

Knowledge of Factors Associated with Teenage Pregnancy among Junior High School Students in the Talensi District of the Upper East Region of Ghana

Odalys Rivera Hernandez^{1,2*}, Bernard Nyaaba Akolbire¹, Ana Maria Simono Charadan^{1,3}

¹School of Medicine, University for Development Studies Ghana, Tamale, Ghana

²Department of Internal Medicine and Therapeutics, School of Medicine, University for Development Studies, Tamale Teaching Hospital, Tamale, Ghana

³Department of Obstetrics and Gynaecology, School of Medicine, University for Development Studies, Tamale Teaching Hospital, Tamale, Ghana

Email: *dr.odalys@uds.edu.gh

How to cite this paper: Hernandez, O.R., Akolbire, B.N. and Charadan, A.M.S. (2022) Knowledge of Factors Associated with Teenage Pregnancy among Junior High School Students in the Talensi District of the Upper East Region of Ghana. *Open Journal of Obstetrics and Gynecology*, 12, 1304-1319.

<https://doi.org/10.4236/ojog.2022.1212115>

Received: November 5, 2022

Accepted: December 26, 2022

Published: December 29, 2022

Copyright © 2022 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

World Health Organization (WHO) defines teenage pregnancy as occurring between the ages of 10 and 19. Although teenagers make up just 22% of the Ghanaian population, in 2014, a Demographic and Health Survey report indicated that teenagers account for 30% of all births recorded. Pregnancies and births during the teenage period are associated with higher risks than older women. This study aimed to identify and establish the knowledge of factors linked to teenage pregnancies among junior high school students in the Talensi District Assembly in the Upper East of Ghana. **Method:** A cross-sectional study was conducted with 95 Junior High School students from January to February, 2022 for a period of six weeks. Convenience sampling was used to select the participants. Primary data was obtained using a structured questionnaire; secondary data was obtained from the Talensi District Health Directorate and the Talensi District Assembly. Data were analysed using SPSS Version 22. **Results.** Thirty-six (36, 25.2%) of the respondents intimated that curiosity was a significant cause of teenage pregnancies in the Talensi District, which recorded 19.6% in 2021, an increase over the 2020 figure of 17.7%. Reasons why teenagers would want to engage in sexual activities, included curiosity about sex—36 (27.17%), social media influences—8 (19.58), peer pressure—27 (18.88%) and favours to partners—19 (13.29%). Concerning their knowledge about contraceptive use, the participants mentioned friends (32.26%) as being the prime informants, parents and relatives (17.74%) and radio broadcasts (12.10%). **Conclusion:** The Talensi District

Assembly is entreated to roll out poverty alleviation programmes for families in the area with teenage girls attending school and to enact legislation prohibiting early marriage. Measures that will help reduce teenage pregnancies in the district should include adequate financial support by parents of their wards, sex education in schools and various houses, and schooling of the teenagers to resist peer pressure.

Keywords

Knowledge, Teenage Pregnancy, Peer Pressure

1. Introduction

In developing countries, about 21 million adolescent girls who fall between the ages of 15 and 19 years are estimated to get pregnant, and an approximated 16 million adolescent girls give birth annually [1] [2]. According to WHO, teenage pregnancy is synonymous with adolescent pregnancy. Ganchimeg *et al.* [3] define adolescent pregnancy as pregnancy in girls aged 10 to 19. In Ghana, adolescents represent 22.4% of the total population and the rates of teenage pregnancy and adolescent childbearing stand at 14.2% and 66/1000 adolescents, respectively. Thirty percent (30%) of all births registered in Ghana in 2014 were by adolescents [4]. Statistics from the Ghana Health Service indicate that the Upper East Region recorded a total of 6533 cases of teenage pregnancies in 2020, with Talensi District placing third among the 15 municipal and district assemblies. Also, according to GHS, a total of 1639 girls below the age of 20 got pregnant in the first quarter of 2021, with Talensi District recording 162, placing second among the districts. [4]

Many countries consider adolescent pregnancy and reproductive health a significant public health problem [5]. Sub-Saharan Africa has the highest teenage pregnancy incidence (143 per 1000 live births) [6]. Teenage pregnancy (intended or not) has adverse effects on the individual, community and country. Teenage mothers are more likely to be school drop-outs and more likely to suffer poverty. They are at increased risk of giving birth to children with poorer behavioural, health and educational outcomes throughout their lives than children of adult parents [7] [8] [9].

Adolescents in Ghana comprise 6.6% of total fertility [10]. In Ghana, 11% of adolescent girls between the ages of 15 and 19 years have had at least one child [11]. The highest rates of teenage pregnancy in Ghana occur in the Volta (22.1%), Central (21.3%), and Brong Ahafo (21.3%) regions, with the lowest rates occurring in Upper East (9.7%) and Greater Accra (8.3%) regions [12]. Women who have not gone to school or who have had little education are likely to start giving birth at a very early age; whilst those women who have been able to reach secondary level are likely not to start giving birth at an early age (31% compared to 1%) [13].

The Reproductive and Child Health Department of Ghana Health Services reported a rise in adolescent pregnancies among those aged 15 to 19 years, from 43,465 in 2009 to 83,917 in 2013, representing 12.3% of all pregnancies in the country [9].

