

Teenage Pregnancy in The ERA of COVID 19: Insights from Botswana

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Citation: Phukula MA, Maundeni T, Lubinda G (2024) Teenage Pregnancy in The ERA of COVID 19: Insights from Botswana. American J Sci Edu Re: AJSER-156.

Received Date: 30 December, 2023; Accepted Date: 10 January, 2024; Published Date: 17 January, 2024

Abstract

The prevalence of teenage pregnancy is increasing worldwide especially in developing countries. Incidents of pregnancies among teenagers escalated during the Covid 19 era in African countries such as Botswana due to various factors. Girls under the age of 15 years in developing countries give birth each year, and this has enormous impact on their physical, emotional, academic, and social well-being.

Objective: The study therefore seeks to describe factors that place adolescents at risk of teenage pregnancy, challenges teenage mothers experienced during the Covid 19 era and the coping mechanisms they used.

Methods: A qualitative research design and semi-structured interview guide was used to collect data from 15 female students aged 13 to 16 years in one secondary school in Gaborone. Content analysis was used to analyze the data, and descriptive statistics was used to analyze continuous data. A notebook and audio recorder were used to capture the data. All Covid 19 protocols were adhered to.

Results: Factors that led to teenage pregnancy are individual, economic, physical setting, peer pressure and drug and alcohol use. Challenges experienced by teenage mothers included lack of financial support, health problems, rejection and school dropout. Adolescents indicated that they coped with the challenges by sharing their problems with peers, attending religious activities and counseling. They suggested that strengthening of parent-child relationship, abstinence, provision of family planning, peer groups and social media messages on teenage pregnancy are some of the ways in which teenage pregnancy maybe prevented.

Keywords: Teenage pregnancy, Covid 19, Coping mechanisms, Botswana.

Introduction and Background Information

Teenage Pregnancy is a worldwide problem that affects the wellbeing of adolescents. Approximately twenty-one million girls aged 15-19 years and 777,000 girls under the age of 15 years give birth each year in developing regions [1]. Adolescents and young people aged 10-24 years contribute more than 30% of Botswana's population [2]. Doherty et al (2018) [3], contend that about 20-40% unintended pregnancies result in high maternal mortality and abortions in Africa. Although teenage pregnancy is a global problem, developing countries are the most hard hit because of socio-economic factors especially in rural areas [4]. The prevalence of teenage pregnancy in Africa was 18.8% and 19.3% respectively, and the highest (21.5%) was in East Africa.

Cases of teenage pregnancy keep escalating in Botswana. For instance, in 2019, there were 14 districts that had registered the highest births of mothers aged 10-19 years [5]. According to the United Nations Population Fund (2020), teenage pregnancy emanates from lack of education and it leads to the drop out of girl children from school. In Africa more than 70,000 teenagers die each year due to complications of teen pregnancies.

Stakeholders in Botswana have made efforts to try to curb the high rates of teenage pregnancy. For instance, the Government of Botswana has formulated laws, strategies, guidelines, policies and social services to help reduce teenage pregnancy. Despite these various efforts, teenage pregnancy continues to rise. During the Covid 19 pandemic, incidents of teenage pregnancy increased significantly worldwide especially in developing

countries [6]. Some countries in sub-Saharan Africa such as Uganda experienced (30%-50%) rates of teenage pregnancy, South Africa in Gauteng the rate jumped to 60%, while Zimbabwe had high adolescent fertility rate of 108 per 1,000 among young women aged 15 to 19 years. These high figures were attributed to frequent lockdowns.

Although research on teenage pregnancy has been carried out over the years, there is paucity of studies on teenage pregnancy during the Covid 19 pandemic. The few studies on teenage pregnancy during the era of Covid 19 include those conducted by Batiibwe et al, 2023; Sychareun et al, 2018; and Kassa et al, 2018 [7,8]. Therefore, the study whose findings are discussed in this paper intends to fill a gap in existing literature. Moreover, most previous studies used quantitative methods to collect data, so this study is unique because it used a qualitative research design.

