

Original Research Article

FACTORS ASSOCIATED WITH TEENAGE PREGNANCY IN AHAFO ANO SOUTH EAST DISTRICT

Abstract

Background: Teenage pregnancy is a global societal issue with significant public health implications. Both developed and developing nations are affected, although developing nations like Ghana are more likely to have it. The explored the factors associated with teenage pregnancy in the Ahafo Ano South East District of Ghana.

Methods: The study employed qualitative method. An exploratory study design was used to determine the factors that influence the prevalence of teenage pregnancy in Ahafo Ano South-East District. A purposive sampling method was used to select 45 participants for the study. Data were collected by using one on one interview and analysis also done with NVivo.

Results: The findings revealed that early marriage, poor knowledge and use of family planning, peer influence and social media were the main factors that influenced teenage pregnancy. On support systems available, the study revealed that most of the participants had support from their families, the friends and health workers to deal with their challenges. Support systems are ways adopted by the teenage mothers with pregnancy to reduce their burden of the condition on the young mothers. On effects of teenage pregnancy, the following findings emerged: school dropout, child abuse, drug abuse and economic hardship.

Conclusion: The study concludes that if the above challenges are not addressed by providing social support and adequate health services, sex education, girls after delivery will find it very difficult to reintegrate themselves into their families and communities. The government through the Ministry of Health should provide free medical care the teenage pregnant girls to prevent further complications associated with the pregnancy.

Keywords: Teenage pregnancy, Support services, Early marriage and Family planning

Introduction

Worldwide attention has been drawn to the public health issue of teenage or adolescent pregnancy. Teenage pregnancy is a global problem that impacts both developed and poor nations. In the United States of America (USA), a broad definition of teen pregnancy exists. Any pregnancy by a woman under the age of 18 is referred to as a teen pregnancy. In the United Kingdom (UK), teen pregnancy is defined in more detail. A girl who becomes pregnant before turning eighteen (18) is considered to be in her teen years in the United Kingdom. The United Nations Children's Fund defines teenage pregnancy as when a teen girl between the ages of 13 and 19 becomes pregnant [1].

Adolescent pregnancy is still a public health issue with a variety of negative repercussions, including higher health risks for both the mother and the child, missed opportunities for personal development, social marginalization, and low socioeconomic attainment. This problem is recognized as a major public health concern around the world [2]. Every year, an estimated 16 million young women aged 15 to 19, as well as roughly a million girls under the age of 15 give birth around the world, primarily in low and middle-income nations [3]. Approximately 14 million pregnancies occur each year in Sub-Saharan Africa with approximately half of these occurring among women aged 15–19 [4].

In Ghana, 14% of young women aged 13–19 have started having children in 2021 [5]. According to the United Nations Population Fund [6], adolescent pregnancies are expected to increase globally by 2030, with Sub-Saharan Africa having a particularly high frequency. Teenage pregnancies are already most prevalent in Africa [7]. Teenage pregnancy is an issue, and there are many reasons why [8]. These include peer pressure to engage in sexual behavior, lack of education, peer pressure to marry young due to customs and traditions, improper or non-use of contraceptives, poverty, low self-esteem, exposure to family violence or abuse and early marriage as a result of these factors [9]. Teenage pregnancies have also been associated with the need to fulfill basic needs, sexual assault, and a need for self-respect [10].

Teenage girls who fall pregnant are frequently shunned by society in Ghana and other African nations, especially if the pregnancy happens before marriage [5]. However, having a child or children before being married is typical in many nations worldwide [11]. On the other side, Ghana estimates that roughly 14% of adolescent girls between the ages of 15 and 19 have started having children, with an approximate live birth rate of 11% [12]. According to annual statistics

from Ghana Health Services (GHS), 13 teenage pregnancies would be reported every hour in 2024, with almost 301 adolescent females becoming pregnant daily [13]. Teenage pregnancy is still a serious issue in Ghana. According to the GHS, there were 109,888 teenage pregnancies in Ghana overall [13]. The information shows that in 2020, 2,865 girls between the ages of 10 and 14 and 107,023 females between the ages of 15 and 19 each had 107,023 pregnancies [14]. Also, 17.802 pregnancies, or 16.2% of all pregnancies, occurred in the Ashanti region, with Ahafo Ano South East among the districts having the highest rates [15].

In the Brong Ahafo Region, it was found that 7.8% of teenage girls between the ages of 15 and 19 were married, with 3.8 percent between the ages of 12 and 14 [16]. Teen pregnancy is also widespread in the majority of high-income or developed nations, including the United States of America [17]. Numerous cultures and civilizations despise teenage pregnancies [18]. Most young women who become pregnant unintentionally decide to abort the pregnancy using risky methods, which puts their lives in jeopardy [19]. These teenagers occasionally pass away, and when they do, it has serious repercussions for their reproductive health [20]. A 2018 study by the Guttmacher Institute found that 16% of adolescents between the ages of 12 and 24 had participated in pregnancy terminations [21]. Infections with HIV among adults in the 15 to 24 age group accounted for 40% of all cases in 2009 [22].

Most teenagers who become pregnant may not be biologically equipped to handle the financial, social, and health effects of their pregnancy due to their age [23]. Adolescents in elementary and Junior High Schools are typically affected [24]. In Ghana, one (1) out of every eight (8) pregnancies involves an adolescent [25]. In the Ho Municipality in Ghana's Volta region, two (2) adolescent mothers who were taking the Basic Education Certificate Examination (BECE) in 2020 were among the test takers [26]. At the time, these mothers were 13 and 15 years old [27]. Pregnancy prevented more than thirty-three (33) female students in 2021 from taking the BECE in Ghana's Eastern region's Manya Krobo District [28]. There were 572 teen pregnancies reported in the Shama District of the Western region, and there was also a mass failure of children who took the BECE there, according to reports [29]. In the Sunyani West District of the Brong area, 259 teenage pregnancies between the ages of 15 and 19 were recorded between January and June 2019 [30].

Concerned by the recent surge in teenage pregnancies, the director in charge of the University of Ghana's Centre for Migration Studies declared that teenage pregnancy is a threat to national

development and that it would be disastrous for the country's growth and development if coordinated efforts and practical solutions were not found to address the issue [31]. In Ghana, 16.2% of adolescent females gave birth before the age of 18, with a birth rate of 69.7 per 100,000 women between 2016 and 2020 [32]. In 2020, VibeGhana.com published a survey that found 750,000 pregnant teenagers between the ages of 15 and 19. 14,000 adolescent pregnancies in the Central region alone occurred in 2019 [33]. Similar to other regions of the nation, the Brong Ahafo region experiences a high rate of teenage pregnancies [34]. The number of teenage females who became pregnant during the Basic Education Certificate Examination increased from 77 in 2020 to 111 in 2021, and then to 170 in 2022 [35].

Whether intentional or not, adolescent pregnancy has detrimental effects on people, communities, and societies [36]. In comparison to children born to parents who are older, young women who have children are less likely to complete high school, are more likely to be impoverished as adults, and are more likely to produce children who will have poor behavioral, educational, and health outcomes throughout their lifetimes [37].