In the Upper East Region, 15.8% of pregnant women were teenagers in 2018. According to GHS, five thousand five hundred and thirty-four (5534) girls under 20 years got pregnant in Upper East Region in the first ten months of 2021. According to the Ghana Health Service report, this represented 15.4% of the population of girls under 20 years in the region. In 2020, 6533 teenagers got pregnant in the Upper East Region [4].

In Talensi District, in 2020, out of the 6533 pregnant teenagers in the Upper East Region, the district recorded 564, the 3rd highest in the region [4]. Again, in the first quarter of 2021, Talensi District placed 2nd, recording 162 teenage pregnancies out of the regional total of 1639. [4]. Various studies have pointed out that adolescents' knowledge regarding factors leading to early pregnancy is still unclear, and they are unaware of certain aspects of the subject, such as the use of contraceptive methods, the consequences of adolescent pregnancy, etc. These are critical points to address this public health problem [14] [15] [16].

Factors associated with teenage pregnancies include: economic, cultural, social, and non-availability of access to reproductive education and other related factors.

Economic factors associated with teenage pregnancies: Teenagers from poor homes are vulnerable to unintended pregnancies due to their inability to afford basic needs such as food, clothing, and shelter. Some adults use this as an opportunity to provide for these vulnerable adolescents' needs in exchange for sex. These adolescents cannot negotiate for safer sex from these adults who provide for their needs [17]. Gyan C (2013) [18] found that adolescent pregnancies are recorded higher in urban slums than in well-planned communities. Due to the high poverty rate in rural Sub-Saharan Africa, adolescent girls are restricted to little or no source of income if they are in any marriage. This can let families make sudden marriage transactions without considering the teenager's welfare. Again, the low social status of women in traditional societies in Sub-Saharan Africa prevents them from earning high incomes. [19].

Cultural factors associated with teenage pregnancies: Cultures that promote early marriages prevent teenage brides from often negotiating safe sex with their husbands, making them more susceptible to sexually transmitted infections, including HIV, and putting them at higher risk of getting pregnant early [20] [21]. Empirical studies have proven that teenage marriage is an essential factor that exposes teenagers to early sexual intercourse and pregnancy.

Our society can have a negative or positive impact on teenage pregnancy, [9] discovered that most traditional homes in Ghana do not openly discuss sex matters since they consider the mere mention of sex a taboo and see it as evil. Sexual reproductive health education for adolescent girls is often received from their colleagues [22]. Gyan C (2013) [18] believes bad parenting contributes to most

teenage pregnancies. Effective contraceptive use and education can prevent many teenage and adolescent pregnancies; however, contraception is still an issue for most people in rural Africa due to cultural beliefs [23] [24]. For example, most adolescent girls from traditional homes in Ghana do not know about contraceptives and family planning, mainly due to the negative perceptions and beliefs associated with both. Therefore, adolescents and teenagers are reluctant to patronize these family planning methods [25].

Religion plays a significant role among the factors associated with teenage pregnancy in our sub-region. A study conducted by de Visser *et al.* (2007) [26] on religion and sexuality using four religious groups (Protestants, Christians, Buddhists and Muslims) revealed that the attendance of religious activities is associated with more reserved patterns of sexual behaviour and attitude. The more religious girls were, the less likely chances to engage in early sex. Also, Galvan *et al.* (2007) [27] found that fewer sexual partners and lower chances of engaging in unprotected sex were associated with religiosity. This will suggest that safer sex among adolescents is highlighted during religious sermons.

Social factors associated with teenage pregnancies: The social factors of health are the conditions in which people are born, grow, live, work and age, including the health system. These social factors are determined by how money, power and resources are distributed locally, nationally and globally. The social factors of these health issues are often the reasons for the unjust and preventable differences in health status seen within and between countries [28]. Knowing that these social factors make adolescents vulnerable to early pregnancy may contribute to reducing teenage pregnancies through acceptable policy measures instituted through research. The places where adolescents live, learn, work, and play influence their sexual and reproductive health behaviours [29] [30].

Education is critical among the factors associated with teenage pregnancies, especially education of the girl-child; achieving sustainable development goals depends hugely on it. For example, even if they are not in the expected class for their age, adolescent girls who attend school have lower rates of reported sexual activity than out-of-school peers. If school-going girls are even sexually active, they are more likely to use one form of contraception or the other, which will assist in lowering the occurrence of pregnancy [31]. Peer influences are a major contributing factor to adolescent pregnancies. This occurs when the peers' influence one another to engage in sexual activities, which most of the time is without protection and the consequence of this behaviour is unintended pregnancies [32]. One primarily known factor which has been found to cause premarital sex in Sub-Saharan Africa is peer pressure. A study carried out in Ghana and Uganda reported that teenagers were influenced by their colleagues to indulge in unsafe sexual behaviours even though they had not prepared for it [33].

It is widely accepted that alcohol and drug use by adolescents play a vital role in the cause of adolescent pregnancies through unintended sexual activities [34].

Domestic violence and sexual abuse are also factors associated with teenage pregnancy. According to Saewyc *et al.* (2004), [35] there is a strong correlation

between adolescent pregnancy and sexual abuse history through examining the association between pregnancy involvement, risk behaviours and sexual abuse. Results confirmed that the reports of pregnancy involvement were significantly more common among adolescents who were sexually abused than non-abused adolescents [36].