The adolescent stage is often characterised by the clarification of sexual values and experimentation with sexual behaviours. This experimentation poses a risk for teenage pregnancy. The purpose of this paper is four-fold. First, it explores factors that place teenagers to pregnancy. Secondly, it analyses challenges experienced by teenage mothers during the era of the Covid 19 pandemic in Gaborone. Thirdly, it describes coping mechanisms of teenage mothers; and finally, it highlights the possible solutions to curb and mitigate the cases of teenage pregnancy in Botswana.

Methodology

Issues discussed in this paper are derived from findings of a qualitative study that was conducted in Gaborone - the Capital city of Botswana in 2021 as well as from existing literature. A qualitative research design was used because the purpose of the study was to explore respondents' experiences which may give holistic perspective, since there is scarcity of literature on teenage pregnancy in the era of Covid 19 in the country. The study was conducted in one public junior secondary school in Gaborone. Female students aged between 13-16 years participated in the study. This age group was chosen because most of the junior secondary school students in Botswana are aged between 13 and 16, and pregnancy revolves around young girls. Respondents were accessed through the assistance of the guidance and counseling teacher. A total of 15 students participated in semi-structured interviews. Participants were met in a designated private room and further details of the study were shared with them. Such information included the purpose, data collection methods and duration of the interview. Respondents were also informed that they had a right not to respond to questions or withdraw from the study anytime they wanted, and that the study posed minimal risk. Issues of confidentiality and anonymity were also highlighted. The students who assented and whose parents/guardians consented were included in the interview.

A notebook and audio recorder were used to capture the data. Covid 19 protocols such as face masking, social distancing, and sanitizing of hands were adhered to. Data was recorded in audio and notebook by a transcriber. Collected data was kept in a locked cabinet, password protected laptop, and only the researchers had access to such information.

Findings and Discussions

Factors associated with the rise of teenage pregnancy in the era of Covid 19

Findings of this study indicated that several factors contributed to the rise of teenage pregnancy. These include individual, social, economic, and physical setting factors. Individual factors included sexual ignorance and naivety, lack of knowledge about birth control methods, and lockdown redundancy while social factors included peer influence, lack of parental monitoring, lack of community responsibility, and media influence. Economic factors included unemployment and low income by parents/guardians, and physical factors included houses that the teens lived in and those in their neighborhoods.

Peer pressure

Slightly more than half of the respondents reported peer pressure as a factor contributing to teenage pregnancy. Some teenagers have sex at a young age because they are influenced by their boyfriends as a sign of proving their love to them and having sex because their peers have already started. This is due to teenagers' desire to fit in and have a 'soft' life as they say. This kind of life comes at a price which includes having sex with older men for material and financial gains. One prudent decision that faces teenagers is that of engaging or not engaging in sexual intercourse. Some teenagers engage in sex without thinking and later realize the mistake they would have made. The finding that associates teenage pregnancy to peer pressure is not a new one. It has been documented in existing literature [7,9]. Moreover, a systematic review of determinants of teenage pregnancy that was conducted prior to the outbreak of Covid 19 highlighted peer pressure as one of the factors. These findings correlate with

the ecological systems theory which explains that structures in the micro system like peers have a bi-directional influence on a child [10].

Drugs and alcohol abuse

Drugs and alcohol abuse were reported to be one of the factors associated with the rise of teenage pregnancy. The findings of this study are consistent with those found by Bocar and Blong (2012) [11] and Francisco et al (2016) [12], who reported that alcohol use was one of the greatest reasons that influence teenagers to engage in pre-marital sex that results in teenage pregnancy. The findings indicated that when teenagers are under the influence of alcohol, they tend to engage in risky behaviors such as unprotected sex, which they later regret. It has been reported that in Botswana, alcohol and substance use were higher in female adolescents as compared to males [13]. This explains why this factor is deemed the greatest reason in the influence teenage pregnancy even in Botswana. Consequently, since they may be abusing alcohol, they can end up having sex with someone just to be able to buy alcohol and further compound the risk.

