

Hybrid Psychology

Website: https://royalliteglobal.com/psychology

Research Article





This article is published in Nairobi, Kenya by Royallite Global in the Hybrid Journal of Psychology, Volume 1, Issue 1, 2020

© 2020 The Author(s). This article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

Article Information

Submitted: 1st August 2020 Accepted: 30th September 2020 Published: 26th October 2020 Conflict of Interest: No conflict of interest was reported by the authors

Funding: None

https://creativecommons.org/licenses/by/4.0/

To read the paper online, please scan this QR code



Prevalence of Teenage Pregnancy in the Lower Manya Krobo Municipality of Ghana

Nathan Asamoah Agyemang

Science Department, Mount Mary College of Education, Ghana

Email: <u>aagyemang12@yahoo.com</u>

D https://orcid.org/0000-0001-7963-8960

Abstract

Teenage pregnancy has been a social canker causing a lot of problems to governments, societies and individuals the world over. This study explores the prevalence of teenage pregnancy in relation to the challenges faced by teenage pregnant mothers in the Lower Manya Krobo Municipality of Ghana. The descriptive cross-sectional survey design was employed. The stratified and purposive sampling procedures were used to select a sample of 150 (100 pregnant teenagers and 50 health workers). Two selfconstructed questionnaires were designed to collect data. The data collected were analysed using Chi-square, and descriptive statistics of frequency counts and percentage scores. The study revealed that teenage pregnant girls face various health, education and socio-economic challenges such as complications of delivery and low birth weight, inability of parents to send wards to school and ridiculing and mockery by school mates, and societal rejection respectively. From the findings, the study concluded that teenage pregnancy is a serious public health issue that has observable negative health, educational and socio-economic effects on the pregnant girls.

Keywords: adolescent, birth weight, socio-economic, societal rejection, teenage pregnancy



How to Cite:

Agyemang, N. A. (2020). Prevalence of Teenage Pregnancy in the Lower Manya Krobo Municipality of Ghana. *Hybrid Journal of Psychology*, 1(1). Retrieved from https://royalliteglobal.com/psychology/article/view/427



Website: https://royalliteglobal.com/psychology



Public Interest Statement

The July 18, 2009 edition of the Ghanaian Times gave an account of the fact that 748 teenagers had been impregnated within 18 months. Also records at St. Martin de Pores hospital at Agormanya in the Manya Krobo Municipality records that between January and October, 2009, a total or 265 teenage pregnancy cases were recorded. These publications and many more unpublicized cases in both rural and urban communities show how threatening and critical the issues of teenage pregnancy are on the health and socio-economic status of the society. The teenage pregnancy situation in the Manya Krobo Municipality is no different from what pertains in other areas.

Introduction

Adolescent childbearing has emerged as one of the most significant social problems facing the world today. Many third world countries are poverty stricken without knowing what to do or how to come out of it. Some heads of state both present and the past have either tackled the root of poverty or lost sight of it. Teenage pregnancy has been identified as one of the primary causes of poverty because the teenagers do not plan for themselves let alone their children before giving birth. Teenage pregnancy is on the increase in recent times and calls for collective efforts of government, parents, clergies, stakeholders, youth and every concerned citizen to help address this social canker. One cannot afford to see our youth, who are the future leaders get destroyed through teenage pregnancy. When this happens their dreams and aspirations for the future are completely thwarted. They are left frustrated all their lives.

The prevalence of teenage pregnancy has become very common in the Ghanaian society, especially among the youth who are at the primary and junior high school (JHS) level of education (Prevalence to Teenage Pregnancy in Basic Schools in Ghana, 2007). At the 2011 basic education certificate examination (BECE), pupils had no choice than to take their pregnancies to the examination centers to write their final examinations. Also, some had to be there a couple of days after giving birth, whiles some gave birth in the examination halls. This sordid situation is an annual affair among teenage girls in Ghana.

