



Teenage Pregnancy: Family and Social Characteristics and Risk Factors in Etinan, Sub-urban Area of Southern Nigeria

Udoh SB,¹ Iyanam VE,¹ Uche NN,² Udonwa NE.¹

¹Department of Family Medicine, Faculty of Clinical Sciences, University of UYO, Nigeria

²Department of Family Medicine, University of Uyo Teaching Hospital, UYO, Nigeria

Corresponding Author: Dr. Victory Iyanam, Department of Family Medicine, UNIUYO, Nigeria

Type of Publication: Original Research Paper

Conflicts of Interest: Nil

Abstract

Background: Teenage pregnancy constitutes a menace and threat to well-being and all aspects of existence of both the pregnant teenager and her unborn fetus. Yet its prevalence seems not to be decreasing in most settings especially the least developed countries.

Objective: The objective of this study was to determine the prevalence of teenage pregnancy among the ante-natal attendees of a secondary healthcare facility in Etinan, Southern Nigeria, identify the risk factors, describe the socio-demographic and family characteristics of the pregnant teenagers.

Method: This was a cross-sectional descriptive study involving 161 pregnant women who attended the ante-natal clinic of General Hospital, Etinan, sub-urban area of Akwa Ibom State, Southern Nigeria, between April and August 2018, recruited through non-probability (consecutive) sampling. A pretested semi-structured interviewer administered questionnaire was used to obtain data on socio-demographic and family characteristics, and obstetric and gynaecological profile of the respondents.

Results: Out of 161 pregnant women who attended the clinic during the study period, 73(45.34%) were teenagers (<20 years). Their ages ranged from 13-19 years with an

average age of 15.73± 1.73 years. Results obtained showed that 50.68% of the teenage mothers were younger teens (13-15 years), most of them, 69.86% and 63.01%, lived in rural areas and were in school respectively when the pregnancy occurred. Also 57.55% admitted to come from poor families while 57.38% complained that their fathers had no time for them. Most of the respondents, 84.93% and 82.19%, had menarche and coitarche before 13 years and 15 years respectively. Almost half of them, 49.31%, had friends who were pregnant before they too became pregnant while greater percentage of the pregnant teenagers, 79.45% and 61.64% had not used contraceptives and had not been taught sex education, respectively.

Conclusion: The study has shown an unacceptably high prevalence of teenage pregnancy among the ante-natal attendees of General Hospital, Etinan. This portends a threat to the realization of full potentials of the affected teenagers and their babies. The need therefore to work on the identified modifiable risk factors including sex education, age at coitarche, access to contraceptives, neutralizing negative peer influence and improved socioeconomic factors as panacea for curbing this menace is recommended.

Keywords: Teenage pregnancy, family and social characteristics, Southern Nigeria.

Introduction: The American Pregnancy Association defines teenage pregnancy as a pregnancy that occurs in a female under the age of 20 years.¹ It is also variously termed adolescent pregnancy and teenage motherhood.²⁻⁶ Teenage pregnancy is a serious public health hazard with far-reaching negative implications on the health and overall well-being of the teen mother and her baby.⁷⁻¹⁰ Studies have shown that teenage pregnancy is one of the preventable and neglected causes of menace that has wrecked havoc on the potentials of teenage girls in the populace globally, leading to morbidity and mortality in no small measure among the teen mothers and their babies.^{8, 10-14} Being a reproductive issue, teenage pregnancy constitutes a grave burden on the affected teenager, the family and the society at large, with an avalanche of medical, socio-economic and psychological sequelae. It has severally been found that complications such as anemia in pregnancy, spontaneous abortion, preterm labour and delivery, preeclampsia, antepartum haemorrhage, fetopelvic disproportion, obstructed labour, high operative delivery rate, genital fistula, puerperal endometritis and systemic infections are commoner among teenage mothers than adult pregnant women^{11, 13-15} Moreover, anxiety disorder, depression, attempted suicide, inadequate knowledge of baby care with resultant neglect of babies, exhaustion, financial burden, dropping out of school with non-progression to higher education, early marriage with tendency to be pregnant again is common among teenage mothers.^{9,11,16} On the other hand, according to CDC, babies born to teenage mothers are prone to underweight, weaker intellectual development, infant mortality, behavioural problems, chronic medical problems, risk of incarceration as a teen or young adult with tendency to drop out of