The influence of social media is another factor that can lead to unwanted teenage pregnancies. The mass media have made information on issues worldwide easily accessible through television, the internet, mobile phones and radio. The mass media has become a tool for learning and behavioural change, including the proliferation of videos and movies that portray sex openly as being normal. Adolescents are, therefore, exposed to programmes with adult or sexual content that is not suitable for them, and this may have an influence on their sexual habits, which may eventually lead to adolescent pregnancy [37] [38] [39].

Reproductive education and health-related factors associated with teenage pregnancies. The accessibility to health services and sexual reproductive awareness tends to affect the rate of teenage pregnancy [40] [41]. About 220 million women in developing countries, most adolescents, have no or inadequate sexual reproductive health services [42]. Inadequate knowledge of reproductive education and family planning services also accounts significantly for increasing adolescent pregnancy. In Ghana, some parents, due to a lack of knowledge or limitation by cultural barriers, cannot talk to their children about sex. Therefore the adolescents are left to receive information from their peers, who may not have in-depth knowledge of what they are talking about [43]. However, the parents who educate their adolescents on sex and sexuality often use threats and warnings about the consequences of engaging in sexual activities. Hence, they tell their adolescents to abstain from sexual activities, which does not do much in tackling adolescent pregnancy because today's adolescents find it difficult to abstain [44].

The attitude of some health workers also contributes to adolescent pregnancy. It has been said that sexual reproductive information has been unavailable to adolescents because of the negative attitude of some health service providers [45]. Most of our adolescents are reluctant to seek reproductive health services because some health service providers sometimes scold them, resulting in their reluctance to seek such services. Even at times, some health service providers reveal confidential information about their clients to third parties, disrespect and stigmatize some teenage clients who visit them for advice and help [46]. The absence or inadequate health facilities in some rural areas contributes to the harmful effects of adolescents not seeking sexual reproductive health advice [47]. This contributes to the very high non-patronage of sexual reproductive health services. The high cost of these reproductive health services at the health centres also affects patronage. Many adolescents in Ghana are either students or unemployed; because of this, they cannot afford reproductive health services, especially those not registered with a national health insurance scheme [48].

Teenage pregnancy continues to be a social problem, making it a public health

concern in the Talensi District Assembly and the nation. Teenage pregnancy is rampant in Ghanaian society, especially among students at the primary level. Most have no option but to enter examination halls with their pregnancies to write the Basic Education Certificate Examination (BECE). Some give birth a few days before the BECE, and others too would, unfortunately, give birth at the examination centres, as reported by the Talensi District Education Office of the Upper East Region after the 2013 Basic Education Certificate Examination [49]. Because of the high rate of teenage pregnancies in the Talensi District, in particular, and Ghana at large, this study was conducted to identify the knowledge of factors associated with teenage pregnancy among students of the junior high schools in the district and to make the findings available to the appropriate authorities. The study was also to aid the health facilities, governmental organizations and NGOs make appropriate policies and proffer strategies to lessen the prevalence of teenage pregnancies in the Talensi District and possibly the entire nation.

2. Study Participants and Methods

2.1. Study Design

The research design used was a cross-sectional study in some selected junior high schools in the Talensi District.

2.2. Study Population

The study population was adolescent girls aged between 13 and 19 years who attended junior high schools in the Talensi District of the Upper East Region.

2.3. Sample Size

Sampling size would be selected from 46 junior high schools in the Talensi district.

The sample size was obtained using the Taro Yamane's formula:

$$n = N / \left[1 + N(e)^2 \right]$$

where;

n = sample size;

N = population size;

e = sampling error.

Using 90% confidence interval with 10% sampling error. Using a study population size of 1738 (female students of JHS2 and JHS3 in the Talensi District) and sampling error (e) of 0.1, the sample size (n) is 94.559 which is approximately 95 of the study participants

2.4. Sampling Technique

Convenience sampling was employed. It included schools that were closer to the Tongo town.

2.5. Data Collection Tools

The data collection tool used was a questionnaire. Primary data was obtained from interviews with key informants. Secondary data was acquired from the Talensi District Health Directorate and the Talensi District Assembly.

2.6. Quality Control

Privacy was ensured during the answering of the questions in the questionnaire by making sure that the respondents sat far apart from each other. They were also made to understand that no one was going to know whoever answered a particular questionnaire since their identifications such as names, index numbers and so forth were not required.

Also, Statistical Package for the Social Sciences (SPSS) version 22 for windows was used for analysis and Excel was used for data entry and cleaning.

2.7. Data Analysis

Statistical Package for the Social Sciences version 22 for windows was used to analyse the data.

2.8. Ethical Consideration

We obtained Ethical approval for the study from the Ghana Education Service and the Talensi District Health Directorate. Information from key informants and questionnaire were treated confidentially.

3. Results

A total of 95 girls, students of some selected Junior High Schools (JHS 2 & JHS 3) in the Talensi District, aged between 13 and 19 years, with a mean age of 15.58 ± 0.43 , consented to be enrolled on the study. No JHS 1 students were registered in the district when the study started, hence their absence. The participants were selected using the convenience sampling method.

Data from the Reproductive and Child Health (RCH) Unit of the Talensi District indicated that, in 2019, out of the total number of women who delivered babies at the various health facilities in the district, 19.9% were below 20 years of age. In 2020, the percentage reduced to 17.7% but rose to 19.6% in 2021. The Talensi District Hospital alone recorded 52 teenage pregnancies in 2021.