At first, the notion was that teenage pregnancy often happens among teenagers who have no educational background and no parental guardians; however, that impression seems to be wrong, as the culprits of late are those in basic schools (Prevalence of Teenage Pregnancy in Basic Schools in Ghana, 2007). The source further reports that about 750,000 teenagers get pregnant every year in Ghana.

It must be accepted that government cannot lay a sound foundation for economic prosperity without tackling teenage pregnancy which to the large extent is a setback to the prosperity of a nation. As a tutor in the college of education and a supervisor of the in-in-out programme (this is the programme where students in colleges of education receive tuition for two continuous years in their colleges and spend the third year outside the college teaching in the basic school for professional development), it was observed that, especially in the rural communities the situation of teenage pregnancy is appalling. During such rounds some of the teenage mothers were with their babies and looking dirty and miserable, and in most cases they looked far older than their ages.

Website: https://royalliteglobal.com/psychology



Literature Review

Teenage pregnancy has been identified as one of the primary causes of poverty because teenagers do not naturally plan for themselves and their children before giving birth. The Longman Active Study Dictionary of English (1991) defines teenager as someone who is between 13 and 19 years old. Pregnancy is also defined as the conception of a fetus by a woman.

Odei (2007), a volunteer co-ordinator for youth realities network, defines teenage pregnancy in two ways. He said teenage or adolescent age can be defined as the period in life during which the growing individual makes a transition from childhood to adulthood, the anthologist call it the rites of passage. Some ethnic groups have a way of initiating a child into adulthood. Odei was particular about the Krobos, found in the eastern region, where a young girl in her teen is taken through a cultural exercise called "dipo". After these rites, the young girl is declared ripped for dating and marriage. The teenage years for the Krobos cover a period between the ages of 12-19 years.

Odei (2007) reiterated that there are some characteristics with this stage. First, are the intellectual changes. Here the intellectual development is high with the physical development which is obvious. Secondly, emotional changes such as affection, aggressiveness and fear become manifest. There is also increasing sexual interest. The adolescent at this stage easily identifies him or herself with the opposite sex. The teenager seeks complete independence from parents and wishes to be treated like an adult, anything apart from that brings conflict.

Odei (2007) further defines pregnancy as the beginning of conception (the fertilization of an ovum by the sperm) and normally end with childbirth. With these facts teenage pregnancy can be defined as the conception by a girl between the ages of twelve and twenty years. Mostly these pregnancies are unplanned and have consequences on the parties involved in the pregnancy. The term teenager is to be someone who is between the ages of 13-19. A girl getting pregnant within these ages is considered to be a pregnant teenager. In Ghana, teenage pregnancy occur from ages as low as 13 years, unfortunately these teenagers have no knowledge as to how to go about things concerning the pregnancy and are not fully developed to produce a child (Masahudu, 2009). Teenage pregnancy is one that occurs during a girl's teenage years. Any pregnancy that occurs when a girl is within the age range of thirteen to nineteen is termed teenage pregnancy.

A report by Save the Children (2009) reveals that annually 13 million children are born to women under age 20 worldwide and more than 90% are in developing countries. Complications of pregnancy and childbirth are the leading causes of mortality among women between the ages of 15 and 19 in such areas. According to Traffers (2003), the highest rate of teenage pregnancy in the world is in Sub-Saharan Africa, where women tend to marry at an early age. In Niger for example, 87% of women surveyed were married and 53% had given birth to a child before the age of 18 years (Locoh, 2000).

Mehta, Groenen, and Roque (1998) in their research stated that in India, early marriages sometimes is as a result of adolescent pregnancy, particularly in rural regions where the rate is much higher than it is in urbanized areas. The rate of early marriage and pregnancy has decreased sharply in Indonesia and Malaysia, although it remains relatively high in India. Mehta et al. indicated that in the industrialized Asian nations such as South Korea and Singapore, teenage birth rates are among the lowest in the world.