Compared to women in their 20s and 30s, babies born to teenage mothers had a substantially higher mortality rate [2]. Abortions are considerably more likely to occur during adolescent pregnancies [8]. The majority of teenage pregnancies occur outside of marriage in Africa, where premarital sex is frowned upon [38]. This typically implies covert, risky abortions carried out in unhygienic settings by individuals lacking the necessary skills and in settings that do not meet the minimum requirements for medical care [38]. However, it appears that policymakers and implementers in Ghana are not giving teen pregnancy the attention it requires, which has led to inadequate solutions to the issue. Adolescent girls seem to be underserved in terms of sex education and encouraging interventions. In order to better understand the factors contributing to the high prevalence of teenage pregnancies in the Ahafo Ano South East District, the study attempted to fill these gaps.

The number of teenage pregnancies reported in the Ahafo Ano South East District (Adugyama) between the years of 2019 and 2022 is shown in the table below. Ten to nineteen years old is the age range. According to the incidents that have been documented, the communities were divided into the three subdistricts of Biemso, Pokukrom and Sabronum.

Table 1: Sub District Breakdown of Teenage Pregnancy Cases Recorded in Adugyama District

Sub Districts	2019	2019	2020	2022	Total	Percentage
Biemso	146	133	170	115	564	40.2
Pokukrom	96	95	89	166	446	31.8
Sabronum	105	111	81	95	392	28
Total	347	339	340	376	1402	100

Source: District Health Directorate-Adugyama, 2019 -2022

Adolescent girls seem to be underserved in terms of sex education and encouraging interventions [39]. In order to better understand the factors contributing to the high prevalence of teenage pregnancies in the Ahafo Ano South East District, the study attempted to identify these factors. Much more research is required on teenage or adolescent pregnancies, particularly with regards to the effects or consequences of adolescent pregnancies as well as prevention. Therefore, the goal of this study was address this by examining the factors, support systems and the effects of teenage pregnancy in Ahafo Ano South East District of Ghana. It is believed that this study would help policymakers as they design and carry out programs to address the issue of teenage pregnancy. The study would add to the body of knowledge concerning teenage pregnancy and their effects on both the teenage mother and society.

Methods

The study area

A total of 545.16 km² or 22% of the Ashanti region's total surface area (24,370.5 km²) is covered by the Ahafo Ano South-East District, which is situated in the region's north-western corner [40]. About 42 kilometers separate Kumasi from Adugyama, the capital. Offinso North District is the district's northern neighbor. Ahafo Ano South West is its southern neighbor. Atwima Nwabiagya North District is its eastern neighbor. Tano South Municipal in the Ahafo Region is its western neighbor. Others include the Ahafo Ano North Municipality in the South West, Atwima Nwabiagya in the South East, and Offinso Municipality in the North East. The District has 58,586 residents, which is 1.2 percent of the population of the Ashanti Region, according to the population and housing census [41]. About 60.6 percent of the District's entire

population is under the age of 24, which has a significant impact on future socioeconomic development and teenage pregnancy.

Study design

A qualitative, exploratory research design was used. This research design was considered suitable for the study; because the factors associated with teenage pregnancy among adolescents were explored. A qualitative exploratory research design is the method of choice when straight probing of a phenomenon is desired [41]. Case study qualitative approach was used to explore the views of participants on the factors that associated with teenage pregnancy in Ahafo Ano South-East District. Bracketing was observed by first stating the researcher's features that could influence the research questions, approach, methods, results and transferability. The researcher's characteristics including personal attributes, qualification/experience, relationship with participants, expectations and or presuppositions were observed. This was done to prevent possible bias in the study.

Study population

To ensure maximum variation, the study included teenagers who were pregnant or had given birth, reside and attend antenatal or postnatal clinic within the district. Also, parents of the adolescents, community health workers, head teachers and the district social welfare officers in Ahafo Ano South East District who were residents in the district were also interviewed.

Sample size and sampling procedure

The researcher interviewed 25 teenagers and 20 other participants (parents of the adolescent, health workers, head teachers and the district social welfare officers in Ahafo Ano South East District). Interviews however were terminated at any point where there was saturation of data that is, where no new information or themes were recorded. A purposive sampling technique was employed to obtain a range of views. Purposive sampling aimed to recruit a sample of participants who had the necessary information and experience the researcher wanted to elicit.

Data collection tool and procedure

Focus group discussion was done for the adolescents while in-depth interview was carried out for the other participants including few adolescents. The interview guide was pretested before using them for the actual data collection. The interview guide with five (5) items was presented to reflect the various study objectives. The study collected qualitative data through focus group

discussions (FGD) and semi-structured interviews (SSI). Three individuals in all took part in the collection of the data in both cases: The principal investigator (PI) and two other assistants that were recruited by the PI to assist. The principal investigator and the assistants recorded the responses from the participants. Data collection occurred until saturation. This was achieved when respondents started giving similar responses. In all, forty-five participants were used for the qualitative data collection. Data collection occurred daily until the entire participants are interviewed. Secondary data from the various health facilities were assessed to compliment the primary data to verify the response from the participants.

Focus Group Discussion

In using focus group discussion, the researchers assumed that group dynamics brought out the information useful for the study. Focus group discussion (FGD) was used for the adolescents because in Ahafo Ano South East District where the study was conducted, some of the adolescents lacked formal education making the use of self-administered questionnaire unrealistic. Focus group techniques are especially well suited for populations with low literacy. This approach was suitable since it allowed for translation for individuals who were unable to understand English language. In contrast to other data collection technologies, the use of this technology was constrained by time and resource.

The researcher conducted four (4) mixed focus groups discussions comprising five (5) people (adolescents), literates and illiterates. Face to face interview was done for the other 25 participant. These discussions enabled the researcher to examine groups' views about teenage pregnancy in the district. Notwithstanding the above strengths, focus group discussion has lapses. The approach is not the best when the authentic point of view of individuals are solicited on themes bordering on religious or social norms since a participant could feel intimidated by the presence of other participant to express themselves freely. The same problem also arises where traditional, patriarchal or religious etiquette come into play causing authenticity and honesty to suffer.

The principal investigator (PI) moderated the interviews and research assistants took notes during the discussions, while the recorder did the recording with a mobile phone. The discussions were held in private locations away from family or community distractions but within easy access for participants. The interviews lasted within an hour. The group sat in a semi-circular arrangement, which gave the moderator a full view of every participant as they

talked. Participants were not be given any financial incentive for taking part in the discussions. Beverages were consumed by participants after each session. Water in bottles was provided for any one needed during the discussions.

Semi-Structured Interviews (SSI)

To make up for the above weaknesses it was appropriate to employ, in addition to focus group discussion, the semi-structured interviews that targeted each individuals where locations and times of meeting was scheduled outside daily events convenient and comfortable to the participant. This approach solved the problem of those individuals who were reserved due to the strong traditional and cultural background to open-up in focus group discussions. In all twenty five (25) semi-structured interviews were conducted. There were good reasons for combining both focus groups discussions and semi-structured interviews in this study. The first was a practical one; while some respondents were at ease with group discussions, some voluntarily opted for individual interactions when consulted. Both methods belong to qualitative approach and it was ease synchronising and triangulating them during analysis of the data using the thematic analysis approach. The third benefit was that the use of the two methods allowed for comparisons, since the questionnaires that were used for both were the same with some adaptations. It allowed testing the consistency of findings obtained through different research instruments. All the interviews were audio recorded except the one who refused to be audio recorded for fear of being publicized in spite of being assured of confidentiality. The same general six (6) questions used for the focus groups discussions were also used for the SSIs with some adaptations. Each SSI lasted for about 1 hour.