Sociodemographic characteristics of the respondents: Out of the 95 participants in the study, 9 (9.47%) were 13 years old, 11 (11.58%) were 14 years old, and 42 (44.21%) were 15 years of age. All of them were unmarried, with 5.26% staying with their fathers only and 22.11%—with their mothers only (**Table 1**).

Concerning religious denominations, 94.74% were Christians (**Table 1**).

Reasons why respondents wanted to try having sexual intercourse

Out of the 95 respondents, 10 had boyfriends, and seven indicated that they had had sexual intercourse before. Even though 88 girls had not had any sexual intercourse before in their lives, answers to the questions concerning the reasons

why they would want to engage in sexual activities included curiosity (25.17%), social media influences (19.58), peer pressure (18.88%) and as favours to partners (13.29%) (**Table 2**).

Knowledge of methods of contraception and types of contraceptives in use

Most of the respondents (81.3%) knew the available methods of contraception. Regarding the types of contraceptives available in the market and which can be used during sexual intercourse, 53.59% mentioned condoms, 20.92% implants, and 11.11%—the various pills used as contraceptives (**Table 3**).

Source of knowledge of contraceptives

On the sources of their knowledge about contraceptives in use, the participants mentioned friends (32.26%) as being the prime informants, parents and relatives (17.74%) and radio broadcasts (12.10%) (**Table 4**).

Reasons for not accepting to use any contraceptive method if allowed to do so

The 95 participants in the study gave various reasons why they would not want to use any contraceptive method even if they had the choice to do so. These reasons included: parental disagreement (24.6%), fear of being perceived as being an immoral girl (23.6%) and belief of becoming infertile in the future (19.1%) (**Table 5**).

Table 1. Sociodemographic characteristics of respondents.

Age	Number of respondents (N)	Percentage of total (%)
13	9	9.47
14	11	11.58
15	42	44.21
16	26	27.37
17	5	5.26
18	2	2.11
19	0	0.0
Total	95	100.0
With whom they girls stayed:		
Fathers	5	5.26
Mothers	21	22.11
With both parents	58	61.05
With other relatives	11	11.58
Total	95	100.00
Religious denomination:		
Christianity	90	94.74
Traditionalism	3	3.16
Islam	2	2.10
Total	95	100.00

Table 2. Participants perceived reasons for wanting to and/or engaging in having sexual intercourse.

Reasons for wanting to have or engaging in sexual intercourse	Frequency	Percentage
Curious about sex	36	25.17
Social media influence	28	19.58
Peer pressure	27	18.88
Favours to partner	19	13.29
Drug influence	11	7.69
Sexual abuse	10	6.99
Early marriage	7	4.90
Wish to become pregnant	5	3.50
Total	143	100.00

N.B. Participants were allowed to choose more than one answer.

Table 3. Knowledge of types of contraceptives in use.

Contraceptives in use generally	Frequency	Percentage
Condom	82	53.59
Implant	32	20.92
Pills	17	11.11
Injectable	17	11.11
IUD	3	1.96
Others	2	1.31
TOTAL	153	100.00

N.B. Participants were allowed to mention more than one item.

Table 4. Source of knowledge of contraceptives.

Source of knowledge about contraceptives	Frequency	Percentage
Friends	40	32.26
Television	29	23.39
Parents/relatives	22	17.74
Social media	18	14.51
Information obtained from radio broadcasts	15	12.10
Total	124	100.00

N.B. Participants were permitted to choose more than one item.

Table 5. Reasons for not wanting to use contraceptives.

Reasons for not wanting to use contraceptives	Frequency	Percentage (%)
Parents will not agree	49	24.62
Fear of being perceived as an immoral girl	47	23.62
Fear of infertility	38	19.10
Do not believe in contraceptives	37	18.59
Fear of weight gain	10	5.03
No reason given	18	9.04
TOTAL	199	100.00

N.B. Some participants chose more than one item.

Availability and patronage of contraceptive services in the community

Fifty-one (51, 53.7%) out of 95 participants indicated that contraceptive services were readily available in the community in which they lived. Still, only six (6) indicated they had ever visited a reproductive health facility. Even though a vast majority of them (93.68%) have never visited a reproductive health facility, many indicated that health workers were generally friendly (69, 72.63%), and only 27.37% thought otherwise, believing that health workers were rude.

4. Discussion

Data from the Ghana Health Service (GHS) statistics [4] indicated that 6533 teenagers became pregnant in the Upper East Region, where the Talensi District is situated. Out of the region's 6533 pregnant teenagers in 2020, the Talensi District recorded the third highest of teenage pregnancies (564, 8.63%). Again, in the first quarter of 2021, the Talensi District placed 2nd in the region, recording 162 teenage pregnancies out of the 1639 teenage pregnancies (GHS).

The sociodemographic characteristics of the girls in this study showed that their ages ranged between 13 years and 18 years, which falls within the WHO definition of teenage girls or adolescents. Also, even though many of them lived with both parents (61.05%) advise on contraceptive use was low—17.74%. This goes to show that there was very little sexual and reproductive health education from the parents they lived with, who considered such ideas as being taboo, alien. This fact was also highlighted in a systematic review by Newton-Levinson *et al.* [50]. This is as a result of the fact that in many homes in the Upper East Region, families considered it a taboo to talk about sex in the presence of children (9). Of the 95 girls interviewed in the district only seven claimed to have had sex even though 10 had boyfriends. Eighty-eight girls (92.63%) of the girls had never had sex. Since over 94.7% of them were Christians and therefore religious, we believe religion played a major role in their abstinence from experimenting with sexual activities. The study by Odimegwu confirms this idea and goes further to state that religious groups have strong opposition to premarital sex [51]. This is a strong indication of the role religion plays in the education of teenagers about sex.