school and become a parent at a young age.¹² In a study on teenage pregnancy and education in Nigeria, it was observed that teenage pregnancy is a two-directional pitfall such that teenagers who become pregnant are likely to drop out of school and teenagers who drop out of school are likely to be pregnant,¹⁷ leading to a cycle of frustration in the affected teenager, her baby and the family.

With the vast population of adolescents across the world, teenage pregnancy is a global problem with increasing prevalence that cuts across countries and regions.^{17,18} The WHO documents that even though global adolescent birth rate declined from 65 births per 1000 women in 1990 to 47 births per 1000 women in 2015, an estimated 21 million girls aged 15-19 years and 2 million girls less than 15 years became pregnant in developing world.¹¹ Rates of teenage pregnancy is as high as 25/1000 in Europe, 83.3/1000 in Bulgaria, 83.6/1000 in USA, 107.7/1000 in Russia while the sub-Saharan Africa has the highest prevalence rate of 143/1000 live birth.¹⁹ According to the Nigeria Demographic Health Survey (NDHS), 23% of adolescent girls 15-19 years have begun child bearing, of which 17% and 5% had had their first and second child already respectively. Regionally, the north-west, north-east, north-central, south-south, south-east and south-west Nigeria have prevalence rates of 36%, 32%, 19%, 12%, 8% and 8% respectively.^{15,20-22} Teenage pregnancy has been found to be multifaceted menace with interconnected risk factors bothering on the teenager, the family and the society at large. The risk factors include low socio-economic background of parents, illiteracy of parents, absent parental care, peer pressure, media influence, substance abuse among teenagers, childhood environment, age of sexual debut, ignorance on sex-related issues, religious and cultural factors, and glamorization of pregnancy.^{1,8,10,23,26} Almost all the risk factors are

modifiable and preventable, thereby posing a challenge on stakeholders on teenage care and upbringing to make conscious efforts at preventing the menace of teenage pregnancy thereby allowing teenage girls to realize their potentials.

The study therefore was an attempt at identifying cases of teenage pregnancy, family and social characteristics as well as obstetric and gynaecological profile among the respondents of a general hospital in southern Nigeria.

Materials and Methods

Study Area: This was a facility based cross-sectional descriptive study that was done at the ante-natal clinic of General Hospital, Etinan, Akwa Ibom State, Southern Nigeria between April and August 2018. General Hospital Etinan was established in 1927 by the medical mission of Qua Iboe Church but was later taken over and run by the Akwa Ibom State Hospital Management Board. It is a secondary health care facility with standard ante-natal clinic that runs from Mondays to Fridays, with well trained nurses supervised by Medical Officers.

Sample Selection: A total of 161 pregnant women who attended the ante-natal clinic of the facility during the study period were recruited using the formula.²⁷

$$n = \frac{z^2 p(1-p)}{m^2}$$

Where:

z = Confidence level at 95% (standard value of 1.96%), at
m = 5% acceptable margin of error (standard value 0.05)

p = estimated prevalence of teenage pregnancy in South-South

Nigeria²⁰ = 12%. Substituting the values in the formula gives 161% (to the nearest 10). A non-probability (consecutive) sampling technique was used to recruit the pregnant women. The inclusion criteria include all consenting pregnant women seen at the antenatal clinic of the hospital during the period of the study while the

exclusion criteria were subjects who did not consent as well as those who were too ill or in onset of labour.