United Nations International Children's Emergency Fund (UNICEF) (2001) has showed that teenage birth rates in the United States are the highest in the developed world, and the teenage



Website: https://royalliteglobal.com/psychology

abortion rate is also high. The U.S. teenage pregnancy rate was very high in the 1950s and had decrease since then, although there has been an increase in birth out of wedlock. The teenage pregnancy rate decreased significantly globally in the 1990s. this decline manifested across all racial groups, although teenagers of Africa-American and Hispanic descent retained a higher rate, in comparison to that of European-American and Asian-American. Guttmacher Institute (2006) attributes about 25% of the decline to abstinence and 75% to the effective use of contraceptives. However, as of 2006 the teenage birth rate began to rise, the rise could also be due to other sources, a possible decrease in the number of abortions or a decrease in the number of miscarriages, to name a few.

Available records at the Manhean Health Centre shows that of the 941 women who delivered at the health centre, 434 were teenagers of which one of them was a 13 year old class six pupil. The report indicates that from January to July, 2009, 880 delivery cases have been recorded of which 350 involved teenagers (Gibbah, 2009).

During the 19th annual national conference of the public health nurses group (PUBHENG) held at Takoradi in the Western Region, Dr. Sylvester Ananu, the Regional Director of Health Services said the region has the highest rate of teenage pregnancies in Ghana. He lamented that the teenagers had the lowest supervisory rate in the country (Ghana News Agency (GNA), 2009). The GNA report also indicated that the Western Region alone recorded 12,872 teenage pregnancies in 2004 and this represented 16% of antenatal attendance in the region.

In some societies, early marriage and traditional gender roles are important factors in the rate of teenage pregnancy. For example, in Sub-Sahara African countries, early pregnancy is often seen as a blessing because it is a proof of the young woman's fertility (Locoh, 2000).

Childishness has been identified as one of the causes of teenage pregnancy. Teenagers have naïve mind, shy and sensitivity to others. For instance, the male refuses to use protective mechanism like the condom because it is unpopular. They fail to use contraceptive because they simply think it is not feminine to precondition your mind towards having sex, or to take precautions against getting pregnant (Odei, 2007).

Another factor that causes teenage pregnancy is sexual abuse. Studies have found that between 11-20% of pregnancies in teenagers is a direct result of rape while 60% of teenage mothers had unwanted sexual experienc4e preceding their pregnancy. Before age 15, majority of first-intercourse experiences among females are reported to be non-voluntary. Guttmacher Institute (2006) found that 60% of girls who had sex before age 15 were coaxed by males who on average were six years their seniors. The institute added that one in five teenage fathers admitted to forcing girls to have sex with them.

Martin et al (2006) lamented that teenage mothers are more likely to have low birth weight babies; most low birth weights are born prematurely. The earlier a baby is born, the less she is likely to weigh. In 2006, 10% for mothers ages 15-19 and how birth weight babies, compared to 8.3% for mothers of all ages; 15.7% of 15 years old mothers had low birth weight babies in 2006; 18,403 babies were born to girls this age with 2,153 of low birth weight. Martin et al laments that 9.5% of 19-year-old mothers had low birth weight babies in 2006; 172,999 babies were born to these women with 16,362 of low birth weight.

According to Martin et al (2006), babies who are premature and have low birth weight may have organs that are not fully developed and this can lead to breathing problems, such as respiratory distress syndrome, bleeding in the brain, vision loss and serious intestinal problems. Very low-birth





weight babies (less than 3.5 pounds) according to Martin et al, are more than 100 times as likely to die, and moderately low birth weight babies (between 3.5 and 5.5 pounds) are more than five times as likely to die in their first year of life than normal weight babies. Life may be difficult for a teenager and her child; teen mothers are more likely to drop out of school than girls who delay childbearing. Only 40% teenagers who have children before age 18 go on to graduate from school, compared to

or 21 (National Campaign to Prevent Teen Pregnancy, 2009).

The sum total of the good and healthy food choices a woman makes before and during pregnancy is a favourable pregnant outcome. Thus, chances that a mother and her unborn child will remain alive after the child is born, is higher. On the contrary, making wrong food choices will result in certain complications that can endanger the life of both mother and baby. Worst still, the way we approach solving any ensuring nutritional complications of pregnancy can either worsen or solve those complications (National Campaign to Prevent Teen Pregnancy, 2009.