Pre-testing

At the Mankranso health center, pre-testing of the research data collection instruments took place. The pre-test facility was situated outside the study area, but in terms of personnel, facilities given to clients and the configuration of the wards, it had similar characteristics. The pre-testing helped clarify certain difficulties that are linked to the understanding of the respondents. The researcher pre-tested the interview guide on 3 adolescents and one respondent each from the other participants for reliability of the instruments and correction of errors.

Methodological Rigor

Trustworthiness in qualitative study is a means in which the researcher ensures the public that information obtained from the research and the interpretations are truly what the participant

provided. Credibility, transferability confirmability and dependability are the major criteria for trustworthiness.

Credibility: To ensure this the researcher recruited participants that met the inclusion criteria of the study and could share detailed experiences of teenage pregnancy. The researcher did not allow his own perception, interest, beliefs and professional background to influence the responses of participants. Researcher also observed the behavior of participants and recorded them in a note diary. Further, researcher did member checks to confirm data collected from participants. The researcher transcribed and analyzed each interview after all the interviews were conducted. The accuracy of the data was ascertained by checking the information that was gathered with views shared by other subjects.

Dependability: An audit trail of all the events and procedures followed in the research were kept. Detailed description of procedures in the research such as sampling technique, study design, gathering and analyzing data in the final report was documented without any ambiguity to permit replication.

Conformability: The researcher worked closely with the supervisors to audit the entire research process. An audit trail of field notes, transcript, audio-records, interview questions and consent forms kept for future confirmatory purpose.

Validity: To ensure face and content validity, the interview guide was tested on teenagers and other participants at Mankranso Health Center. Results of pre-test were shown to the supervisor and an expert for modifications on the interview guide in order to achieve the best responses. This also served as a test to verify the function of the recorder. The modified interview questions were tested again to ensure they answer the research questions. Data were collected after a satisfactory guide had been agreed upon by the researcher and supervisor.

Data Management

The data collected were only made available to members of the research team. Data collected through recordings and field notes were coded to ensure anonymity and protect the privacy of respondents. The data management included acquiring, validity, storing, protecting, and processing required data to ensure the accessibility, reliability and timeliness of the data for it users. The researcher kept records of data, time and place of interview. Participants were identified by codes which were written in the files kept for everyone. The recorded tapes,

transcribed data, field notes and diaries were kept in a cabinet under lock and key accessible to only the researcher. The audio tape was kept on external hard disc to avoid data loss.

Data Analysis

Nvivo content analysis was used to analyze the data. The verbatim transcription of the interview recordings was done. Transcribed work was read through numerous times to pick out the main ideas. For the selected core concepts, codes were created, which were then categorized into themes. Themes that emerged were used to guide the analysis of the data. The researcher and the participants' dialogue was captured on tape recorders. All of the questions were thoroughly answered, but when a participant did not feel confident in responding, the item was skipped. When a question was not fully understood by the responders, the researcher asked it again to make sure it was understood correctly. The audio recordings were repeatedly played before being verbatim transcribed. The data were examined using Thematic Content Analysis (TCA). With this approach, the researchers were able to examine all the data to find the key themes that encapsulated all the viewpoints they had gathered. These interviews were verbatim translated into English by the translator as well.

Ethical considerations

Ethical clearance was sought from the Ghana Health Service Ethics Review Committee, Research and Development Division and The District Director of Health Service for Ahafo Ano South-East for authorization. Approval was given with Identification Number GHS-ERC:029/04/22. In addition, participants were given the free will to participate and withdraw. Participants were assured of anonymity and privacy. In that case participants were made to write their names and other personal information that can disclose their identity on the questionnaire forms. It was explained to the leadership and the respondents that the results of the study were just for academic purposes only. Before collecting data from young people under the age of 18, parents or guardians were requested for their permission. The teenagers gave their consent before taking part in the study. Parental or guardian consent was obtained in writing from each participant as well as from them. All COVID-19 guidelines, such as using a face mask, washing your hands thoroughly, keeping a social distance, and using hand sanitizer, were followed

Results

Major and subthemes from the data

The researcher interviewed 25 teenagers and of 20 other participants (parents of the adolescent, health workers, head teachers and the district social welfare officers in Ahafo Ano South East District). The interviews centred primarily on teenage pregnancy. The first section of the results presents the background characteristics of the participants. The subsequent results are presented according to the stated objectives of this study. The presentations of the results were supported by verbatim quotes of the respondents' responses using pseudonyms (Refer Table 2 for themes and subthemes of the study).

Table 2:Major and subthemes from the data

Main themes	Subthemes
1. Factors	Early marriage/sexual intercourse Poverty Poor knowledge and use of FP Peer influence Social media
2. Support available	Social support (family members, Health services available, Counselling) Economic support
3. Effects of TP	School drop out Child abuse Drug abuse Health system

Participants characteristics

From table 3, the study used twenty (20) other participants. The age range of the participants was within the age range of 29-49years. Also, most of the participants were married. Most of them had tertiary as their highest educational. Again, more than half of the participants had Akan as their ethnic group. And twenty five (25) teenage participants within the ages of 15-19 years, almost all of them being single, unemployed and basic as their highest level of Education.

Table 1: Demographic characteristics of the other participants (parents, teachers etc)

Pseudonym	Age	Edu Level	Marital status	Occupation	Religion	Ethnicity
P1	34	Tertiary	Married	Nurse	Christian	Akan
P2	38	No education	Single	Trading	Muslim	Akan
P3	35	Tertiary	Married	Nurse	Muslim	Akan
P4	37	JHS	Married	Farming	Muslim	Bono
P5	49	Primary	Married	Unemployed	Muslim	Bono
P6	49	Primary	Married	Trading	Muslim	Akan
P7	45	Tertiary	Married	Nurse	Christian	Akan
P8	34	No education	Married	Trading	Christian	Akan
P9	33	JHS	Married	Farming	Christian	Bono
P10	36	Tertiary	Single	Teaching	Christian	Akan
P11	43	Tertiary	Married	Teaching	Christian	Akan
P12	45	Tertiary	Married	Teaching	Christian	Dagarti
P13	41	Tertiary	Married	Social W	Christian	Akan
P14	39	Tertiary	Married	Teaching	Christian	Kusaase
P15	37	Tertiary	Married	Teaching	Christian	Bono
P16	42	Tertiary	Single	Nurse	Christian	Bono
P17	31	Tertiary	Married	Nurse	Christian	Akan
P18	29	Tertiary	Single	Nurse	Christian	Akan
P19	34	Tertiary	Married	Teaching	Christian	Dagarti
P20	41	Primary	Single	Farming	Muslim	Frafra