Data Collection

A pretested semi-structured questionnaire was used to collect data from the respondents by the author and trained assistants after due explanation of the purpose of the study, assurance of confidentiality of information, and verbal consent obtained from them. They were given numbers to avoid duplication. Pregnant women with no formal education were assisted with local dialect by the trained assistants. Data contained in the questionnaire include socio-demographic and family characteristics as well as obstetric and gynaecological profile of the respondents.

Data Analysis: Data obtained from the study were analysed using the statistical package for social sciences (SPSS) version 22.0. The percentages of independent and primary outcome variables were determined. Tables were used to show data distribution.

Ethical Clearance and Consent:

Approval for the study was obtained from the Health Research and Ethical Committee of Akwa Ibom State Ministry of Health and the administrative head of general Hospital, Etinan. Verbal consent was obtained from the respondents before administration of the questionnaire.

Results: A total of 161 pregnant women who were recruited into the study fully participated, thereby giving 100% response rate. The results obtained are presented below:

Table 1: Prevalence of teenage pregnancy among the respondents.

Characteristic	Frequency (n=161)	Percentage (%)
Age (years)		
< 20	73	45.34
≥20	88	54.66

Table 1 shows the prevalence of teenage pregnancy at the facility during the period of the study. Out of 161 pregnant women who attended the antenatal clinic during the period, 73 of them representing 45.34% were teenagers (< 20 years).

Table 2: Sociodemographic characteristics of the pregnant teenagers.

Characteristics	Frequency (n=73)	Percentage (%)
Age (years)		
13-15	37	45.68
16-19	36	49.32
Residence:		
Rural	51	69.86
Urban	22	30.14
Educational Level:		
No formal education	2	2.74
Primary education	30	41.10
Secondary education	41	56.16
Occupation When the Pregnancy occurred:		
Schooling	46	63.01
Trading	12	16.44
Apprenticeship	9	12.33
Civil Servant	3	4.11
Not Occupied	3	4.11
Currently Married:		
Yes	6	8.22
No	67	91.78
Parity:		
0	52	71.23
1	16	21.92
≥2	5	6.85

Table 2 summaries the Sociodemographic characteristics of the pregnant teenagers. Their ages range from 13-19 years with mean and standard deviation of 15.73± 1.73 years. Most of the teenagers 37(50.68%) were younger teens (13-15 years). Majority of them, 51(69.86%) lived in the rural areas. More than half of the respondents, 41(56.16%) had secondary education. Greater percentage of the teens, 46(63.08%) were in school when they became pregnant. Almost all the teenagers, 67(91.78%) were single while greater percentage, 52(71.23%) were para o.

Table 3: Family Characteristics of the pregnant teenagers.

Characteristics	Frequency (n=73)	Percentage (%)
Father's Educational Level (n=66)*		
Primary	29	43.94
Secondary	31	46.97
Tertiary	6	9.09
Father's Occupation (n=66)*		
Unemployed	10	15.15
Civil/Public Servant	13	19.70
Trading	36	54.54
Artisans	7	10.61
Mother's educational level (n=70)*		
No formal	3	4.29
Primary	46	65.71
Secondary	18	25.71
Tertiary	3	4.29
Type of family (n=73):		
Monogamous	57	28.08
Polygamous	16	21.92
Perceived economic status of the family (n=73):		
Poor	42	57.53
Rich	31	42.47

Table 3 contd: Family characteristics of the pregnant teenagers.