In Botswana, drugs and alcohol abuse are some of the major burdens in societies. For instance, the total alcohol per capita (15+) consumption in litre of pure alcohol was 8.6 in 2010 and 8.4 in 2016. Although the statistics seems lower in the later, the numbers are still very high when compared to WHO African region of 6.3 [14]. Most of the time, alcohol and substance abuse is influenced by parental behavior, in cases whereby a child grew up in a family that drinks alcohol, making teenage adolescents to be at risk for same behaviour and become prone to premarital sex and pregnancy. In the context of Botswana, it should be noted that there are some traditional alcohol beverages that are sold in homesteads, and although there are guidelines on the sale of such beverages, some outlets do not adhere to them.

Lockdown and related dynamics

Few respondents who are in form 3 stated that during lockdown since schools were closed, a lot of teenagers had too much time at their disposal, so they ended up experiencing boredom. This led them to have more time to spend with their boyfriends and girlfriends. They further stated that these dynamics led teenagers to engage in sexual activities which led to the rise of teenage pregnancy. The occasional lockdowns that the country embarked on to curb the spread of Covid 19 contributed to the rise in cases of teenage pregnancy, gender-based violence, rape, and cases of incest.

This observation is consistent with those of Zulaika et al., (2022) [15] who conducted a study on the impact of Covid 19 on adolescent pregnancy and school dropout among secondary school girls in Kenya and found out that; girls in Kenya remained out of school for 6 months due to Covid 19 lockdown and had experienced twice the risk of becoming pregnant, three times risk of dropping out of school when compared to girls prior the outbreak.

The findings also showed that when students were not going to school for a long time due to state of emergency that was declared, a lot of teenagers became depressed. This influenced them to spend a lot of time in social media (eventually learning mischievous things) as well as to get into random relationships to find solace and joy because they were bored. So being out of school for a long time caused teenagers to engage in sexual activities which resulted in teenage pregnancy.

Lack of knowledge on the use of contraceptives

Almost half of the respondents reported that lack of knowledge on the use of contraceptives is one of the factors associated with teenage pregnancy. They stated that teenagers engage in sexual activities without knowledge on the use of contraceptives as the knowledge they have on sexual reproductive health at school is not enough. The results of this study are consistent with what Sychareun et al (2018) [8] and Geda (2019) [16] found out, that lack of knowledge on contraception was one of the determinants of teenage pregnancy.

The findings of this study show that teenagers are not provided with enough information on the use of contraceptives and most of them have to get such information from social media platforms. The results are consistent with a study conducted in Ghana, about examining pregnancy related socio-cultural factors. The authors stated that teenagers from families where sex is not discussed were 3 times more likely to fall pregnant [17]. The lack of communication in general between parents and teenagers also makes them feel lonely and fail to talk to them about challenges that they experience leading them to engage in risky sexual behaviors.

Parents are agents of sexual education; therefore, they are supposed to play a pivotal role in imparting information about sexual matters to the young ones [18]. However, some, if not most parents and guardians in developing countries do not communicate adequately with their children about sexuality matters and contraceptives probably due to cultural norms. In Tswana culture it is a taboo for parents to talk to children about sexual matter.

Challenges experienced by teenage mothers

Findings of this study indicate several challenges experienced by teenage mothers. These are: lack of financial support; health problems; rejection and school dropout.

Lack of financial support

One of the challenges mentioned by respondents was lack of financial support. Lack of financial support is exacerbated by the harsh economic challenges related to the Covid 19 pandemic. Some parents were retrenched, while others' salaries were reduced as companies could no longer afford to pay workers. Furthermore, respondents stated that lack of financial support is a challenge to teenage mothers because since the outbreak of the virus a lot of families are challenged financially as the high cost of living is on the rise. Therefore, the family cannot afford to take care of another head in the family. Some teenagers fell pregnant because they are trying to fend for themselves and their families. This observation tallies with that of Imamura (2007) who investigated the link between pregnancy and lack in United Kingdom. He indicated that lack or deprivation and pregnancy have a strong association in United Kingdom and areas with higher levels of lack have higher conception or birth rates. The Covid 19 dynamics outlined above affected parents' ability to meet their families' needs (including providing financial support to teen mothers). Teen mothers' experiences of economic hardships are also worsened by the fact that in most cases, males who impregnate them tend to abandon them. These males do so either because they are still at school and have no means to support the teenage mothers or they are older men who are married and would not want to disclose their extra-marital affairs. Most teenage pregnancies take place in families of low socio-economic status families Ochen et al, (2019) [9] and McCall et al (2015) [19]. The finding that some

men do not pay child support put children's wellbeing at risk. They also cause concern because the Botswana Children's Act of 2009 [20] clearly stipulates that all children have a right to be cared for by both parents regardless of whether the parents stay with the child or not.