75% of teenagers from similar social and economic backgrounds who do not give birth until ages 20

Designs and Methods

The cross-sectional survey plan was employed to conduct the research. This focused on the overall structure according to which the entire study was carried out. Teenage pregnant mothers in Manya Krobo were enrolled based on the sample taken from the population, and the results were used to describe the whole larger group of teenage pregnancy victims. The cross-sectional design was used because information was collected from one or more samples drawn from the population at that time and used to describe the population at that point in time.

The population for the study was made up of health workers and teenage pregnant girls. All health workers at Atua Government Hospital at Odumase Krobo and St. Martin de Pores Catholic hospital at Agormanya formed the target population. The accessible population was midwives (MW), Ghana registered nurses (GRN) and community health nurses (CHN). All teenage pregnant girls in the district also formed the target population. The accessible population comprised those who attended antenatal clinic at these two hospitals within the period of the study.

A total of 150 respondents were sampled for the study. This was made up of 100 teenage pregnant girls and 50 health workers all drawn from the two hospitals. To obtain the sample, a combination of the stratified and purposive sampling techniques was used. First, the health staffs were put into three strata, that is community health nurses, Ghana registered nurses and midwives. At Atua hospital, a total of 28 comprising 9 CHNs, 9 GRNs and 10 MWs were purposively drawn. At St. Martin's hospital, a total of 22 made up of 7CHNs, 7 GRNs and 8 MWs were also selected. These differences were reached because of the numerical strength of the groups. Also 50 pregnant teenagers attending antenatal clinics were purposively selected from hospital to give a total of 100. The 50 health workers and 100 pregnant teenagers yielded a sample size of 150 used for the study.

Educational research lends itself to the use of several data gathering methods. Special areas of study have peculiar methods of gathering data. Others are also selected based on the suitability of an instrument used for the gathering of the data. Two self-developed questionnaires (one for health staff and the other for pregnant teenagers) were the instruments used for data collection.

Website: https://royalliteglobal.com/psychology



Data analysis

The first step of data analysis in this study was to properly code the questionnaire. The various items were identified and data summary sheet was drawn to facilitate easy loading onto the computer. The value labels assigned to the categories on the Likert scale were; Strongly agree, 1; Agreed, 2; Undecided, 3; Disagreed, 4; Strongly disagreed, 5. The same was done for the alternate options.

Findings

The study assessed the prevalence of teenage pregnancy in relation to the challenges faced by teenage pregnant mothers in the Manya Krobo District of Ghana. It also assessed the effects of teenage pregnancy on the socio-economic development of the society or district.

Is there any relation Teenage Pregnancy and the challenges faced by Pregnant Teenagers?

This sought to find out whether or not there was any significant evidence to conclude that teenage mothers face challenges due to teenage pregnancy. It was hypothesized that;

H_o: Teenage Pregnancy is independent of challenges.

H': Teenage Pregnancy is not independent challenges.

The summary of the challenges is elaborated in Table 1.

From Table 1, teenage mothers strongly agreed that they were affected by health and education challenges with both having 105 responses which make up 70% each of the total challenges. The total of responses strongly affected by economic and social challenges were 62% and 60% respectively.

The result further showed that 34% (n = 51) of the responses agreed that they were affected by social challenges. Also, 39 representing 26% of the tot-al responses agreed that they were affected by health challenges. However, the results also indicated that 15, 9 and 9 were not affected by education, social and economic challenges respectively which made up 10%, 6% and 6% of the responses. Four percent of the responses were not affected by health challenges.

