for improving provision of sexual and reproductive health services among Tanzanian adolescents. This study therefore wants to fill the gap by to provide up-to-date and comprehensive information on the status of puberty education practices, myths and misconception, communication and knowledge gaps among adolescent girls, parents and educators on puberty

3 Research Methodology

3.1 Sample size

Oldadai (Arusha), Sing'isi (Arusha), Mabilioni (Kilimanjaro), Felix Mrema (Arusha), and Kwaang'w (Manyara) were the five (5) schools from three (3) regions that were randomly selected to take part in the study. A total of 100 students, 20 from each school, were chosen at random. Two teachers from each school were specifically chosen to provide broad information about the situation of female students in secondary schools. Ten teachers were interviewed for this study in total. Also purposefully chosen for the study were 2 educational officers from the regions of Arusha and Manyara.

3.2 Sampling techniques

The sampling technique used was simple random sampling techniques where students were

selected by chance to reduce bias. Purposive sampling was used to identify the teachers and educational officers as Key Informants of the research.

3.3 Data collection methods

Survey method was used to collect information from students. Furthermore, interviews were used to collect information from teachers and education officials.

3.3.1 Survey

Survey was used to collect quantitative data using the questionnaire tool. The method was used to collect information from the sampled female students in the selected schools. However, majority of the students respondents were of form one to three because of the age eligibility thus students below the age of 17 while majority of form four were 18 and above which were not the targeted respondents.

3.3.2 Interviews

Through the method, the study obtained qualitative data used to attain an in-depth understanding on the data collected through the survey using an interview guide. The method was used to collect data from Key informants thus 2 teachers from each school and 2 educational Officers from 2 regions thus Arusha and Manyara.

3.4 Data Analysis

The study's quantitative data was analysed using the Statistical Package for the Social Science (SPSS). Using the Package, descriptive statistics that describes and summarizes features from the collection of information was attained.

4.0 Findings

4.1 Demographic characteristics

The study drew on a sample of 100 female secondary school students from five schools across three regions of northern Tanzania: Oldadai, Sing'isi and Felix Mrema in Arusha; Mabilioni in Kilimanjaro; and Kwaang'w in Manyara. Arusha contributed 60 respondents (60%), while Kilimanjaro and Manyara contributed 20 respondents each (20%). The regional distribution is therefore unequal, and this asymmetry should be borne in mind when interpreting the findings: aggregate results are disproportionately shaped by the Arusha sub-sample, and inter-regional comparisons should be read as indicative rather than conclusive.

Table 1: Demographic characteristics

Characteristic	Category	Arusha	Kilimanjaro	Manyara	Total	%
Age group	11–12	3	0	1	4	4
	13–14	25	6	3	34	34
	15–16	30	7	13	50	50
	17 and above	2	7	3	12	12
Level of education (Form)	One	17	6	5	28	28
	Two	16	4	5	25	25
	Three	18	4	5	27	27
	Four	9	6	5	20	20

As shown in Table 1, half of the respondents (50%) were aged 15-16 years, followed by those aged 13-14 years (34%). Only a small minority fell at the extremes of the distribution: 4% were aged 11-12 and 12% were aged 17 or above. The sample is thus concentrated in mid-adolescence, with 84% of respondents aged between 13 and 16 years. This age profile is substantively significant. Given that menarche among girls in sub-Saharan Africa typically occurs in the early teenage years, the overwhelming majority of respondents are likely to have already entered puberty and to be navigating its physical, psychological and social demands within the school environment. The sample is therefore well suited to the objectives of this study, since respondents are positioned to report on lived, current experience rather than anticipated or recollected experience. It follows that the findings presented in subsequent sections should be understood as reflecting the needs of girls actively managing pubertal change, rather than those approaching it.

With respect to form level, respondents were distributed relatively evenly across Form One (28%), Form Two (25%) and Form Three (27%), with Form Four slightly under-represented (20%). This balanced distribution strengthens the study's capacity to capture experiences across the full span of lower and upper ordinary-level secondary education, and reduces the risk that findings are skewed towards a single stage of schooling. The relatively lower representation of Form Four students may be attributable to examination preparation commitments during the data collection period, although this cannot be confirmed from the present data.

4.2. Awareness on children's right to knowledge

This section examines whether female students were aware of their right to receive information on puberty and life skills. Such awareness is treated here as a precondition for agency: a girl who recognises that she is entitled to accurate information is better positioned to seek it, to manage the physical and emotional changes of puberty, and to make informed decisions concerning her safety, academic progress, discipline and self-worth.