Reasons why respondents wanted to try having sex

The girls in JHSs in the Tongo District gave various reasons why they wanted to have sexual intercourse with men. Among the reasons that our respondents gave that will goad them into having sexual intercourse included personal desire to satisfy their curiosity about sex (25.17%) and also social media influences that offered them enough information about their sexuality. These same factors were noted by Adongo B.W. [52] and Ahinkorah BO *et al.* [53] in their studies.

Knowledge about sex and factors that may lead to teenage pregnancy

Even though none of our participants became pregnant as a teenager, they were knowledgeable about the possible causes of teenage pregnancies. A majority (25.2%) of those who answered the questionnaire intimated that curiosity was

a major cause of teenage pregnancies in the district. This finding agrees with that of Acharya *et al.* (2010) [22]. They stated that teenage girls hear about sex from their peers and fantasise about it, making them curious and vulnerable and wanting to engage in sexual activities. According to Acharya *et al.* [22], they do this without fully knowing the possible repercussions of early sex. The study by Acharya (2010 [22]) asserted that most of the time, young girls received sexual reproductive health education from their peers, which had a high association with teenage pregnancy. In our study, even though over 40% of the participants received information about contraceptives (sex education) from their peers, none of them used them.

According to the participants of this study, information from social media was the second most common source of their knowledge about sex. Similar conclusions were arrived at by Wanyama & Simatwa (2011) [54] when they identified the mass media, especially the electronic version, as a source of changed values and mores being experienced by teenagers in societies. The media increasingly reaches most areas in all countries, influencing young people. Social media and the movies industry tend to glamorise teenage pregnancy, knowingly or unknowingly, contributing to the growth of teen pregnancies [38]. Other factors that contributed to the growth of teenage pregnancies in the district, as articulated by the respondents, included: peer pressure, which found expression in the work of Thammaraksa P. *et al.* (2014) [55]; and the need to gain favour from the male counterparts to satisfy their essential needs, which agrees with what Gyesaw and Ankomah (2013) [56] wrote about in their work on teenage pregnancies in Accra, Ghana.

Knowledge about the use of contraceptives

None of the participants of this study had used contraceptive methods before; even the seven teenagers who stated that they had had sex before did not use any contraceptives. All the same, over 81% of the respondents knew about contraceptives. This correlates well with studies conducted in India by Prachi, Das, Ankur, Shipra, & Binita (2007) [57] and Nigeria by Egede *et al.* (2015) [58] that having some knowledge about contraceptives does not reflect in the usage of them. Over 32% of the study participants stated that they learned about contraceptives from their friends. Other sources of information on contraceptives were from television shows, parents and relatives and social media. This communication about getting information on contraceptive use from parents/relatives is at variance with what was found in Bolgatanga in the Upper East Region that sexual communication/education was conspicuously absent in most homes in that area [9]. The current study results indicated that over 17% of the participants had information about contraceptives from their parents/relatives. The study also brought to the fore the various unacceptable ways of looking at contraceptive use; these included the fact that people would perceive the users as being bad girls and that those who use contraceptives have the likelihood of not getting pregnant in the future. Similar findings were observed by others [10] [59] [60]. According to Ghana Statistical Service (2013) [10], many teenagers in Ghana do

not have knowledge of the available contraceptive methods and the use of family planning due to their negative perceptions and beliefs about them. In effect, adequate knowledge about the range and use of contraceptive methods was lacking.

5. Study Limitations

The limitations of the study included the short period of six weeks used; another limitation is the fact that the study involved on JHS students of the district and not teenage girls of the district, including the senior high school girls. This would make generalisation of the study results to the whole district inaccurate.

6. Conclusion

The Talensi District recorded teenage pregnancy of around 19.6% in 2021, an increase over the 2020 figure of 17.7%. This district's significant risk factor for adolescent pregnancy was curiosity about sex—the need to experiment. Other factors contributing to teenage pregnancy, as perceived by the respondents, included what the teenagers heard on social media, which influenced their behaviour, and the lack of sex education in schools and various houses, especially where it is taboo to talk about sex in the presence of children. Peer pressure, poverty and early marriages of teenagers to older males also impact teenagers' behaviour. For fear of being perceived as immoral, though many students had heard about contraceptives, they conceded that they would not use them. Another reason given against the use of contraceptives was the fear of becoming overweight or infertile. We concluded that measures that will help reduce teenage pregnancies in the district should include adequate financial support by parents of their wards, sex education in schools and various houses, and schooling of the teenagers to resist peer pressure. The Talensi District Assembly is entreated to roll out a poverty alleviation incentive to families in the area and enact legislation prohibiting teenage girls' early marriage. Lastly, parents should be encouraged not to give their girls out for early marriages. We believe these measures will help stem the worrying trend of teenage/adolescent pregnancies in the Talensi District of the Upper East Region.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- [1] Darroch, J., Woog, V., Bankole, A. and Ashford, L.S. (2016) Adding It Up: Costs and Benefits of Meeting the Contraceptive Needs of Adolescents. Guttmacher Institute, New York.
- [2] Yussif, A.-S., Lassey, A., Ganyaglo, G.Y.-K., Kantelhardt, E.G. and Kielstein, H. (2017) The Long-Term Effects of Adolescent Pregnancies in a Community in Northern Ghana on Subsequent Pregnancies and Births of the Young Mothers. *Re-*