Table 1: Distribution of Challenges facing Teenage Mothers

	Strongly agree			Agree			Disagree		
Challenges	No.	%		No.	%		No.	%	
Health		105	70		39	26		6	4
Social		90	60		51	34		9	6
Economic	93	62		48	32		9	6	
Education	105	70		30	20		15	10	

Note: The total number (N) of respondents is 150

This implies that teenage pregnant mothers suffer serious challenges in education, economic, social and health matters. Considering the health implication of the teenage mothers who are strongly affected, they contribute about 70% of responses whiles 26% are fairly affected giving a total effect of 96%. Education had a total effect of 90% on teenage mothers which is made of 70% strongly agreeing and 20% agreeing. The total effects on teenage mothers by economic and social



Website: https://royalliteglobal.com/psychology

challenges were 94% apiece which comprised 62% strongly agree and 32% agree, and 60% strongly agree and 34% agree for both economic and social challenges respectively.

Education is the least contributor of the challenges because youngest girls in the rural areas do not go to school and therefore are least affected. Also, they have the opportunity to enter into school again since age and time are factors that really affect schooling in the rural setting. The setting of this study is a rural area, so it can be understood that most girls are not really enthused about education and its effect on the society. From the distribution of proportions of challenges facing teenage mothers, the highest among the challenges is health. This observation is so because most young girls do not have a well-developed anatomy to bore children, therefore, facing serious clinical, physical and psychological complications. Table 2 is the test statistic of association between teenage pregnancy and the challenges as a whole.

Table 2: Chi-square analysis of Teenage Pregnancy and Challenges

Statistics	N	df	X ²	Р
Chi-square	50	6	16.4005	0.0118
Likelihood Ratio Chi-square	50	6	16.3880	0.0118

p < .05 s = significant

From Table 2, the Chi-square value is 16.4005 with 6 degrees of freedom and p value of 0.0118. Summarily (X^2 [50] = 16.4005, p < .05) is a statistically significant result. This does not support the null hypothesis. In this wise the variability of scores could not have occurred by chance. It can therefore be concluded that there is a relation between teenage pregnancy and the various forms of challenges. This means that teenage mothers face health, social economical and educational challenges.

The study result is corroborated by Dryburgh (2012) that many teenagers who are parents or are pregnant experience issues of parenthood. Whether it is emotional, social, or physical, all teenage mothers go through that. Some of the problems are based on strict welfare requirements, lower education attainment, poor school experience, and false hope and expectations. Dryburgh adds that most often sources of income become a major problem for teenage nursing mothers because their husbands who are responsible for the pregnancies do not have any sustainable jobs to keep. For most teenagers finding work to benefit from are limit and their state of health and capacity to work.

Martin et al (2006) indicates that there are many effects teenage pregnancy may have on a girl; social isolation is the first thing she encounters as soon as a teenager gets pregnant because of the traditional and religious settings of the people. Because the society frowns on teenage pregnancy and considers it as an abomination, the teen mother lacks the courage to face society and at times becomes afraid of her own parents and friends. At a point in time, Martin et al. stresses, friends and colleagues are warned not to associate or be seen around her; for she had been cursed by the gods of the land. She then becomes a topic of discussion wherever people are gathered in the community.

Odei (2007) adds that teenage pregnancy can also interrupt a girl's social and economic advancement, although not officially required to withdraw from school. Most pregnant girls do voluntarily withdraw from school for fear of victimization, stigmatization, financial, health and social constraint. Odei adds that even if they are able to go to school later, at least there is temporal halt in





their academic pursuit which discourage their interest in continuing. Career opportunities are then cut off, thus exposing them to economic constraint.

Question: Is there any relation between Teenage Pregnancy and Educational Challenges faced by Pregnant Teenagers?

This looked at the educational challenges facing teenage mothers and also if there possibly is an association between teenage pregnancy and educational challenges faced by pregnant teenagers. It was hypothesized that;

H₀: Teenage Pregnancy is independent of educational challenges.

H': Teenage Pregnancy is not independent of educational challenges.

Find the summaries in Tables 3 and 4 respectively.

Table shows the educational perceptions, orientations and experiences teenage mothers go through once they are pregnant. Twenty percent of the responses strongly agreed that they left school because of the pregnancy whiles 51% also agreed with the preposition. Twenty-nine percent however, disagreed that they left school because they were pregnant.