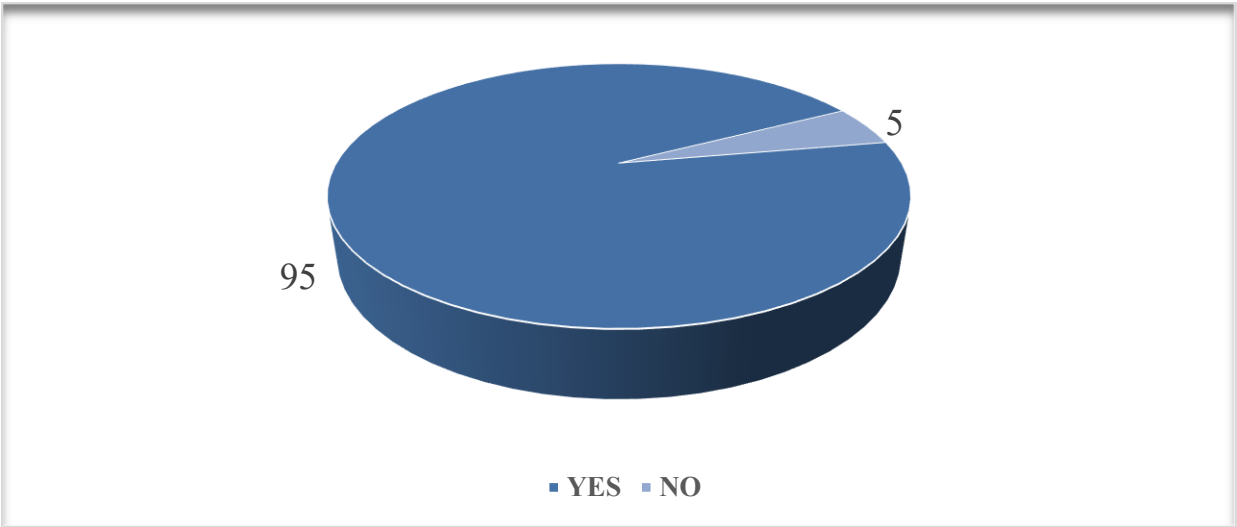


Figure 1: Awareness of the right to education

Nevertheless, as shown in Figure 1, the study revealed that 95% of students were aware of their rights to an education. This could be a result of the incorporation of the human rights subject in secondary education. According to the Ministry of Education, Science, and Technology (2014), the Ministry of Education and Vocational Training has incorporated human rights education into the national secondary school curriculum, with the goal of promoting human dignity, respect for diversity, and social responsibility among young people. The Tanzanian government has incorporated human rights education into the national secondary school curriculum, with a focus on promoting human dignity, respect for diversity, and social responsibility among young people (Ministry of Education, Science, and Technology, 2014). The curriculum covers a range of topics related to human rights and social justice, including the Universal Declaration of Human Rights, the African Charter on Human and Peoples' Rights, and gender and child rights. Furthermore, in

addition to formal human rights education in the classroom, there are also various extracurricular activities and initiatives that promote human rights education in secondary schools in Tanzania as observed in the secondary schools under study. These include clubs and societies, such as human rights clubs, debating clubs, and community service clubs, as well as outreach programs and partnerships with civil society organizations and human rights defenders that educate students from secondary schools.

4.3 Students' understanding of puberty

This section examines students' exposure to puberty and life-skills education and the sources from which they obtain such information. All 100 respondents were asked to identify the sources through which they had received information on puberty and life skills, with the option of selecting more than one source. Consequently, the total number of responses exceeds the number of respondents, as students could identify multiple sources of information. The findings therefore reflect the proportion of students who identified each source rather than mutually exclusive categories of respondents.