- productive Health*, **14**, 178. <https://doi.org/10.1186/s12978-017-0443-x>
- [3] Ganchimeg, T., Ota, E., Morisaki, N., *et al.* (2014) Pregnancy and Childbirth Outcomes among Adolescent Mothers: A World Health Organisation Multicountry Study. *BJOG*, **121**, 40-48. <https://doi.org/10.1111/1471-0528.12630>
- [4] Ministry of Health (2021) Upper East Region Tops in Teenage Pregnancy. Graphic Report. <https://www.graphic.com.gh/news/general-news/upper-east-region-tops-in-teenage-pregnancies.html>
- [5] Omoni, G.M. (2009) Teenage Mothers in Kenya: Seduced, Coerced and at Risk of HIV. *African Journal of Midwifery and Women's Health*, **3**, 24-29. <https://doi.org/10.12968/ajmw.2009.3.1.39412>
- [6] Treffers, P.E. (2003) Teenage Pregnancy, a Worldwide Problem. *Nederlands Tijdschrift voor Geneeskunde*, **147**, 2320-2325.
- [7] Cook, S.M.C. and Cameron, S.T. (2017) Social Issues of Teenage Pregnancy. Review. *Obstetrics, Gynaecology and Reproductive Medicine*, **30**, 309-314. <https://doi.org/10.1016/j.ogrm.2020.07.006>
- [8] Marcotte, D.E. (2013) High School Dropout and Teen Childbearing. *Economics of Education Review*, **34**, 258-268. <https://doi.org/10.1016/j.econedurev.2013.01.002>
- [9] Krugu, J.K., Mevissen, F., Munkel, M. and Ruiters, R. (2016) Beyond Love: A Qualitative Analysis of Factors Associated with Teenage Pregnancy among Young Women with Pregnancy Experience in Bolgatanga, Ghana. *Culture, Health & Sexuality*, **19**, 293-307. <https://doi.org/10.1080/13691058.2016.1216167>
- [10] Ghana Statistical Service (2013) Children, Adolescent & Young People in Ghana, Population and Housing Census Report, 2010. Accra.
- [11] Ghana Statistical Service (2014) Ghana Demographic and Health Survey Report, 2014. Accra.
- [12] Ghana Demographic and Health Survey (2014) Teenage Pregnancy and Motherhood. 70.
- [13] Ghana Statistical Service (2008) Ghana Demographic and Health Survey Report. Accra.
- [14] Sychareun, V., Vongxay, V., Houaboun, S., *et al.* (2018) Determinants of Adolescent Pregnancy and Access to Reproductive and Sexual Health Services for Married and Unmarried Adolescents in Rural Lao PDR: A Qualitative Study. *BMC Pregnancy Childbirth*, **18**, Article No. 219. <https://doi.org/10.1186/s12884-018-1859-1>
- [15] Kassa, G.M., Arowojolu, A.O., Odukogbe, A.A., *et al.* (2018) Prevalence and Determinants of Adolescent Pregnancy in Africa: A Systematic Review and Meta-Analysis. *Reproductive Health*, **15**, Article No. 195. <https://doi.org/10.1186/s12978-018-0640-2>
- [16] Macutkiewicz, J. and MacBeth, A. (2017) Intended Adolescent Pregnancy: A Systematic Review of Qualitative Studies. *Adolescent Research Review*, **2**, 113-129. <https://doi.org/10.1007/s40894-016-0031-2>
- [17] Yakubu, I. and Salisu, W.J. (2018) Determinants of Adolescent Pregnancy in Sub-Saharan Africa: A Systematic Review. *Reproductive Health*, **15**, Article No. 15. <https://doi.org/10.1186/s12978-018-0460-4>
- [18] Gyan, C. (2013) The Effects of Teenage Pregnancy on the Educational Attainment of Girls at Chorkor, a Suburb of Accra. *Journal of Educational and Social Research*, **3**, 53-60. <https://doi.org/10.5901/jesr.2013.v4n3p53>
- [19] Ahonsi, B., Fuseini, K., Nai, D., *et al.* (2019) Child Marriage in Ghana: Evidence