Health problems

Few respondents reported health problems as a challenge of teenage mothers. They indicated that teenage mothers face a lot of health problems during birth and thereafter because their bodies are not fit/mature to carry babies. Teenagers may experience death, depression, and high stress levels during pregnancy and birth. Most teenage pregnancies are unwanted making it stressful for a young person to carry the pregnancy to term. So, they attempt to terminate pregnancy using unsafe procedures leading bleeding that may result in anemia and death. Other conditions are urinary tract infections and pregnancy induced hypertension. Post-partum depression has been reported because of unwanted pregnancy [21,22]. There are high chances of infertility following unsafe abortion because it is performed by unskilled practitioners in an unsterile environment. These are some of the factors that contribute to high maternal mortality in Botswana. There is also risk of still births and preterm babies may result leading to high infant mortality [23]. This indicates that indeed teenagers face extreme health problems because they are unfit to carry babies.

Rejection

Slightly more than half of the respondents reported rejection as one of the challenges faced by teenage mothers. They indicated that some teenage mothers are rejected by their families and disowned by their parents. This finding is consistent with that of Apolot et al., (2020) [24] who found that some adolescents were rejected by their parents and chased away from home mainly because the parents did not approve of the pregnancy. Furthermore, they stated that teenage mothers who are rejected faced physical violence from their partners who did not want to take responsibility. Some parents who disapproved teenage pregnancy may beat their children and thereby worsening their emotional turmoil. This physical violence may lead to hospitalization and permanent body injuries. In addition, it is consistent with the study conducted in south Africa, KwaZulu Natal, where the authors reported that family reaction to their child who is pregnancy ranged from anger, rejection and abandonment [25]. Unplanned pregnancy can burden families who are already struggling financially, making them subject their children to social exclusion and rejection. This social exclusion and rejection may result in grave emotional turmoil and upheavals [26].

The finding that some teen mothers experienced rejection from their social network members has far reaching consequences on their wellbeing. It can affect them emotionally, socially, morally, spiritually, and economically. It can also lead to depression and consequently Post traumatic stress disorders. If young mothers are depressed, their ability to provide the necessary love and care to their children will be seriously hampered. Yet, research shows that failure to experience a strong bond between a mother and a child can affect children both in the short and long term.

School dropout

Respondents identified dropping out of school as one other challenge faced by teenage mothers. Some respondents stated

that teenage mothers drop out of school because they are stigmatized and discriminated by their peers. This finding correlates with that of Chigona and Chetty (2008) [27] study in South Africa and found that many girls report being bullied, isolated and teased by other students at school leading to them dropping out of school. This is a challenge because a lot of young girls' education is affected as they cannot focus on school work while being bullied by their classmates. This affects the mental health of teenage mothers.

Coping mechanisms of teenage mothers

Findings of this study indicate several coping mechanisms of teenage mothers. These are sharing problems with peers, religious activities and counseling.

Sharing problems with peers

Respondents indicated that most teenagers cope by sharing their challenges with their peers because they feel secure talking to their peers. This finding is similar with that of Lombe (2016) who carried investigation on the needs, experiences, and coping strategies of pregnant teenagers and parenting. She found that teenage mothers sought support from friends, families and their partners in order to cope. When teenage mothers are offered support by their friends, they are able to cope well and manage the situation [28].