Table 4: Demographic characteristics of the teenage participants

Pseudonym	Age	Edu Level	Marital status	Occupation	Religion	Ethnicity
P1	17	Primary	single	unemployed	Christian	Akan
P2	16	No education	Single	Trading	Muslim	Akan
P3	15	JHS	Single	Schooling	Muslim	Akan
P4	17	JHS	Single	Farming	Muslim	Bono
P5	19	Primary	Married	Unemployed	Muslim	Bono
P6	18	Primary	Married	Trading	Muslim	Akan
P7	16	JHS	Single	Unemployed	Christian	Akan
P8	18	No education	Single	Trading	Christian	Akan
P9	17	JHS	Single	Farming	Christian	Bono
P10	16	Primary	Single	Unemployed	Christian	Akan
P11	19	JHS	Married	Unemployed	Christian	Akan
P12	17	Primary	single	Unemployed	Christian	Dagarti
P13	15	No education	Single	Unemployed	Christian	Akan
P14	18	JHS	Single	Trading	Christian	Kusaase
P15	19	SHS	Single	Trading	Christian	Bono
P16	18	SHS	Single	Schooling	Christian	Bono
P17	19	SHS	Single	Unemployed	Christian	Akan
P18	17	Primary	Single	Unemployed	Christian	Akan
P19	16	JHS	Single	Unemployed	Christian	Dagarti
P20	18	Primary	Single	Farming	Muslim	Frafra
P21	17	Primary	Single	Unemployed	Muslim	kusaase
P22	16	JHS	Single	Farming	Christian	Bono
P23	16	JHS	Single	Unemployed	Christian	Akan
P24	18	SHS	Single	Trading	Christian	Dagarti
P25	19	No education	Single	Trading	Muslim	Akan

Factors influencing the prevalence of teenage pregnancy

This theme presents the findings on the factors influencing teenage pregnancy. The factors included early marriage, poor knowledge and use of family planning, peer influence and social media. To address this objective or major theme, subthemes were identified following the data analysis on the factors influencing teenage pregnancy.

Early marriage/sexual intercourse

Findings of the study showed that, most of the participants engaged in early marriage as a result of poverty. Majority of the participants stated not been able to cater for themselves hence premarital affairs leading to pregnancy and early marriage. Also, most of the participants were able to recognised these factors but could not do anything about it due to hunger. However, some participants were of the view that, these factors were based on the individuals' socio-economic status and their communities.

“Mmm, I wasn't getting any help and support from my parents so I met a guy who supported me with money and fed me and also in my education. Because he wanted to have sex with me before he gives the money to me. Also, I didn't know about my menstrual cycle so I didn't know my free period so I just had sex with him anytime and take the money and later I realized I was pregnant ...” (T2).

“I'm from a very poor family so I met a man who helped and supported me financially and in accommodation. He proposed to marry me though I was young, my parents agreed because they could not provide our needs as their children. So I had to enter into early marriage at the age of 17 years...” (T5).

“I didn't want to marry at that tender age, but I had no option because I was sleeping outside, no clothing or food. You know, marriage will always come with pregnancy; no man will give you money without sex. So early marriage causes teenage pregnancy no doubt about that...” (T5).

“This is a farming community and most of the parents here are farmers and they sometimes find it very difficult caring for their wards in school. So if they get a helping hand men who have money they turn to give their female children out for marriage even at a tender age...” (HT2)

Others also referred to the early marriage as not been able to go to school always helping the man in the farm and in the evening have sex with him. The research showed that, most participants knew that teenage pregnancy will be the consequence of early marriage.

“...When we talk about marriage, we talk about the sex. So anything related to sex should be anticipated. You can always have sex with a man without been pregnant. I have

nothing to offer in the marriage, no money, nothing so the only thing I can do to make my man happy is to offer him sex anytime he wants...” (T1).

“...I think marriage is erm, social institution that relates to the community and most importantly the vagina and it is also the feeling that a person may express. Only the one who is... the one experiencing it who can tell you. And managing patients' sexual issues in this uncomfortable issue is very important” (P2).

“I know for marital management [clears throat]. When one is not comfortable, the person may not feel for it... as any other condition, the person may not be able to verbalise it due to shyness, but from facial expression and other things, you can know that the person is not comfortable in the institution...” (P3).

Poor knowledge and use of family planning

From the analysis, it was realised that most of the participants had challenge with the use of family planning and poor knowledge about family planning. Those who had this challenge had it through complications such as irregular menses and weight gain.

“Yeah, I had an infection one week after I used a family planning method and it was terrible, I was passing discharge through my vagina and was very offensive, yes very offensive, my husband and myself were worried it will lead to different condition like destroying my womb and other organs...” (T5).

“Yes. I had that challenge, they don't educate us on family planning with the idea that we are children so we should concentrate on our education. I feel shy to go to the health facility to seek for family planning services, they will laugh at me that I'm a child...” (T3).

“As part of preventing pregnancy, I use family planning, the pills but I always forget take it so I got pregnant without me been aware. A friend introduced me to the methods so she couldn't explain to me well that's why I misused it...” (T1).

“...In some cases education that we need to have about our menstrual cycle is not given. In this community too, a girl may be staying with her parents alright but the parents may not be able to provide her needs. So if when she finds a man who will be providing for

her, she will agree to it and have sex with him and by the time she realizes she is pregnant...” (T2).

“Yer, most girls are not privy to family planning issues they don’t know how to use these methods effectively so they always rely on their friends for family planning education. This can lead to teenage pregnancy if the methods are not used well...” (SW1)

Peer influence

The factors identified by the participants as the causes of teenage pregnancy included peer pressure. This peer pressure resulted in changes in the minds of the teenagers towards male and female relationship. This was stated by most of the participants. Mobile phones, money, dresses were part of the items enticed the teenagers to indulge in sexual activities with men. Most of the participants had knowledge about the results of this peer pressure but could not control themselves because of inability to afford basic needs for their education.

“My friends usually come to school with iPhone, money, nice school bags and dresses which I don’t have so the only option was to follow them. Most of them get these items from their boyfriends and not their parents. They always convince us to go with them to their boyfriends and at end of the day they will get you a boyfriend...” (T5).

“I got pregnant because of peer pressure. I was following my friends because they had so many things which I also wanted to have, at the end of the day I got myself pregnant. I blame myself my parents were supporting me though not enough now that I’m pregnant I have lost everything. I don’t have money to buy airtime I just receive calls but I cant place calls myself. My friends don’t visit me anymore hmmmm its sad...” (T4).

“...Some friends are very wicked they just want to destroy your life and nothing else. If you fail to take good care of yourself there could be complication that no friend can help you. Now I stay with my friend because my parents sacked me from the house due to this pregnancy and my friend too does not have money to help me...” (T2).

“Peer pressure caused one of my daughters to be pregnant because she will always coming with friends, go out with friends I warned her but will not listen. Now that she is pregnant, she is always at home but can’t go to school as her other friends...” (T4)

Social media

The social media experiences identified by the participants included Facebook, Twitter, and WhatsApp etc for communication. This social media resulted in changes in the participants' friendship status. This was stated by most of the participants. Most of the participants had knowledge about the impacts of social media if care was not taken.

“I got myself pregnant because of social media. I met a guy on Facebook and we became friends for about four months. He one day asked me to visit him and I went. We had an unprotected sex. I spent about one week with him before returning to my house. About a month later I missed my period so I went to the nearby chemical shop to buy over the counter pregnancy strip. I tested my urine and it was positive. My parents did not know I was pregnant until I started vomiting and having morning sicknesses...” (T5).

“A friend of mine gave my number to a certain boy. So we chatted on WhatsApp every day because he was always providing me with data but now that I'm pregnant he doesn't give me credit anymore. This phone was given to me by one of my friends some months ago, I wished I did not take this phone in the first place, now look at my life I can't go to school again....” (T4).