Characteristics	Frequency (n=73)	Percentage (%)
Parents' Relationship:		
Married	43	58.90
Separated	15	20.55
Widowed	8	10.96
Divorced	7	9.59
Parents have time for the Respondents Fathers (n=66)*		
Yes	28	42.42
No	38	57.58
Mother (n=70)**		
Yes	55	78.57
No	15	21.43
Domestic Violence in the family (n=73):		
Yes	17	23.29
No	56	76.71
Substance abuse among parents (n=73):		
Yes	10	13.70
No	63	86.30

Table 4: Obstetric and gynecological profile of the respondents

Characteristic	Frequency (n=161)	Percentage (%)	Age of menarche (years):
< 13	62	84.43	
≥ 13	11	15.07	
Age at sexual debut [(coitarche) (Years):			
< 15	60	82.19	
≥ 15	13	17.81	
History of previous abortion:			
Yes	13	17.81	
No	60	82.19	
Ever used contraceptives			
Yes	15	20.55	
No	58	79.45	
Ever been taught sex education (Home or school):			
Yes	28	38.36	
No	45	61.64	
Had friends who were pregnant before your pregnancy:			
Yes	36	49.31	
No	37	50.69	
Substance abuse before Pregnancy:			
Yes	7	9.59	
No	66	90.44	

Table 4 summarises the obstetric and gynaecological profile of the pregnant teens. Most of the teenagers, 84.43% and 82.19%, attained menarche and had sexual debut (coitarche) before 13 years and 15 years respectively. Majority of the adolescents, 79.45%, had not used modern contraceptives while greater percentage of them, 61.64%, had not been taught sex education either at home or school. Almost half of the teenagers, 49.31%, had friends who were pregnant before they too became pregnant.

Discussion

The study has shown a high prevalence rate (45.34%) of teenage pregnancy at General Hospital, Etinan, a typical resource-poor setting. This is however lower than the almost 50% rate obtained by Nwosu, et al in Abia State, South East Nigeria,¹⁴ but higher than findings by Emem, et al in UUTH, Uyo,⁶ Okuyelu et al in western Nigeria,¹⁹ Envaludu, et al, Plateau State, North central Nigeria,²³ and the Nigeria national prevalence.²⁰ The higher rate in this study could be explained on the basis of the study location which was predominantly sub-urban/rural setting.

On sociodemographic characteristic, the study has shown that most of the teenagers were lower teens (13-15 years), lived in rural areas, had secondary education, were in

school when they became pregnant, were single and para zero. These findings are similar to findings in most studies on teenage pregnancy across the world,^{14,25,26,28} a further confirmation that teenage pregnancy is associated with low socioeconomic background. Also a perusal into the family characteristics of the respondents in the study revealed that almost all the parents had lower levels of education (Secondary education and below) while greater percentage of the fathers had low paying jobs (artisans, traders and no employment). Furthermore, while significant percentage of the parents were not together and most fathers had no time for the teenagers, most of the teenagers came from poor families. These findings are all in agreement with findings from other studies that teenage pregnancy is associated with parental low educational background, poverty, absent parental care, family dysfunction and other factors that distort family dynamics.^{8,23,29,32} The obstetric and gynecological profile of the respondents in the study shows that most of them attained menarche before 13 years (non-modifiable risk factor), had coitarche before 15 years, had not used contraceptives, had not been taught sex education either at home or school (modifiable risk factors). These findings agree with findings in several other studies^{1,5,7,9} Even though the WHO recognizes the sexual right of adolescents,³³⁻³⁵ failure to guide teenagers in sexual issues, both at the family and societal levels, is a pointer to a weak family and societal settings and moral structure. Of special importance is the realization that most of the teenagers in the study had no access to modern contraceptives. If adolescents have sexual right, then they should be given access to contraceptive counselling and products, so as to avert unwanted pregnancy among the sexually active ones. Again that most respondents had not been taught sex education both at home and schools is unacceptable. Studies have shown that, if initiated early at

home, school, community and the media, with topics such as sexual intercourse, reproduction, puberty, dating and romance, child planning, birth control, sexual orientation, sexually transferred infection, gender identity, abstinence, how to use condom, sexuality thought life, gender role identity and sexuality and media,³⁶⁻³⁸ sex education could go a long way in addressing sexual problems among teenagers, thereby advertising unwanted pregnancy. This is therefore a call on policy makers to include sex education in the curriculum of Universal Basic Education (UBE). Finally almost half of the pregnant teens in the study had friends who were pregnant before they, too, became pregnant. Peer influence and glamorization of pregnancy constitute serious risk factors in adolescent pregnancy. It is the responsibility of parents and care givers to monitor teenagers, know who their friends are so as to neutralize, as much as possible, negative influence from their peers.