Religious activities

A few respondents reported religious activities as one of the coping mechanisms of teenage mothers. The findings revealed that teenage mothers get distracted and forget about their problems when they focus on their spiritual activities such as praying and reading the bible. Bhat et al.,(2015,p.41) [29] who conducted a study on religious coping and adjustment among pregnant women and found out that religious coping activities and individual spiritual resources showed higher scores in lowering levels of distress, depression, anxiety and hopelessness. Attending religious activities has really helped teenage mothers to cope as they find more peace and comfort in doing religious activities.

Counselling

Counselling was indicated as one of the coping mechanisms of teenage mothers. The findings revealed that there are guidance and counselling teachers available in schools that help troubled students who seek counselling. Teenagers are able to accept their situation and move so that they create a safe environment for their born or unborn babies. These findings are in correlation with ecological systems theory which explains that people (including teenage mothers) are influenced by the changes in the meso system. Guidance and counselling teachers can interact with teenage mothers in order to develop teenagers, enhance their roles and activities which encourages growth and positive orientation. The findings are similar to that of Apondi et al., (2011, p.224) [30] who conducted a study on schooling challenges, coping mechanisms and support accorded mothers in Kenya and established that student-mothers were counselled when returning to school and when they were in school to train them on how to deal with their challenges like balancing their time to attend school, stigma and parenting demands. This helped teenage mothers to be free to come to school and see the need for them to return to school. However, there was insufficient trained personal to carry out professional counselling [30].

Possible solutions to mitigate incidents of teenage pregnancy

Respondents suggested several solutions which can be employed to reduce teenage pregnancy. These include: improving parent-child relations, abstinence, provision of family planning and evaluation of available programs and policies may assist in mitigating teenage pregnancy. Programs like Families Talking Together, strengthening parent-child relationships, peer groups and social messages with the target population of youth from ages of 10-14 years have reduced sexual risky behaviors by building good parental relationships [31].

The respondents further suggested that abstinence can reduce teenage pregnancy. They stated that teenagers can stay away from sex completely because they are still young and not experienced. To help keep their abstinence, they can join programs like Shapo Ka Yone and Sure Ka Yone (SKY girl BW) for them to be assertive. An evaluation of current programs to prevent teenage pregnancy conducted by Summers, Lee & Lee (2017) [31] found out that programs on the evidence-based pregnancy prevention programs were identified to prevent factors associated of teenage pregnancy. The researchers further stated that in order for these programs to be effective or function well, parental influence, substance use including alcohol, peer influence and social messages must be the main focus of these programs. This will help teenagers to stay true to themselves and abstain from sexual activities through such programs.

Some respondents suggested the provision of family planning as a way of reducing teenage pregnancy. This can help teenagers to think about their actions before engaging in sexual activities because they are now educated in terms of family planning. It can also help them know the right contraceptives to use, especially those who are sexually active.

Evaluation of available programs and policies was identified by the respondents as another possible solution of mitigating teenage pregnancy. The findings revealed that the government tends to come up with programs that help prevent teenage pregnancy but does not conduct follow ups. Section 34 (1) of the 1967 Botswana Education Act requires a "pupil who has fallen pregnant to withdraw from school and that she can be re-admitted on condition that she goes to a school other than that from which she was withdrawn after one calendar year after the cessation of pregnancy and subject to the approval of the Minister". Molosiwa, Serefete & Bernard, 2012, p.267 [4], argue that the particular education clause does not guarantee the return to school by the girl child even after meeting all the requirements stated above by the education act of 1967; the return of the girl child to school is based on the availability of space in schools the child applied to [4] this shows that the government or the ministries of education come up with policies which are not guaranteed to help pregnant teenagers or teenage mothers hence this results in more pregnancies because they cannot go back to school. This also shows that these policies and programs are not evaluated because people who are in practice are never sure how to help people who are to benefit from this program because they say there are no spaces but it can be solved by building new classes in schools to accommodate teenage mothers.

Acknowledgement

We are grateful to the University of Botswana (UB)'s Office of Research and Development for funding the research project whose findings are presented in the article.

The role played by each co-author

The first author / main author wrote the proposal, collected data for the study, analyzed the data and wrote the research project in partial fulfilment for the Bachelor's Degree in Social Work. The second author supervised the first author and drafted the article together with the third author. The third author also boosted the literature review and edited the paper.