Table 2: Multiple response on sources of knowledge about puberty

Source	Frequency
Teacher	43
Parents	37
Posters	7
Friends	15
Digital platforms	27
Civil society organisations	17
Sister	5

The findings indicate that teachers (43%) and parents (37%) were the primary sources of puberty knowledge, underscoring the central role of the school and the family in adolescent socialisation. However, neither source reached the majority of students. This suggests uneven integration of puberty content in schools and socio-cultural barriers to parent-child communication. The considerable reliance on digital platforms (27%) reflects adolescents' growing use of online information, which, though accessible, may be unreliable. Civil society organisations (17%), friends (15%), posters (7%) and sisters (5%) played only a marginal role. Taken together, the results suggest that puberty education among the respondents is fragmented across multiple sources, with no single channel reaching the majority of students. This underscores the need for a coordinated approach. Such an approach would strengthen the delivery of comprehensive puberty and life-skills education in schools, equip parents to engage in open dialogue with their children, and promote digital literacy so that adolescents can critically evaluate online information. One of the KI explained that "Intervention on puberty will never be enough because every year new students enrolled are almost clueless; hence awareness creation will always be needed. Also these students need constant reminders, not just by teachers but also from other people outside the school with different teaching methods, contents and skills"

Following the finding presented in Table 2, students were further asked to assess whether the information provided was sufficient for their needs. Their responses provide further insight into the adequacy of the information received and whether the knowledge provided was considered sufficient to support their understanding and management of puberty-related changes and associated life skills.

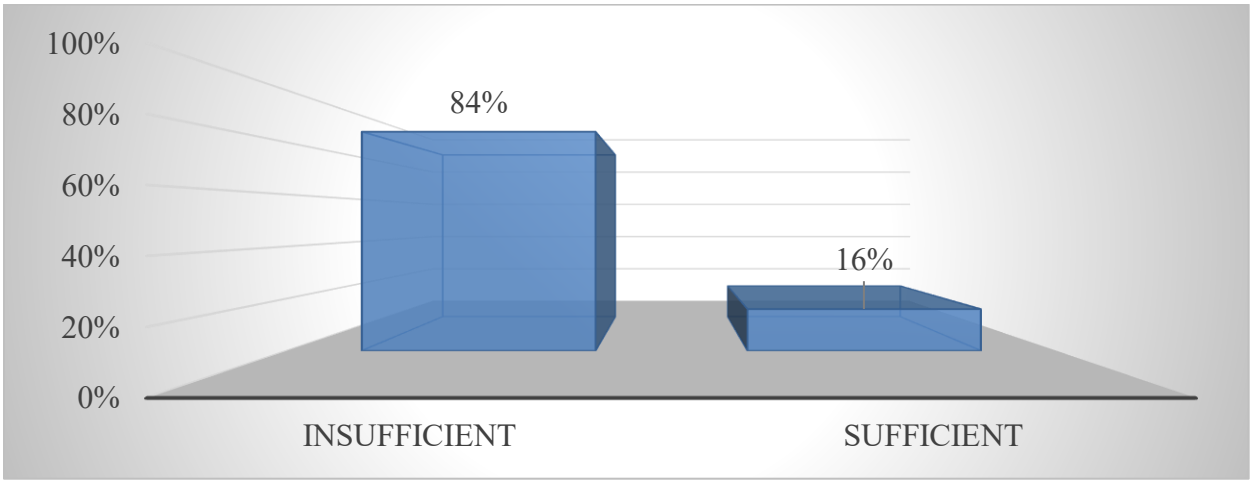


Figure 2: Reported adequacy of puberty and life skills education

As shown in the figure, the majority of students (84%) considered the information they had received on puberty and life skills insufficient, while only 16% regarded it as sufficient. Although students obtained information from multiple sources, as shown earlier, this exposure did not translate into adequate knowledge. The finding suggests that the information provided may be fragmented, superficial or poorly aligned with students' needs. Such shortcomings are likely to limit students' ability to understand and manage the physical, emotional and social changes associated with puberty. The results point to the need for more comprehensive, structured and age-appropriate puberty and life-skills education, delivered in a coordinated manner by schools, parents and other stakeholders

4.4 Parental communication about puberty

The study further inquired on the parents' commitment to communicate with their children on puberty in order to assess parent's responsibility and commitment to educate their daughters at home. From the survey, the following was identified.

Table 3: Parents communicating with girls about puberty

Parent	Frequency	Percent
Mother	87	87.0
Father	1	1.0
Neither parent	11	11.0
Both parents	1	1.0
Total	100	100.0

Most respondents (87%) reported discussing puberty with their mothers, compared with 1% with fathers alone and 1% with both parents. This suggests that, where parents were involved in communicating about puberty, mothers were substantially more likely than fathers to assume this role. Puberty-related communication therefore appears to be predominantly associated with maternal involvement. This pattern is supported by Wamoyi et al. (2010) findings concluding this outcome being a reflection of prevailing gender norms that position women as the primary agents in the socialisation of girls, particularly regarding bodily changes and reproductive health. Nonetheless, 11% of the students responded to having no communication with either parent which could particularly be one of the sources of challenges facing female students leading to difficulty in reporting the brutality they face due to poor environment fostered to facilitate such communication. In probing, one of the interviews conducted with one of the educational Officers, the Officer affirmed that parents and relatives are one of the sources of mishaps that befall female students. When the children fall to mishaps and the parents settle with money or gifts the child loses confidence to communicate with the parents on the challenges she faces as well as on her body changes.