- from a Multi-Method Study. *BMC Women's Health*, **19**, Article No. 126.
<https://doi.org/10.1186/s12905-019-0823-1>
- [20] UN Population Fund (UNFPA) (2013) State of World Population: Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy.
<https://www.unfpa.org/press/state-world-population-2013-motherhood-childhood>
- [21] Phillips, S. and Mbizvo, M.T. (2016) Empowering Adolescent Girls in Sub-Saharan Africa to Prevent Unintended Pregnancy and HIV: A Critical Research Gap. *International Journal of Gynecology & Obstetrics*, **132**, 1-3.
<https://doi.org/10.1016/j.ijgo.2015.10.005>
- [22] Acharya, D.R., Bhattarai, R., Poobalan, A., Van Teijlingen, E.R. and Chapman, G. (2010) Factors Associated with Teenage Pregnancy in South Asia: A Systematic Review. *Health Science Journal*, **4**, 3-14.
- [23] Allen, K., Alice, R., James, N. and Atuyambe, L. (2016) Sociocultural Inhibitors to Use of Modern Contraceptive Techniques in Rural Uganda: A Qualitative Study. *The Pan African Medical Journal*, **25**, Article No. 78.
<https://doi.org/10.11604/pamj.2016.25.78.6613>
- [24] Ahinkorah, B.O., Seidu, A., Mintah, J.K., Sambah, F., Schack, T. and Hormenu, T. (2019) Examining Pregnancy Related Socio-Cultural Factors among Adolescent Girls in the Komenda-Edina-Eguafo-Abrem Municipality in the Central Region of Ghana: A Case-Control Study. *Frontiers in Public Health*, **7**, Article No. 93.
<https://doi.org/10.3389/fpubh.2019.00093>
- [25] Vondee, P.A. (2018) Factors Affecting Female Adolescent Modern Contraception in the Volta Region, Ghana. <https://ugspace.ug.edu.gh>
- [26] De Visser, R.O., Smith, A.M., Richters, J. and Rissel, C.E. (2007) Associations between Religiosity and Sexuality in a Representative Sample of Australian Adults. *Archives of Sexual Behavior*, **36**, 33-46. <https://doi.org/10.1007/s10508-006-9056-0>
- [27] Galvan, A., Hare, T., Voss, H., Glover, G. and Casey, B.J. (2007) Risk-Taking and the Adolescent Brain: Who Is at Risk? *Developmental Science*, **10**, F8-F14.
<https://doi.org/10.1111/j.1467-7687.2006.00579.x>
- [28] Odimegwu, C. and Mkwanzani, S. (2016) Factors Associated with Teen Pregnancy in Sub-Saharan Africa: A Multi-Country Cross-Sectional Study. *African Journal of Reproductive Health. Special Edition*, **20**, 94-107.
<https://doi.org/10.29063/ajrh2016/v20i3.14>
- [29] Jennings, M.H. (2013) Social Determinants of Health That Impact Teen Pregnancy. Office of Adolescent Health (OAH) Adolescent Pregnancy Prevention Campaign of North Carolina (APPCNC). (2012). Social Determinants That Affect Teen Pregnancy. <http://appcnc.org/Podcast>
- [30] UNFPA & Population Council (2010) The Adolescent Experience In-Depth: Using Data to Identify and Reach the Most Vulnerable Young People. Kenya Demographic and Health Survey, 2008-09. New York.
https://www.popcouncil.org/uploads/pdfs/PGY_AdolDataGuides/Kenya2008-09.pdf
- [31] Smetana, J.G., Campione-Bar, N. and Metzger, A. (2006) Adolescent Development in Interpersonal and Societal Contexts. *Annual Review of Psychology*, **57**, 255-284.
<https://doi.org/10.1146/annurev.psych.57.102904.190124>
- [32] Amuyunzu-Nyamongo, M., Biddlecom, A.E., Ouedraogo, C. and Woog, V. (2005) Qualitative Evidence on Adolescents' Views of Sexual and Reproductive Health in Sub-Saharan Africa. Occasional Report No. 16.
- [33] Waddington, D. (2007) Teenage Pregnancy: Risk-Taking, Contraceptive Use and

- Risk Factors. <http://hdl.handle.net/2077/4605>
- [34] Adu-Gyamfi, E. (2014) Assessing the Effect of Teenage Pregnancy on Achieving Universal Basic Education in Ghana: A Case Study of Upper Denkyira West District. *Journal of Education and Practice*, **5**, 49-59.
- [35] Saewyc, E.M., Magee, L.L. and Pettingell, S.E. (2004) Teenage Pregnancy and Associated Risk Behaviours among Sexually Abused Adolescents. *Perspectives on Sexual and Reproductive Health*, **36**, 98-105. <https://doi.org/10.1363/3609804>
- [36] Chandra, A., Martino, S., Collins, R., Elliott, M., Berry, S., Kanouse, D. and Miu, A. (2008) Does Watching Sex on Television Predict Teen Pregnancy? Findings from a National Longitudinal Survey of Youth. *Pediatrics*, **122**, 1047-1054. <https://doi.org/10.1542/peds.2007-3066>
- [37] Kimemia, K.A. and Mugambi, M.M. (2016) Social Media and Teenage Pregnancy among Students in Secondary Schools in Imenti North Sub-County, Meru, County Kenya. *International Journal of Scientific Research and Management*, **4**, 4586-4606. <https://doi.org/10.18535/ijstrm/v4i9.18>
- [38] O’Keeffe, G.S. and Clarke-Pearson, K. (2011) The Impact of Social Media on Children, Adolescents, and Families. *Paediatrics*, **127**, 800-804. <https://doi.org/10.1542/peds.2011-0054>
- [39] Khanal, P. (2016) Adolescents Knowledge and Perception of Sexual and Reproductive Health and Services: A Study from Nepal. Master’s Thesis, Institute of Public Health & Clinical Nutrition, University of Eastern Finland, Kuopio.
- [40] World Health Organization (2016) Adolescent Health. https://www.who.int/health-topics/adolescent-health/#tab=tab_1
- [41] Singh, S. and Darroch, J.E. (2012) Adding It Up: Costs and Benefits of Contraceptive Service. Estimates for 2012. Guttmacher Institute and UNFPA, New York. <http://www.guttmacher.org/pubs/AIU-2012-estimates.pdf>
- [42] Wamoyi, J., Fenwick, A., Urassa, M., Zaba, B. and Stones, W. (2010) Parent-Child Communication about Sexual and Reproductive Health in Rural Tanzania: Implications for Young People’s Sexual Health Interventions. *Reproductive Health*, **7**, 1-18. <https://doi.org/10.1186/1742-4755-7-6>
- [43] Hutchinson, H., Domhnaill, B.M., Miley, A. and Miley, Y. (2005) Teenage Pregnancy in the Schools of the Ho Municipality in Ghana. Village Exchange International-Village Exchange Ghana.
- [44] Blanc, A.K. and Way, A.A. (2014) Sexual Behavior and Contraceptive Knowledge and Use among Adolescents in Developing Countries. *Studies in Family Planning*, **29**, 106-116. <https://doi.org/10.2307/172153>
- [45] Addae, N.A. (2021) Understanding Adolescents’ Sexual and Reproductive Health Needs in Cape Coast Metropolis. <https://lr.ucc.edu.gh/xmlu>
- [46] Clotey, C. (2012) Social Barriers That Affect the Non-Use of Contraceptives among Adolescents in the Gomoa East District. <https://ugspace.ug.edu.gh>
- [47] Akakpo, S.S.C. (2013) Social Determinants of Non-Marital Adolescent Pregnancy in Nkwanta South District. <http://197.255.68.203/handle/123456789/5916>
- [48] Asare, B.Y-A., Baafi, D., Dwumfour-Asare, B. and Adam, A.-R. (2019) Factors Associated with Adolescent Pregnancy in the Sunyani Municipality of Ghana. *International Journal of Africa Nursing Sciences*, **10**, 87-91. <https://doi.org/10.1016/j.ijans.2019.02.001>
- [49] Alhassan, A. (2015) Early Pregnancy of Junior High School Girls: Causes and Implications on Academic Progression in the Talensi District of the Upper East Region of