Source of funding

The project was funded by UB's Office of Research and Development.

References

1. WHO (2023). Adolescent pregnancy <https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy>.
2. Government of Botswana. UNFPA (2022-2026.). Retrieved https://botswana.unfpa.org/sites/default/files/pub-pdf/unfpa_a5_booklet_wednesday_edit.pdf.
3. Doherty, K., Arena, K., Wynn, A., Offorjebe, O. A., Moshashane, N., Sickboy, O., Ramogola-Masire, D., Klausner, J. D., & Morroni, C. (2018). Unintended Pregnancy in Gaborone, Botswana: A Cross-Sectional Study. *African Journal of Reproductive Health / La Revue Africaine de La Santé Reproductive*, 22(2), 76–82. <https://www.jstor.org/stable/26493915>
4. Molosiwa, E., & Moswela, B. (2012). Girl-pupil dropout in secondary schools in Botswana: Influencing factors, prevalence and consequences. *International Journal of Business and Social Sciences*, 3, 265–271.
5. Statistics Botswana (2019). Retrieved <https://www.statsbots.org/bw/statistics-botsswana-2019-annual-report>
6. Musinguzi M, Kumakech E, Auma AG, Akello RA, Kigongo E, Tumwesigye R, Opio B, Kabunga A, Omech B. Prevalence and correlates of teenage pregnancy among in-school teenagers during the COVID-19 pandemic in Hoima district western Uganda-A cross sectional community-based study. *PLoS One*. 2022 Dec 16;17(12):e0278772. doi: 10.1371/journal.pone.0278772. PMID: 36525426; PMCID: PMC9757589.
7. Batiibwe, M.S.K., Nannyonga, B.K., Nalule, R.M. et al. Factors related to teenage pregnancy during the COVID-19 pandemic: a case of selected villages in Mayuge District, Eastern Uganda. *SN Soc Sci* 3, 103 (2023). <https://doi.org/10.1007/s43545-023-00694-8>
8. Sychareun et al. *BMC Pregnancy and Childbirth* (2018) 18:219 <https://doi.org/10.1186/s12884-018-1859-1>
9. Anthony Mark Ochen^{1*}, Primus Che Chi^{2,3,4} and Stephen Lawoko^{3,5}Ochen et al. (Predictors of teenage pregnancy among girls aged 13–19 years in Uganda: a community-based case-control study) *BMC Pregnancy and Childbirth* (2019) 19:211
10. Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by nature and design*: United States of America: Harvard University Press.
11. Bocar, A., Gulf, C. & Biang, C. (2016). factors that induce premarital sexual intercourse among adolescents: reasons that lead to teenage pregnancy. doi 10.13140/rg.2.2.27677.51687.
12. Francisco VN, Carlos VR, Eliza VR, Octelina CR, Maria II. Tobacco and alcohol use in adolescents with unplanned pregnancies: relation with family structure, tobacco and alcohol use at home and by friends. *Afr Health Sci*. 2016 Mar;16(1):27-35. doi: 10.4314/ahs.v16i1.4. PMID: 27358610; PMCID: PMC4915414.
13. Mpho Keetile (2020) Patterns and correlates of health risk behaviours among adolescents in Botswana: 2001-2013, *Vulnerable Children and Youth Studies*, 15:3, 205-220, DOI: 10.1080/17450128.2020.1752961
14. World Health Organization. (2018). Global status report on alcohol and health 2018. In *Global status report on alcohol* 65(1) Retrieved: <https://doi.org/10.1037/cou0000248> .
15. Zulaika, G., Bulbarelli, M., Nyothach, E., van Eijk, A., Mason, L., Fwaya, E., Obor, D., Kwaro, D., Wang, D., Mehta, S. D., & Phillips-Howard, P. A. (2022). Impact of COVID-19 lockdowns on adolescent pregnancy and school dropout among secondary schoolgirls in Kenya. *BMJ global health*, 7(1), e007666. <https://doi.org/10.1136/bmjgh-2021-007666>
16. Geda, T., R., Teklemariam, B. & Zelalem (2019) emergency contraceptive usage and factors associate among female daily laborers in the reproductive age group in flower farm of bora woreda, oromia region central ethiopia. retrieved <http://ir.haramaya.edu.et/hru/handle/123456789/4229>
17. Ahinkorah BO, Hagan JE Jr, Seidu A-A, Mintah JK, 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. *Front. Public Health* 7:93. doi: 10.3389/fpubh.2019.00093
18. Ventanilla, V. M. & Valaruel, P. J. (2022). Family communication patterns and teenage pregnancies among Filipino youth. *ASEAN Social Work Journal*, Vol 10 (1); 35-46.
19. Evaluating the social determinants of teenage pregnancy: a temporal analysis using a UK obstetric database from 1950 to 2010 Author(s): Stephen J McCall, Sohinee Bhattacharya, Emmanuel Okpo and Gary J Macfarlane Source: *Journal of Epidemiology and Community Health* (1979-), January 2015, Vol. 69, No. 1 (January 2015), pp. 49-54 Published by: BMJ Stable URL: <https://www.jstor.org/stable/4328202>
20. Government of Botswana. (2009) *The Botswana Children's Act*. Gaborone: Government Printer.
21. Gyeswa, N., K & Ankomah, A. (2013). Experiences of pregnancy and motherhood among teenage mothers in suburbs of Accra, Ghana; A qualitative study: *International Journal of Women's Health*, 2013(5), 773-780.
22. Boath, E.H., Henshwa, C., & Bradley, E. (2013). Meeting the challenges of teenage mothers and postpartum depression: Overcoming stigma through support. *Journal of reproductive and infant psychology*, 31(4), 352-369
23. Okine, L., Dako-Gyeke, M., Baiden, P & Mort, K. (2020). Exploring the influence of repeat pregnancy on the lives of teenage mothers: *Journal of Human Behaviour in the social environment*, 30(7), 863-880