In many African countries, cultural norms and values make it taboo to discuss sexuality with parents at home, and parents themselves are reluctant to discuss sexuality with their children because they feel that they do not have adequate information (Ito, Madeni and Shimpuku, 2022). Subsequently, evidence suggests that in spite of some adolescents being sexually active, many parents do not discuss sex-related issues with them due to lack of age- appropriate respectful vocabulary and skills (Teizazu et al., 2023). Furthermore, according to Lahmi et al. (2020), parents believe that it is a teacher's duty to teach their children about sexual health at school, while teachers think that talking about sex is a basic parental responsibility.

Table 4: Understanding of puberty and related myths

Statement	Yes n (%)	No n (%)	Do not know n (%)	Not sure n (%)
A girl can become pregnant after her first sexual encounter	32 (32)	14 (14)	21 (21)	33 (33)
A girl will not grow properly after a sexual encounter	1 (1)	66 (66)	18 (18)	15 (15)
A girl can become pregnant following sex during menstruation	51 (51)	14 (14)	15 (15)	20 (20)
Condoms can protect a girl from HIV/AIDS	54 (54)	11 (11)	14 (14)	21 (21)
A girl cannot acquire HIV through sex before puberty	5 (5)	54 (54)	24 (24)	17 (17)

The findings indicate that respondents' knowledge of basic sexual and reproductive health facts is limited. On average, only 51.4% of responses were correct, meaning that roughly half of all answers given were either wrong or uncertain. Performance was weakest on the item concerning pregnancy at first intercourse, which only 32% answered correctly. This is arguably the most consequential gap identified in the study. The belief that pregnancy cannot occur at first intercourse, held explicitly by 14% of respondents and not ruled out by a further 54%, is precisely the misconception most likely to influence decisions at the point of sexual debut. Performance was

strongest on the statement that sexual intercourse impairs a girl's growth, which 66% correctly rejected.

A closer analysis, however, suggests that the central problem is not misinformation but uncertainty. Explicitly incorrect answers were comparatively rare, averaging 9.0% across items and never exceeding 14%. By contrast, an average of 39.6% of responses fell into the uncertain categories, rising to 54% on the first-intercourse item. In other words, the majority of students who did not answer correctly did not hold a false belief; rather, they did not know. This distinction carries significant implications for intervention. Myth-busting strategies, which aim to correct false beliefs, are designed for a problem that the data suggest is secondary. The primary deficit is an absence of clear, confident knowledge, which calls for direct, explicit and repeated instruction rather than corrective messaging alone.

Too many young people receive confusing and conflicting information about puberty, relationships, love and sex, as they make the transition from childhood to adulthood. A growing number of studies show that young people are turning to the digital environment as a key source of information about sexuality (UNESCO, 2023). This ultimately leads to their engagement to inappropriate behaviours. According to the Demographic Health Survey in Tanzania, among individuals aged 18–24 years, more than 60% of women and 51% of men experience their first sexual intercourse before the age of 18 years. Further, 56.7% of girls under 19 years of age have experienced childbirth (Ito, Madeni and Shimpuku, 2022).

4.5 Preferred training topics

Nonetheless, the students expressed the areas of interested training areas that thought will be beneficial in their welfare and development as expressed on Table 5.