- Ghana. *UDS International Journal of Development*, **2**, 50-60.
<http://www.udsijd.org>
- [50] Newton-Levinson, A., Leichter, J.S. and Chandra-Mouli, V. (2016) Sexually Transmitted Infection Services for Adolescents and Youth in Low- and Middle-Income Countries: Perceived and Experienced Barriers to Accessing Care. *Journal of Adolescent Health*, **59**, 7-16. <https://doi.org/10.1016/j.jadohealth.2016.03.014>
- [51] Odimegwu, C. (2005). Influence of Religion on Adolescent Sexual Attitudes and Behaviour among Nigerian University Students: Affiliation or Commitment? *African Journal of Reproductive Health*, **9**, 125-140. <https://doi.org/10.2307/3583469>
- [52] Adongo, B.W. (2018) Assessing Factors Influencing Early Sexual Initiation among Adolescents (13 to 19 Years) in Ghana: A Qualitative Study. *International Journal of Caring Sciences*, **11**, 53-60.
- [53] Ahinkorah, B.O., Hagan Jr., J.E., Seidu, A.-A., Budu, E., Hormenu, T., Mintah, J.K., Sambah, F. and Schack, T. (2019) Access to Adolescent Pregnancy Prevention Information and Services in Ghana: A Community-Based Case-Control Study. *Frontiers in Public Health*, **7**, Article No. 382. <https://doi.org/10.3389/fpubh.2019.00382>
- [54] Wanyama, E.G.A. and Simatwa, E.M.W. (2011) Prospects and Challenges in the Implementation of Re-Entry Policy of Girls in Secondary Schools in Kenya: A Case Study of Emuhaya District. *Educational Research*, **2**, 1373-1390.
<http://www.interestjournals.org/ER>
- [55] Thammaraksa, P., Powwattana, A., Lagampan, S. and Thaingtham, W. (2014) Helping Teachers Conduct Sex Education in Secondary Schools in Thailand: Overcoming Culturally Sensitive Barriers to Sex Education. *Asian Nursing Research*, **8**, 99-104. <https://doi.org/10.1016/j.anr.2014.04.001>
- [56] Gyesaw, N.Y.K. and Ankomah, A. (2013) Experiences of Pregnancy and Motherhood among Teenage Mothers in a Suburb of Accra, Ghana: A Qualitative Study. *International Journal of Women's Health*, **5**, 773-780.
<https://doi.org/10.2147/IJWH.S51528>
- [57] Prachi, R., Das, G.S., Ankur, B., Shipra, J. and Binita, K. (2008) A Study of Knowledge, Attitude and Practice of Family Planning among the Women of Reproductive Age Group in Sikkim. *The Journal of Obstetrics and Gynecology of India*, **58**, 63-67.
- [58] Egede, J.O., Onoh, R.C., Umeora, O.U.J., Iyoke, C.A., Dimejesi, I.B.O. and Lawani, L.O. (2015) Contraceptive Prevalence and Preference in a Cohort of South-East Nigerian Women. *Patient Preference and Adherence*, **9**, 707-714.
<https://doi.org/10.2147/PPA.S72952>
- [59] Sotolongo, J., House, L.D., Swanson, S. and Davis, S.E. (2017) Integrated Community Strategies for Linking Your to Adolescent Reproductive Health Services: A Case Study. *Journal of Adolescent Health*, **60**, S45-S50.
<https://doi.org/10.1016/j.jadohealth.2016.11.026>
- [60] Bankole, A. and Malarcher, S. (2010) Removing Barriers to Adolescents' Access to Contraceptive Information and Services. *Studies in Family Planning*, **41**, 117-124.
<http://www.jstor.org/stable/25681351>