“...Hmmm Facebook has spoilt my life... It's good to make friends but not friends that will terminate your education like it has happened to me. Most people on social media are there to ruin your life they are not genuine friends. Now he has blocked me I can't reach him...” (T2).

“Social media are killing our children. They are always on phone without what exactly they are doing chatting unknown people. I don't even know the person who impregnated my daughter...” (P2).

Support systems for pregnant teenagers

To answer the second research objective — the support systems for pregnant teenagers. Most of the participants had support from their families, the friends and health workers to deal with their challenges. Support systems are ways adopted by the teenage mothers with pregnancy to reduce their burden of the condition on the young mothers. The subthemes that were derived were social support and economic support.

Social support

Support that was identified during the study included social support and the adoption of a Clinical Psychologists and Social worker to talk to the teenage mothers. It was shown in the findings that social support either from close family members or friends helped relieved or reduced the teenagers' burden. It was also revealed that patients who received social support had good coping skills than those without any support because the mere presence of their relatives made them happy and instilled confidence in them that things will get better one day.

“Me for instance without my sister, like I would have cried enough so it does help yes, it really helps when you have your family around you know that home support so is really good...” (T4).

“The teenage mothers who usually receive support from their relatives live good life. Even if there will be complications, they minimal unlike those who aren't visited by anyone and they just sit there till God helps them. They usually suffer more than those with social support...” (SW)

“Mm, social support... when I see that my relatives are coming, I feel happy. And sometimes, I can tell my relatives what I'm going through and the relatives will console me so I think it helps us...” (T5).

“...So patients in comparison with the ones that receive more friends and family coming to visit us as to those who don't have people coming to visit them, the once who don't have people coming to visit them they are a bit tensed every time they are trying to manage something own their own...” (T4).

Health services available

Monitoring teenage pregnant mother is to ensure that the client adheres to the treatment regimen for example taken of drugs, observing personal cleanliness and going for regular antennal check up to prevent complications. The health facilities monitor the condition of their clients most especially on the issue of complications through the following subthemes; counselling, and relationship with family members to manage the clients' conditions.

Counselling

Some participants also described counselling unit as one of the services available to help deal with their challenges facing teenage pregnant mothers. Some of these strategies included problem solving, where clients try to deal with their problems on their own with the help of the health workers.

“Some people have their own way of solving their problems, even if they’re in pain. Like most of them, they have pregnancy related conditions so when they come, whatever you’ll do for them, they see the value of it. So some of them will say, I vomit or I visit the washroom frequently” (HW3).

“Sometimes the patient will tell you, “Oh, Aunty Nurse, I think it would help me if you take me through counselling because there are so many information received.”(HW1).

“Ah well, when you come, you talk about problem solving, I had a... one of my patients who, ah. This patient will say she is suffering and I will take her to the counselling unit” (HW2).

Relationship with family members

Unhealthy relationship with family members and other close ones also increased clients’ social challenges as one patient stated;

“I was admitted here and I called my husband and he said when we are discharged, I should call him to send us money but there was no response when I called hmmm...” (T4).

“My parents and family are Jehovah witnesses and so they didn’t approve of a blood transfusion when I needed blood but I went ahead and allowed for the transfusion and since they don’t approve of that, they have not helped me in any way. I attend Thy Glory Church where blood transfusion is allowed...” (T3).

Economic support

Most of the participants enunciated that they had economic challenges since they did not receive any financial support from family members. However, others too had some support from family members.

“I went for review for three times, after delivery it was on my fifth time that I was asked not to come again. I stay far from health facilities here so lorry fare is too much. After discharge the hospital staff gave me transportation fee because I didn’t have any money on me and my husband too didn’t have any...” (T5).

“The management of pregnancy is costly and the poor stand the risk of complicating their conditions” (HT). Another patient also stated “...I don’t get any support from the government apart from the National Health Insurance, my brother and sister have really been the helpers but they got tired along the way so I have taken upon myself everything...” (T4).

Effects of teenage pregnancy on teenage mothers

This theme indicated the effects or influence that the pregnancy experiences had on the teenage mothers as they took care of their pregnancies. The following subthemes emerged: school dropout, child abuse, drug abuse and economic hardship.

School dropout

School dropout was a major effect of teenage pregnancy as recounted by most of the participants. During and after delivery, parents were reluctant to continue schooling their wards. As one participant put it:

“immediately I got pregnant my parents sacked me to go to my husband and my husband too was a student at the SHS, he didn’t have money. Initially I tried going to school but later because I was not getting support from any person...” (T3)

Another participant agreed that care for pregnancy and education difficult

“Although the intensity of education declined over time since I was tired and no support from family members throughout the pregnancy is very tedious, moving up and down to get certain things and the family as whole is challenging” (T4).

Again, one head teacher said:

“Sometimes we try our best to keep them in school buh we don’t have the resources to keep them. Though we have free SHS, the student should also have certain things to make

them comfortable. Especially a pregnant woman needs special care in the school but here we don't have such resources... ” (HT2).

Another mother also said:

“I know management of pregnancy and school is difficult, you have to follow a protocol for the treatment till delivery. Those of us who don't have money we are not able to combine this cost with school cost...”(P3).

Child abuse

Child abuse was mentioned by most of the participants since teenage pregnancies are almost always unplanned and unwanted. The young teenage mothers tend to abuse these poor children as displacement for the frustrations. As one teenage mother put it:

“I'm always angry when I see my child because he terminated my education. Though not his fault but I blame him for my school dropout. I sometimes abuse him small since I don't have money to cater for him so I hate to see him cry because his cry disturbs me a lot....(T4)

“Most of the teenage mothers abuse their children. Majority of child abuse cases reported in our office involve these mothers. We always say that a 'hungry man is an angry man' because they don't get any support from the community, government or parents they always abuse these poor babies...”(SW2).

“I don't care if they abuse their babies because they made us waste our resources for nothing. Paying school fees, buying dresses, feeding and other things have gone down the drain we didn't get anything from the investment we did...”(P3).

One headteacher also said:

“I don't really have evidence as to whether they abuse their babies or not but I strongly believe they abuse them because if you don't have money to look after your child, least thing you become angry and anger will lead to child abuse...”(HT2).

Drug abuse

Some of the participants spoke about the fact when the teenagers got pregnant they indulged in drug abuse and other social vices. Some of the pregnant teenagers also failed to go for the

follow-up not want the nurses to know what was wrong with them (drug abuse) sometimes hence they avoided the nurses as well as other family members.

“I didn’t go to the hospital I took care of myself because if you go to the hospital they will ask you not to drink alcohol and smoke tobacco. I can live without a glass of alcohol a day of a stick of tobacco. The pregnant pushed me into that behaviour...” (T3).

“Some of abuse drugs especially alcohol, they drink without eating anything. The little money they have they will waste it on these drugs. They will not go to the hospital for antenatal care and because they don’t have responsible people to depend on, they do whatever they want...” (SW3).

“Yes some of them abuse drugs. Even apart from the hard drugs, when they go hospital and are given drugs they go to drug stores for refill and this behaviour lead to drug abuse...” (P3)

Effects on health system

Effects of teenage pregnancy on health system were also mentioned by most of the participants. The health system in this area was stretched due to inadequate health facilities hence some of the clients were referred to other nearby health facilities.