Table 5: Topics students wished to receive training on

Topic	Frequency	Percent
Skills for independence	17	17.0
Relationships	40	40.0
Gender-based violence	24	24.0
HIV/AIDS prevention	1	1.0
Unity among girls	2	2.0
Puberty	2	2.0
Early pregnancy	1	1.0
Menstruation	5	5.0
Family planning	2	2.0
Female genital mutilation	1	1.0
Avoiding early marriage	1	1.0
Sexually transmitted infections	1	1.0
Gender equality	1	1.0
None	2	2.0
Total	100	100.0

From Table 5, 40% of the students expressed interest in relationship training, 24% on Gender based Violence and 17% on skills that will make them independent. In relation to Table 6, the three highly rated needed training and knowledge which make a total of 81% have not been provided to female students. School-based puberty education is delivered chiefly through Biology and Civics and is therefore oriented towards reproductive biology and the normative framing of courtship and marriage. Students, by contrast, express their most pressing needs in social and relational terms: how to navigate relationships, how to protect themselves from violence, and how to become self-reliant. The prominence of gender-based violence warrants particular attention. According to Mulubwa et al. (2023), poor of access to sexual reproductive health and rights services and education continue to be one of the leading contributors to problems such as sexual assault, rape, and early pregnancies among adolescents.

5.0 Conclusion

This study examined adolescent schoolgirls' awareness of their right to information on puberty and life skills, the sources and adequacy of the education they receive, and its relevance to their safety, education and wellbeing. Findings from five secondary schools across Arusha, Kilimanjaro and Manyara indicate that the central challenge is not simply lack of awareness or access, but the limited ability of existing provision to translate exposure into confident and usable knowledge. Although most students were aware of their rights, had received some puberty education, and had discussed puberty with a parent, many remained uncertain about basic aspects of pregnancy and HIV transmission and overwhelmingly considered the education insufficient. This demonstrates

that measures of reach or curriculum coverage alone may conceal important gaps in the depth, relevance and practical usefulness of puberty and life-skills education.

Three weaknesses emerged. First, puberty education is largely incidental, embedded within broader subjects rather than delivered as a deliberate and recurring area of learning. Second, responsibility is shared between schools and families without sufficient coordination, leaving important gaps in provision. Third, existing content appears insufficiently aligned with students' priorities, particularly their need for guidance on relationships, protection from violence and personal safety. Parental communication was also predominantly maternal, while some key informant accounts suggested that the home may not always provide a safe or reliable source of support.

The findings therefore point to the need for a shift towards dedicated, recurring and practically oriented puberty and life-skills education jointly supported by schools, families and community actors. Such provision should combine accurate reproductive health knowledge with the relational, protective and decision-making skills that students identify as relevant to their everyday lives.

The study is limited by its modest and geographically uneven sample of 100 students from five schools, the reliance on self-reported responses, and the limited qualitative evidence concerning harm within families. The findings should therefore be considered indicative rather than representative. Further research using larger samples and qualitative approaches is needed to examine students' experiences in greater depth, including the role of teachers, parents and safeguarding mechanisms. Overall, the study demonstrates that adolescent girls do not simply need more information; they need education that is relevant, practical, sustained and responsive to the realities they face. Strengthening such provision is important not only for their health and wellbeing but also for their ability to remain in school safely and make informed decisions about their futures.

6.0 Recommendations

The findings suggest several areas for strengthening puberty and life-skills education. First, puberty and life-skills content should be revised to incorporate relationships, prevention of gender-based violence and harmful practices, and skills for independence, which students identified as their foremost priorities. Teachers should also be trained to deliver puberty education confidently and explicitly, with particular emphasis on practical information about pregnancy risks and HIV transmission, areas in which students demonstrated considerable uncertainty. Schools should establish regular and structured sessions for both girls and boys on adolescent issues, drawing on the model already implemented in one of the schools studied. In addition, school-parent collaboration should be strengthened, for example through parent meetings, so that responsibility for puberty education is explicitly shared rather than assumed by either party to rest with the other. Fathers should also be encouraged, through community and religious leaders, to take a more active role in their daughters' puberty education, thereby reducing girls' dependence on a single parental source. Finally, parents, particularly mothers, should be equipped with accurate information and

appropriate communication skills so that conversations about puberty at home move beyond brief instructions to provide substantive and supportive guidance.

References

Academic Technology Services (2015). Academic Technology Services A Division of Information Technology Services', A Division of Information Technology Services, 6654(V).

Amuri, M., Mosha, I. H., & Mgongo, M. (2017). Adolescent girls' perceptions of menstruation in rural Tanzania: Implications for reproductive health education and gender equity. BMC International Health and Human Rights, 17(1), 1-7.

Betzler, M. (2022). The Moral Significance of Adolescence', Journal of Applied Philosophy, 39(4), pp. 547–561. https://doi.org/10.1111/japp.12556.

Carvalho, S. and Evans, D. (2022). Girls' Education and Women's Equality: How to Get More out of the World's Most Promising Investment. Development, 9(1), pp. 27–47. https://doi.org/10.22555/joeed.v9i1.475.