Conclusion

The study has identified high prevalence of teenage pregnancy among the ante-natal attendees of General Hospital, Etinan. This portends a threat to the realization of potentials of the affected teenagers and their babies. The need therefore to work on the identified modifiable risk factors including sex education, age at coitarche, access to contraceptives, increased time spent with children by the parents, neutralizing peer influence and improved socioeconomic factors as panacea to curbing this menace, is recommended.

Acknowledgement: We hereby acknowledge and commend the cooperation given to us by the management of General Hospital, Etinan in general and the staff of maternity unit of the hospital in particular, towards the success of this work.

Conflict of interest: We declare that we do not have conflict of interest in the study.

Funding

We have received no external financial assistant for the study.

References

1. American pregnancy Association. Teenage pregnancy. available at: http://www.americanpregnancy.org/unplanned_pregnancy/teenage_pregnancy. Accessed on 5/11/2018
2. Maduforo AN, Oluwatoyin O. Prevalence of Adolescent Pregnancy in Gange Local Government Area, Adamawa State, Nigeria. *JORIND* 2011;9(1):123-134.
3. Sedgh G, Finer LB, Bankole A, Eilers MA, Singh S. Adolescent Pregnancy, birth and abortion rates across countries; levels and trends. *J Adoles Health* 2015;56(2):223-230.
4. Keller ET, Hilton DB, Twumasi-Ankrah K. Teenage Pregnancy and motherhood in a Ghanaian Community. *J Soc Devt Afr* 1999; 14(1):69-84.
5. UNFPA. *Girlhood not motherhood: Preventing adolescent pregnancy*. New York, UNFPA, 2015.
6. Emem BA, Abasiattai AM, Abasiubong F. Outcome of teenage pregnant mother in Uyo, Nigeria. *Trop J Med Res*. 2006; 10(1):20-23.
7. Alasi OT, Oni IO. Teenage pregnancy in Nigeria: Causes, effect and control. *Int J Acad Res Bus Soc Scs* 2017; 7(2): 17-32.
8. Ezegivi HU, Ikeako LC, Ogbefi F. Obstetric Outcome of Teenage Pregnancy at a tertiary hospital in Enugu, Nigeria. *Niger J Clin Pract* 2012; 15: 147-150.
9. Bodeeb J. Effect of Teenage pregnancy. *LIVESTRONG.COM*.13/6/2017
10. Aderibigbe SA, Araoye MO, Akande TM, Babatunde O. Teenage pregnancy and prevalence