“One of these problems is because we couldn’t come for antenatal care during pregnancy, when labour sets in they find it difficult to manage us. In some cases, they have to transfer us to a different facility cesarean section and sometimes we find it difficult pushing out the baby because we didn’t have good nutrition during the pregnancy and we lack enough energy for the pushing. Even in some cases, they die and in some cases too, the mothers get deformed or disabled after the labour...(T3).

“Some people suffer a lot because they are well developed to give birth so during labour, they find it difficult pushing so in some cases, they are sent to the regional hospitals for cesarean section...(P3).

“Because she is not grown enough to have a baby, she suffers a lot during the pregnancy. Some fall sick throughout the whole period before labour. In some cases they find it very difficult to push and have to be transferred to a different facility for cesarean section. Sometimes she may suffer a lot during labour and may lose her life or even become disabled...”(HW3).

Discussions

The discussions the findings were based on the objectives relevant to the factors associated with teenage pregnancy among adolescent girls in Ahafo Ano South East District into a more comprehensible description. This work provided a broader and deeper understanding regarding the factors associated with teenage pregnancy among adolescent girls. The major themes are discussed while inculcating the subthemes in the discussions as they are directly linked.

Factors that influence teenage pregnancy

This theme presented the findings on the factors influencing teenage pregnancy. The factors included early marriage, poverty, poor knowledge and use of family planning methods and peer influence. The study's conclusions revealed that the majority of the individuals had early sexual contact or marriages that contributed to their adolescent pregnancies. Due to insufficient sex education, failure to refrain from sex, and failure to protect themselves during sexual contact, they became pregnant. Another study's findings, which showed that adolescent pregnancy is significantly influenced by cultural and conventional conventions, such as early marriage, explain why teenage pregnancy occurs. The variety of cultures in many rising nations makes childbirth commonplace. Most traditions and cultures in Sub-Saharan Africa encourage adolescent marriage and parenthood [4]. Nigeria's different cultures of Christians in the south and Muslims in the north have an impact on teenage marriage and parenthood. Some cultures evaluate teenage maturity based on physical development [4].

Additionally, most of the participants stated that they had premarital affairs leading to pregnancy and early marriage due to the fact that they could not care for themselves. Most of the participants were able to recognise these factors but could not do anything about it due to hunger. However, some participants were of the view that, the early sexual intercourse or marriage was based on the individuals' socio-economic status and their communities. This finding supports study by [6] stating that teenage marriage is seen as a positive life decision by some ethnic communities. For instance, the prevalence of adolescent pregnancy is notable among some South Asian ethnic settlers in the United Kingdom [6]. Yemen has a high rate of early marriage, which is steadily increasing, due to factors including poverty, a lack of education, and the predominance of traditional beliefs. A tactic to prevent young adolescent females from participating in illegal sexual conduct is the marriage of young teenage girls. According to [10], early adolescent marriage is also considered a predictor of adolescent girls' fertility in Yemen.

One-third of Bangladeshi women between the ages of 20 and 24 were married before they became 15 years old, according to the UNICEF report on the condition of the world's children [2].

The study's second subtheme examined teen girls' understanding and usage of family planning services. The investigation revealed that the majority of the participants struggled to use family planning and had limited awareness about it. Those who had this difficulty experienced consequences like irregular menstruation and weight gain. This is consistent with the Southwark teenage pregnancy and parenthood strategy study (2001–2010), which found that the prevalence of adolescent pregnancy is also influenced by low or nonexistent contraceptive use, as well as unmet contraceptive needs. Most sexually active teens who have their first sexual experience do so without using any kind of contraception. In addition, these sexually active teenagers had a 90% chance of getting pregnant each year [16]. According to a study done in the Niger Delta region of Nigeria, the lack of resources restricts the availability of contraception and reproductive counseling in developing nations. According to the report, attitudes against artificial birth control and family planning that are discouraged by religion have made matters worse [21]. In Sub-Saharan Africa, few sexually active, unmarried teenagers utilize contraception. From 3% in Rwanda to 56% in Burkina Faso, the percentage varies. Despite the fact that the majority of women want to limit their pregnancy, the low prevalence of contraceptive usage can be attributed to unmet needs or non-use [3].

Support systems for the pregnant teenagers

To answer the second research objective — the support systems for pregnant teenagers, most of the participants had support from their families, the friends and health workers to deal with their challenges. Support systems are ways adopted by the teenage mothers with pregnancy to reduce their burden of the condition on the young mothers. The subthemes that were derived were social support and economic support. Support that was identified during the study included social support and the adoption of a nurses, headteachers and Social worker to talk to the teenage mothers. It was shown in the findings that social support either from close family members or friends helped relieved or reduced the teenagers' burden. It was also revealed that patients who received social support had good coping skills than those without any support because the mere presence of their relatives made them happy and instilled confidence in them that things will get

better one day. These findings revealed, support [8], where minors seeking contraceptive assistance wanted teen-friendly options that were accessible, free or low-cost, discreet and convenient. Because these children have never acted autonomously in the field of sexuality and contraception before, clinical personnel must understand that it is their obligation to teach them what to do [8].

A study further stressed the significance of youth-friendly family planning services to reduce unintended pregnancies by making abortion safe and legal and by making these services accessible to them [21]. Adolescent-friendly services, according to [34], meet young people's needs and uphold their legal rights while effectively utilizing the limited health resources available. It is expected that youth who visit family planning clinics are given ample time to discuss personal factors that could affect their decision to use a contraceptive technique and, consequently, the efficacy of the method. It is shown that individuals with greater education and those who have ongoing instruction in teenage sexuality and reproduction tended to be more receptive to the needs of young people [11]. As a result, it is critical to address service delivery hurdles in order to ensure that young people receive appropriate contraceptive guidance.

Monitoring teenage pregnant mother is to ensure that the client adheres to the treatment regimen for example taken of drugs, observing personal cleanliness and going for regular antenatal check up to prevent complications. The health facilities monitor the condition of their clients most especially on the issue of complications through the following subthemes; counselling, and relationship with family members to manage the clients' conditions. Some participants also described counselling unit as one of the services available to help deal with their challenges facing teenage pregnant mothers. Some of these strategies included problem solving, where clients try to deal with their problems on their own with the help of the health workers. Sex education is another element that promotes adolescent pregnancy. In most of the world, especially in Africa, sexual education for adolescents is frowned upon. Having sexual conversations with their children is frowned upon by many parents, nations, and cultures. According to a poll, sex education is a delicate and divisive subject in the majority of countries. The promotion of sex education is hampered by parental control on what should be covered in the curriculum, the basic values that should be emphasized, and the definition of what constitutes acceptable teenage sexual behavior [12].

Sex education or counseling is crucial to the development of the teenager. It provides the adolescent with all the knowledge they require regarding their bodies, gender, reproductive health, puberty, understanding of contraceptives to help them use them more effectively, and the effects of coitus, such as STIs and unintended pregnancies. It also helps the adolescent make sensibly-informed decisions regarding their sexual orientation. According to a study by the American Academy of Paediatrics (2016), effective sex education programs have provided students with useful skills including self-control and enhanced communication and negotiation ability, which have had a substantial impact on teenage sexual behavior. A study by [6] found that adolescents' use of contraception during their first sexual experience was positively impacted by sex education.