24. Apolot, R.R., Tetui, M., Nyachwo, E.B. et al. (2020). Maternal health challenges experienced by adolescents; could community score cards address them? A case study of Kibuku District– Uganda. *Int J Equity Health* 19, 191. <https://doi.org/10.1186/s12939-020-01267-4>
25. Govender, D., Naidoo, S. & Taylor, M. “I have to provide for another life emotionally, physically and financially”: understanding pregnancy, motherhood and the future aspirations of adolescent mothers in KwaZulu-Natal South, Africa. *BMC Pregnancy Childbirth* 20, 620 (2020). <https://doi.org/10.1186/s12884-020-03319-7>
26. Ajayi, A.I., Athero, S., Muga, W. et al. Lived experiences of pregnant and parenting adolescents in Africa: A scoping review. *Reprod Health* 20, 113 (2023). <https://doi.org/10.1186/s12978-023-01654-4> Download citation
27. Chigona, A., &Chetty, R. (2008). ‘Teen mothers and schooling: Teen mothers and challenges’ in South African: *South African Journal of Education*, 28(2), 261 -281.
28. Mohammed, A., N., &TengkuMuda, T. (2020). A review of social acceptance, psychosocial implications and coping mechanisms of teenage mothers: *International Journal of Social Science Research*, 2(1), 1-12.
29. Bhat, Nasir & Hassan, Rafia & Shafiq, M. (2015). Religious coping and adjustment among pregnant women. 39-47. Religious coping and adjustment among pregnant women (researchgate.net)
30. Apondi, O. L., Kimemia, J. N., & Ryanga, C. W. (2011). Schooling challenges, coping mechanisms and support accorded to student mothers in Kenya:The case of Nyando District. *Quality Education for Societal Transformation Nairobi, Kenya July 20-22, 2011*, 20, 220.
31. Summers, L., Lee, Y. M., & Lee, H. (2017). Contributing factors of teenage pregnancy among African-American females living in economically disadvantaged communities. *Applied nursing research: ANR*, 37, 44–49. <https://doi.org/10.1016/j.apnr.2017.07.006>
32. UNICEF. (2020). Child protection: Retrieved October 10,2021, from <https://unicef.org/Botswana/child-protection>.