Dunkel, L. and Quinton, R. (2014). Transition in endocrinology: Induction of puberty. *European Journal of Endocrinology*, 170(6):229–239. https://doi.org/10.1530/EJE-13-0894.

Govindaraju, V. (2021). A Review of Social Cognitive Theory from the Perspective of Interpersonal Communication. International Journal Documentation & Research Institute, Vol. 7(12), pp. 488–492. https://doi.org/10.5281/zenodo.5802235.

Hashmi, D.K. and Fayyaz, H.N. 2022 'Adolescence and Academic Well-being: Parents, Teachers and Students' Perceptions', Journal of Education and Educational

Health, 18(1), 1-11. https://doi.org/10.1186/s12978- 022-01418-6.

Ito, K., Madeni, F.E. and Shimpuku, Y. (2022). Secondary school students' and peer educators' perceptions of adolescent education in rural Tanzania: a qualitative study', Reproductive

Iwata, J.J. (2021). Southern Africa Journal of Communication and Information Science pp 76 – 99, 1, pp. 76–99.

Jämiä, L. et al. (2023). Contents, Methods, and Outcomes of Adolescent Sexual Health Promotion in School Environments: A Scoping Revie., Journal of School Health [Preprint]. Available at: https://doi.org/10.1111/josh.13393.

Kattan, R.B. (2021). Girls' education goes beyond getting girls into school.

Kihinga, C. N., Shayo, E. H., & Somba, M. J. (2021). Challenges facing parents in communicating with their children on puberty matters in Tanzania: A qualitative study. Reproductive

Lahmi, A. (2020). The Role of Parents in Forming Morality Adolescents Puberty in Globalization Era Project to National seminar on the theme of character education View project Journal View project The Role of Parents in Forming Morality Adolescents Puberty in Globalization.

International Journal of Future Generation Communication and Networking, 13(4):3991–3996.

Major, K.V.P. and Rose, P.M.C. (2019). Education -A Channel for Women Empowerment, 6(5), pp. 103–107.

Mgongo, M. et al. (2019). Facilitators and Barriers to Breastfeeding and Exclusive Breastfeeding in Kilimanjaro Region, Tanzania: A Qualitative Study', International Journal of Pediatrics (United Kingdom). https://doi.org/10.1155/2019/8651010.

Ministry of Education, Science, and Technology (2014). National Strategy for Human Resource Development and Capacity Building in Tanzania.

Ministry of Education, Science, and Technology. (2014). Secondary Education Curriculum. Retrieved from http://www.moe.go.tz/storage/app/media/uploaded-files/Secondary-Curriculum_2016.pdf.

Mulubwa, C., Zulu, J.M. and Chavula, M.P. (2023). Experiences of teachers and community-based health workers in addressing adolescents' sexual reproductive health and rights problems in rural health systems : A case of the RISE project in Zambia. pp. 1–10.

Nkata, H., Teixeira, R. and Barros, H. (2019). A scoping review on sexual and reproductive health behaviors among Tanzanian adolescents. pp. 1–15.

Nkuba, M.. (2018). Mental health problems and their association to violence and maltreatment in a nationally representative sample of Tanzanian secondary school students. *Social Psychiatry and Psychiatric Epidemiology.* 53(7), pp. 699–707. https://doi.org/10.1007/s00127-018-1511-4.

Prosperi, S. and Chiarelli, F. (2023). Early and precocious puberty during the COVID-19 pandemic. *Frontiers in Endocrinology*, 13: 1–10. https://doi.org/10.3389/fendo.2022.1107911.

Teizazu, H. (2023). Exploring a faith-based approach to puberty education in Tanzania. pp. 1–8. Available at: https://doi.org/10.3389/frph.2023.1024550.

UNESCO (2023). Comprehensive sexuality education: For healthy, informed and empowered learners.

UNICEF (2019). Menstrual Health and Hygiene Situation among Schoolgirls in Tanzania,

UNICEF [Preprint].

URT. (2022). Ministry of Health, Community Development, Gender, Elderly and Children National Adolescent Health and Development Strategy 2018 - 2022.

Yakut, E. (2019) 'A Social Cognitive Theory Perspective on Marketing Studies: A Literature Review Pazarlama Çalışmalarına Sosyal Bilişsel Kuram Perspektifi: Bir Literatür Taraması', Journal of Yaşar University, 14: 18–33.