Effects of teenage pregnancy on teenage mothers

This topic portrayed the impacts or influences that the adolescent mothers' pregnancies had on them while they cared for them. School dropout, child abuse, drug misuse, and the healthcare system all surfaced as subthemes. According to the majority of interviewees, school dropout was a significant consequence of teenage pregnancies. Parents were hesitant to continue schooling their children both during labor and after. The majority of the participants also emphasized the effects of teenage pregnancies on the health system. Some of the clients were referred to other neighboring health facilities since the local healthcare system was overburdened by insufficient healthcare services. The negative impacts of teenage pregnancy seem to be pretty similar across the board. The teenage girl's immediate family as well as society at large bears a heavy financial burden as a result of the pregnancy [7].

According to a study by [1], teen pregnancy alone costs the United States roughly 10.9 billion US dollars each year in lost tax revenue, public aid, child healthcare, foster care, and criminality. The majority of teen moms do not work and frequently lack the funds to properly care for themselves and their children, placing a financial burden on the immediate family. Children of teen mothers are more likely to live in poverty and may even be more vulnerable to cyclical poverty and social neglect [9]. The results are in line with studies that have demonstrated that teen pregnancy has seriously detrimental impacts on education. Teenage pregnancies increase the likelihood that girls will drop out of school and have lower educational aspirations [8].

Within a generation of teenage mothers, the disruption of education brought on by teenage pregnancy mostly results in low socioeconomic position and cyclical poverty [3]. Even if the

government has implemented a policy of free secondary education, teen pregnancy still poses the biggest challenge to achieving universal basic education in Ghana [9]. Even though the majority of teen fathers are able to continue their education, young girls are typically unable to finish school and the very few who do so after becoming pregnant end up with very poor grades that disqualify them from tertiary education, thereby truncating their education along the way. Teenage pregnancy brought about child abuse because teen pregnancies were typically unintended and unwelcomed. As a release for their frustrations, the young, adolescent mothers frequently assault these helpless kids. The data backs up [15] claim that teenage childbearing puts their offspring at danger, particularly for asphyxia and low birth weight. In addition, children of teen mothers are more likely to experience physical abuse, other disorders with long-term developmental repercussions, and other health hazards that may have an impact on their general well-being [15].

The highest baby and child death rates in the nation are among adolescent mothers, according to the Ghana Statistical Service [10]. Human Immuno Deficiency Virus (HIV), anemia, malaria, and sexually transmitted illnesses like obstetric fistula, postpartum bleeding and the possibility of maternal mortality are all linked to teenage pregnancy. In addition, compared to women who have children later in life, young moms are more likely to experience mental health conditions including depression [19]. On the subject of drug addiction, some of the participants discussed how when teenagers were pregnant, they engaged in drug use and other vices. Some of the pregnant youngsters skipped the follow-up appointment as well. They avoided nurses and other family members because they did not want the nurses to find out about their drug use. This conclusion is supported by a survey [1]. According to a survey, about 16 million teenage moms between the ages of 15 and 19 engage in drug addiction annually; these instances mostly occur in developing or low-income countries. About eighteen (18) African nations are among the top 20 in the world for the prevalence of adolescent pregnancies, with Niger having the highest rate at 51 percent of women giving birth before the age of 18 every year while also abusing drugs [4].

The majority of the participants also emphasized the effects of teenage pregnancies on the health system. Some of the clients were referred to other neighboring health facilities since the local healthcare system was overburdened by insufficient healthcare services. According to projections, the number of teenage pregnancies in Sub-Saharan Africa would rise from 10.1 million in 2010 to 16.4 million in 2030, placing strain on the region's current medical

infrastructure. 3.3 million Adolescent births in 2030, as opposed to 2 million teenage births in 2016 [5].

Implication for policy and programmes

The study looked at the factors associated with teenage pregnancy among adolescent girls in Ahafo Ano South East District. This study offers helpful information that can be utilized to create programs and policies to address teenage pregnancy. The recent research revealed that teenage Pregnancy is linked to early marriage, peer influence and broken homes. The Ghana' Children's Act prohibits child marriage however, the implementation of this law is sometimes ignored which contributes to the country's enduringly poor health outcomes for children and teenage mothers, particularly high rates of maternal and infant mortality and high fertility. The Ugandan government must evaluate current legal, medical, and social impediments to teenage access to reproductive health care and information, as well as strengthen protections for girls' rights from all types of abuse and harmful traditional practices.

The stakeholders in Ghana must evaluate current legal, medical, and social impediments to teenage access to reproductive health care and information, as well as strengthen protections for girls' rights from all types of abuse and harmful traditional practices. Offering targeted programs that permit teen females (aged 13 to 19) in communities to utilize contraceptives and promoting sex education so that adolescent girls stay away from several sexual partners and early encounters. The government needs to take the required steps to allow married and pregnant girls to attend school. Fresh thinking on the benefits of education for wellbeing, however, also contends that in order for girls to successfully transition from adolescence to adulthood, they also require critical thinking abilities and supportive environments, such as families and communities that are committed to and capable of educating them. When generalizing these findings, care should be taken since the study used qualitative method. It can be utilized in other low-income situations, though.

Strengths and limitations

Since the majority of the adolescent mothers were reluctant to engage in the study, it was difficult to find instances for the study during the field work, which was a major constraint. To obtain their agreement, the study's objective was communicated to them, nevertheless. Also potential recall bias from the participants was anticipated however, secondary data from the health facilities were reviewed to compliment those from the participants which makes the findings reliable.

Conclusions

There are so many factors that influence teenage pregnancy however those revealed in this study were early marriage and sexual intercourse, poor knowledge and use of family planning, social media and peer pressure. Teenage pregnant girls experience challenges in quest to reintegrate themselves into their communities after delivery since they tend to lose their chances example education and other important opportunities as a result of their pregnancy. Also, social support to the teenage girls after during and after delivery from families, husbands, communities and government was poor. Additionally, the health services available for these girls during pregnancy were not enough to help in the reintegration processes of the girls. The study concludes that if the above challenges are not addressed by providing social support and adequate health services, sex education, girls after delivery will find it very difficult to reintegrate themselves into their families and communities.

Based on the findings, we therefore recommend that, the government of Ghana should view teenage pregnancy as a social issue that requires social intervention. Teenage pregnant girls should receive free medical treatment from the government. This will make it possible for females who are pregnant but conceal it or are unable to pay for treatment to receive medical care. Teenage females should receive financial assistance from the government both during and after their pregnancies so that they can meet their financial obligations, particularly those related to their education.

In order to give these pregnant girls with the necessary care, the Ministry of Health (MoH) should make a concerted effort to hire and educate adolescent-friendly nurses and midwives for posting around the nation. The MoH should also create policies to promote sex education and sex education awareness.

The Ghana Health Service should also make sure that young pregnant women are treated by qualified medical personnel at all hospitals and healthcare institutions throughout the nation as the MoH's policy implementation agency.

Civil society organizations and philanthropists should help pregnant teenagers obtain effective care, civil society organizations must work with the government to reach out to them. Sensitization and awareness raising efforts should also be made to teach young girls about the issues that contribute to teen pregnancy and to provide them with help for reintegration into their communities after giving birth.

Further studies could be replicated in different region to confirm or refute the findings of this study.