Moreso, a total of 75 responses stated that they will not be admitted in school because they are pregnant. The remaining 25% however disagreed with them. That, parents will not send them to school and also that friends will make fun of and ridicule them received the greatest number of responses of agreement of 87% (n = 87) and 86% (n = 86) respectively.

Table 3: Educational Challenges facing Teenage Mothers

	Strongly agree		Agree		Agree	Disagree
Challenges	No.	%	No.	%	No.	%
Left school because of pregnancy	20	20	51	51	29	29
	29	29	46	46	25	25
	33	33	54	54	13	13
	46	46	40	40	14	14
	24	24	55	55	21	21

Educational challenges could be a mere perception or belief they hold and therefore look up rather to the educational authorities for redress. For instance, the Ghana Education Service's policy clearly states that no child should be sent out of school because of pregnancy. But most teenage mothers hold the perception that they would not be accommodated in the schools. However, parents' influence, friends' fun making and personal decisions are the real issues that confront them. These experiences inform the pregnant teenagers to eventually abandon school.

Table 6 shows that the Chi-square value is 25.7163 and p is 0.0012 with 8 degrees of freedom. Summarily (X^2 [100] = 25.7163, p < .05) is a statistically significant result. The null hypothesis can thus not be accepted. The variability of scores could not have occurred by chance. This indicates that there is a significant relationship or association between teenage pregnancy and educational challenges. This reveals that teenage pregnancy victims face challenges in education which prevents them from accessing quality education in their state. The major challenge is their parents' inability to send them to school and the situation of being ridiculed and made fun of by their friends and close associates.





Statistics	N	df	X2	Р
Chi-square	100	8	25.7163	0.0012
Likelihood Ratio Chi-square	100	8	25.4519	0.0012
Contingency Coefficient			0.2212	

p < .05 s = significant

Although not officially required to withdraw from school, Odei (2007) stated in agreement with the finding of the study that most pregnant girls do voluntarily withdraw from school for fear of victimization, stigmatization and social constraint. Odei adds that career opportunities are then cut off, thus exposing them to economic constraint. The school authorities may expel them from school thus ending their education at an early age, even before they have had the opportunity to develop meaningful life skills. Expelling these young women from school due to pregnancy reinforces a cycle of dependency and poverty for women which contributes to an over burden public welfare system, Odei concluded. Locoh (2000) reinforces this point by indicating that challenges in education lead to depression and a high poverty rate.

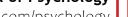
The inhabitants of Manya Krobo are rural settlers who are already struggling with the acquisition of formal education for their wards. Only a few of the young girls attend school; they assist their mothers daily in selling or farming. They also hold the misconception that school authorities, heads and teachers will not allow them into school which clearly goes against education policies. The few who are able to return to school find it difficult to cope and exonerate themselves from the stigma. They return poor grades as a result and finally lose interest in education.

Discussion

Teenagers are not supposed to be pregnant because of their age; unfortunately, many women between 13-17 years get pregnant every year. The revelation that the highest rate of teenage pregnancy in the world is in Sub-Saharan Africa, where women tend to marry at an early age, is a disturbing spectacle. In Niger for example, 87% of women surveyed were married and 53% had given birth to a child before the age of 18 years. This puts a lot of strain on the economies in terms of the distribution of resources. Teenage pregnancies have become a public health issue because of their observed negative effects on prenatal outcomes and long-term morbidity. The association between young maternal age and long-term morbidity is influenced by the high prevalence of poverty, low level of education, and single marital status among teenage mothers. Eating unhealthy foods, smoking drinking alcohol and taking drugs can increase the risk that a baby will be born with health problems, such as low birth weight. The study revealed that teenage pregnant girls are faced with serious challenges of health, education, social and economic issues. Further, it was evident that educational challenges most faced by pregnant teenagers are the parents' inability to send the wards to school, and the mockery, ridicule and fun perpetrated by the friends of the teenagers at school.