- of abortion among in-school adolescents in north central Nigeria. *Asian Soc Sci J* 2010; 7(1): 122-126.
11. WHO. Adolescent pregnancy updated January 2018 Available at: [www.who.int > mediacentral > factsheets](http://www.who.int/mediacentral/factsheets)
12. Lachner D. Teen Mothers and infant mortality. *LIVESTRONG.COM*, 13/6/2017.
13. Ayuba II, Gani O. Outcome of teenage pregnancy in the Niger Delta of Nigeria. *Ethiop J Health Sci* 2012; 22(1): 45-50.
14. Nwosu UM. Contemporary factors of teenage pregnancy in rural communities of Abia State, Nigeria. *Int J Comm Med Pub Health* 2017; 4(2): 585-592.
15. Kukpoluji JA, Njoku EO, Oyinloye BO. Factors associated with teenage pregnancy and child bearing in Nigeria. Available at: <http://uap2015.Princeton.edu/papers/151306>. Accessed on 5/9/2018.
16. Malisa JN. Factors contributing to teenage pregnancy in Tunduru district council, Tanzania. Available at: <http://schorlar.mzumbe.ac.tz/Judith%20nsimbo%20Melisa> Accessed on 9/9/2018.
17. Ekefre EN, Ekanem SA, Essien OE. Teenage Pregnancy and education in Nigeria: A philosophical management strategy. *J Edu Soc Res* 2014; 4(3):41-47.
18. WHO, Adolescent pregnancy, February 23, 2018 Available at: www.who.int/news_room/factsheets/detail/adolescent-pregnancy. Accessed on 12/10/2018/
19. Okuyelu OA, Ayaji IO, Okedare A O. Teenage pregnancy and family characteristics as seen among teenagers presenting at two hospitals in Ibadan, Nigeria. *Niger J Fam Pract* 2017; 8(4): 51-66.
20. Nigerian Demographer Health Survey (NDHS). The DHS Programme – Teenage pregnancy in Nigeria: Fact and Truth. 2014.
21. Ezeogu AU. Nigeria: Teenage pregnancy prevention. *allAfrica.com*.
22. Oyedele D. Sex education. Face the truth. e-paper 2017; 8(2017);29.
23. Envuladu EA, Agbo HA, Olize VA, Zoakah AI. Determinants of Outcome of teenage pregnancy in rural community in Plateau State, Nigeria. *Subsahara Afr J Med* 2014; 1:48-52.
24. Amoran OE. A comparative analysis of predictors of teenage pregnancy and its prevention in a rural town in Western Nigeria. *Int J Equity Health* 2012; 11:37.
25. Enyene I, Jeremiah I, Atombosoba E. Teenage pregnancy and obstetric outcome: A comparative study in urban Nigeria. *NIOG* 2016; 21(1); 37-43.
26. Eyo UE, Iko NF, Matthew EC. Factors that contribute to teenage pregnancy among girls in Nsit Ibom LGA, Akwa Ibom State, Nigeria. *J Health Med Nursing* 2017;35: 143-147.
27. Naing I, Winn T, Rusli BN. Practical issues in calculating the sample size for prevalence studies. *Achieves of Orofacial Services* 2006; 1:9-14.
28. Ajala AO. Factors associated with teenage pregnancy and fertility in Nigeria. *J Econ Sust Devt* 2014; 5(2): 52-61.
29. Tamkins T. Teenage Pregnancy risk rises with childhood exposure to family strife. *Persp Sexual Reprod Health* 2004; 36(2):88-89.
30. Sik J, Romero D. The role of parents and families in teen pregnancy prevention: An analysis of

- programs and policies. *J Fam Issues* 2013; 35(10); 1339-1362.
31. Orluwene GW, Ekechuwku R, Ojiugo AB. Impact of family dysfunction on indiscriminate sexual behaviour of adolescent students of unity schools in South-South Zone Nigeria. *Eur J Res Reflect Edu Scs* 2015; 3(3):55-62.
32. Hills SD, Anda RF, Marks JS. The protective effect of family strengths in childhood against adolescent pregnancy and its long-term psychological consequences. *The Permanente J* 2010; 14(3): 18-27.
33. Adolescent sexuality. Available at: <https://www.humanium.org/en/adolescents-sexuality>. Accessed on 12/11/2018.
34. WHO. Adolescent sexual and reproductive health. Available at <http://ww.who.int>. Accessed on 12/11/2018.
35. Santhya KG, Jejeabhoy SJ. Sexual and reproductive health and rights of adolescent girls: evidence from low and middle income countries. *Glob Pub Health* 2015; 10(2): 189-221.
36. Sohool G. Should sex education be taught in Nigerian schools? Available at: envol.green-springschool.com>sex-education. Accessed on 28/7/2018.
37. Brooks B. Sex education in secondary schools. *Health Edu Res* 2000; 15(4): 506-508.
38. Orji EO, Esimai OA. Introduction of sex education into Nigeria schools; the parents', teachers' and students' perspective. *J Obst Gynaecol* 2003; 23(2) 180-188