References

1. Adanu, R M, A G Hill, and J D Seffah. "Secular trends in menarcheal age among Ghanaian women in Accra." *Journal of obstetrics and gynaecology*, 2016: 26(6), 550-554.
2. Adu-gyamfi, E. "Assessing the Effect of Teenage Pregnancy on Achieving." *Journal of Education and Practice*, 2017: 5(17), 46–60.
3. Aryeetey, R, A Ashinyo, and M Adjuik. "Age of Menarche among basic level school girls in Madina, Accra." *African journal of reproductive health*, 2015: 15(3), 113-121.
4. Bearinger, L H, R E Sieving, and J Ferguson. "Adolescents' views of and preferences for sexual and reproductive health services in Burkina Faso, Ghana, Malawi and Uganda." *African journal of reproductive health*,, 2017: 99-110.

5. Biddlecom, A E, A Munthali, and S Singh. "Adolescents' views of and preferences for sexual and reproductive health services in Burkina Faso, Ghana, Malawi and Uganda." *African journal of reproductive health*, 2017: 11 (3), 99-110.
6. Blanc, A K, and A A Way. "Sexual behavior and contraceptive knowledge and use among adolescents in developing countries." *Studies in family planning*, 2016: 29(2), 106-116.
7. Ceylan, A. "The factors associated with adolescent marriages and outcomes of adolescent pregnancies in Mardin Turkey." *Journal of Comparative Family Studies*, 2018: 39(2), 229–239.
8. Clemmens, D A. "Adolescent mothers' depression after the birth of their babies; Weathering the storm." *Adolescence*, 2016: 37(147), 551.
9. Deardorff, A, U K Gonzales, D H Christopher, F U Roosa, and J Millsap. "Support for." *Journal of adolescent health comprehensive sexuality education: Perspectives from parents of school-age youth.*, 2020: 42(4), 352-359.
10. East, P L, B T Reyes, and E J Horn. "Association between adolescent pregnancy and a family history of teenage births." *Perspectives on Sexual and Reproductive Health*, 2017: 39(2), 108–15. doi:10.1363/3910807.
11. Finer, L B, and S K Henshaw. "Disparities in rates of unintended pregnancy in the United States." *Perspectives on sexual and reproductive health*, 2016: 90-96.
12. GHS. Adolescent pregnancy. Reproductive and Child Health Unit. Accra: Ghana Health Service, 2019.
13. GSS. "Ghana Health Service (GHS) & ICF Macro." *Ghana Demographic and Health Survey.*, 2021: 56-58.
14. Guttmacher Institute. "Unintended Pregnancy in the United States." *Fact Sheet*, 2014: 116-547.

15. Gyan, C. "The effects of teenage pregnancy on the educational attainment of girls at Chorkor a suburb of Accra." *Journal of Educational and Social Research*, 2017: 3(3), 53-60.
16. Gyesaw, K Y, and A Ankomah. "Experiences of pregnancy and motherhood among teenage mothers in a suburb of Accra, Ghana: A qualitative study." *International Journal of Women's Health*, 5, 2016: 773–780.
17. Hindin, M J, and A O Fatusi. "Sexual and reproductive health in developing countries : An overview of trends and interventions." *International Perspectives on Sexual and Reproductive Health*, 2019: 35(2), 58–62.
18. Isa, I A, and O Gani. "Sexual and reproductive health in developing countries." *International Perspectives on Sexual and Reproductive Health*, 2017: 35(2), 58–62.
19. Kost , K, and S Henshaw. "U . S . Teenage pregnancies , births and abortions." *Allan Guttmacher Institue*, 2016: 1-29.
20. Kumar, A, T Singh, S Basu, S Pandey, and V Bhargava. "Outcome of teenage pregnancy." *Indian Journal of Pediatrics*, 2017: 74, 927–931.
21. Kunateh, M A. "Teenage pregnancy: The burden lies on Ghanaian teenagers." *Journal of Adolescent Health*, 2016: 42, 89-96.
22. Makiwane, M. "The child support grant and teenage childbearing in South Africa." *Development Southern Africa*, 2016: 27 (2): 193-204.
23. Mangiaterra, V, R Pendse, K McClure, and J Rosen. "Adolescent pregnancy." *MPS Notes*, 2018: 1(1), 1-4.
24. McIntyre, F, and Y Patton. "Contraceptive use among women seeking repeat abortion in Addis Ababa, Ethiopia." *African journal of reproductive health*, 2019: 17(4).
25. Miller, B C, R Sate, and B Winward. "Adolescent pregnancy." In *Handbook of Adolescent Behavioral Problems*, 2019: 567–587 doi:10.1016/j.ijgo.2010.06.023.
26. Mlambo, G T, and M S Richter. "Perceptions of rural teenagers on teenage pregnancy." *Health SA Gesondheid.*, 2020: 1-3.

27. Mueller, T E, L E Gavin, and A Kulkarni. "The association between sex education and youth's engagement in sexual intercourse, age at first intercourse and birth control use at first sex." *Journal of Adolescent Health*, 2018: 42, 89-96.
28. Nyovani, M, E Zulu, and J Ciera. "Is poverty a driver for risky sexual behaviour ? Evidence from national surveys." *African Journal of Reproductive Health*, 2018: 11(3), 83-98.
29. Odu, K B, and J C Ayodele. "The menace of teenage motherhood in Ekiti." *Journal of Scientific Research*, 2017: 2(3-4), 157–161.
30. Okonofua, A F, and D Norredam. "Repeat pregnancy among adolescent mothers: a review of the literature." *Journal of National Black Nurses' Association*, 2019: 4(1), 28-34.
31. Parker, P. "Pregnancy outcomes of mothers aged 17 years or less." *Saudi Medical journal*, 2016: 32(2), 166-170.
32. Rasch, G H, H P Rodrigues, and Y Kirkwood. "Case-control designs in the study of common diseases: Updates on the demise of the rare disease assumption and the choice of sampling scheme for controls." *International Journal of Epidemiology*, 2016: 19, 205–213.
33. Selby, H. "Teenage pregnancy: Who is to be blamed- the child, parent or society?" *Modernghana.com*, 2016: 35-37.
34. Selkie, E M, M Benson, and M Moreno. "Adolescents' views regarding uses of social networking websites and text messaging for adolescent sexual health education." *American Journal of Health Education*, 2017: 42(4), 205-212.
35. Shawky, E T, and G T Milaat. "Pregnancy outcomes of mothers aged 17 years or less." *Saudi Medical Journal*, 2016: 32(2), 166-170.
36. Shtarkshall, B A, J S Santelli, and J S Hirsch. "Sex education and sexual socialization Roles for educators and parents." *Perspectives on Sexual and reproductive*, 2017: 39(2).

37. UNFPA. "The State of World Population." facts about adolescent pregnancy in sub - Saharan Africa, 2019: 45-47.
38. UNICEF. "Experiences and accounts of pregnancy amongst adolescents." UNICEF_PLAN_Pregnancy_amongst_adolescents, 2018: 134-136.
39. Vibe, and Ghana. "Teenage Pregnancy High in Sunyani West District." vibeghana.com, 2016: 78-79.
40. Waddington, D E. Master thesis submitted to the Department of Social, 2017: 34-36.
41. World Health Assembly. "Risk and protective factors affecting adolescent reproductive health in." maternal_child_adolescent/documents, 2017: 45-46.