Conclusion

Based on the findings of the research, it was concluded that teenage pregnancy is a serious public health issue that has observable negative health, educational and socio-economic effects on the pregnant girls and the society as a whole. These revelations have refuted the hypotheses posited





Website: https://royalliteglobal.com/psychology

and are found to have diverse concerns. This has relegated to the background the concerns of whether there was any relation teenage pregnancy and the challenges faced by teenage mothers, and between the effects of teenage pregnancy and socio-economic development of the society. This has led to the belief that strong relations exist between teenage pregnancy and health, educational and socio-economic challenges faced by teenage girls at Manya Krobo. These have implications for the prioritization of proper child upbringing and the provision of ward's needs, coupled with counseling to forestall any wayward behaviour, leading to unwanted pregnancies during the teenage stage of life, in other communities.

Recommendations

The study recommends that the Ministry of Health in collaboration with the Planned Parenthood Association of Ghana (PPAG) and National Commission for Civic Education (NCCE) should carry out educational programmes in communities to educate the youth on the challenges and dangers of teenage pregnancy and its effect on the society. This could be done through dawn broadcasts, documentaries, drama and role play, advertisements on television, and mobile van film shows. Lorry parks, community centres, schools and playgrounds could be targeted. Also, the Universities and nursing training institutions should make their programmes accessible to a wide range of students so that enough health personnel could be trained to mann the health institutions. They will be able to deliver sustainable health care to the inhabitants to forestall the complications of pregnancy and child birth.



Hybrid Psychology

Website: https://royalliteglobal.com/psychology

References

- American College of Obstetricians and Gynecologist. (2007). Especially for teens: Having a baby. *Patient Education Pamphlet*.
- Breakwell, G. M., Hammond, S., Fife-Schaw, C., & Smith, J. A. (2006). *Research methods in Psychology* (3rd ed.). London: Sages Publications Ltd.
- Centre for Disease Control and Prevention. (2007). *STD surveillance*. An investigative report Submitted to the General Assembly, CDC.
- Dryburgh, H. (2012). Teenage pregnancy. Health Reports, 12(1), 82-90.
- Effects of Teenage Pregnancy. (2009). Retrieved from ischoolsmcgrominez.wordpress.com
- Fink, A. (2001). How to sample in survey. California: Sage Publication Inc.
- Fraenkel, J. R., & Wallen, N. E. (2000). How to design and evaluate research in education (2nd ed). Boston: McGraw Hill Inc.
- Ghana News Agency. (2009). Western Region has highest rate of teenage pregnancy. A paper presented at the 19th Annual National Conference of the public Health Nurses Group (PUBHENG) held at Takoradi
- Gibbah, G. B. (2009). 784 teenagers impregnated within 18 months. The Ghanaian Time, p. 1.
- Gneorgueira, R. V., Carter, R. L., Ariet, M., Roth, J., Mahan, C. S. & Resnick, M. B. (2001). Effect of teenage pregnancy on educational disabilities in kindergarten. *American Journal of Epidemiology,* 154 (3), 212-220.
- Guttmacher Institute (2006). *US teen pregnancies, births, and abortion*. Retrieved May 11, 2012, from www.guttmacher.org/pubs/USTPtrends.pdf
- Masahudu, A. K. (2009). Teenage pregnancy: *The burden lies on Ghanaian teenagers*. Retrieved May, 6, 2009, from http://www.ghanadot
- Mathew, M. S., & MacDorman, M. F. (2005). Infant mortality statistics from the 2005 period link data set. *National Vital Statistics Reports*, 57(12).
- McAnrney, E. (1978). *Management of teenage pregnancy in three different health care settings*. New York: National Institute of Health
- National Campaign to prevent teen pregnancy, (2009). Why it matters. Retrieved December 1, 2009, from http/www.findarticles.com.
- Odei, E. A. (2007). *Teenage pregnancy and development*. Retrieved May 6, 2009, from http://www.ghana.com