Teenage Pregnancy: Prevalence, Pattern and Predisposing Factors in a Tertiary Hospital, Southern Nigeria

Michael Ifeanyi Onwubuariri¹ and Terhemen Kasso²*

¹Department of Obstetrics and Gynaecology, University of Port Harcourt, Teaching Hospital, Nigeria.  
²Department of Obstetrics and Gynaecology, University of Port Harcourt, Nigeria.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Background: Any pregnancy occurring in a young woman who has not reached her 20th birthday is considered as a teenage pregnancy. Globally, approximately a tenth of all births are to women younger than 20 years old and more than 90% of such births occur in developing countries. Socioeconomic deprivation, low contraceptive usage and early marriage are common contributing factors.

Objective: This study aimed to determine the prevalence, pattern and predisposing factors to teenage pregnancy at University of Port Harcourt Teaching Hospital (UPTH), Port Harcourt, Nigeria.

Methodology: This was a retrospective cross-sectional study of 198 cases of teenage pregnancies managed at University of Port-Harcourt Teaching Hospital (UPTH), from 1st January 2008 to 31st December 2015.

Results: The teenage pregnancy prevalence rate was 15 per 1,000 deliveries (1.5%). Low level of education (below secondary) was seen in 81.3% of the women. A socio-cultural factor like early
1. INTRODUCTION

Worldwide, about 1 in 6 people are adolescents aged 10 to 19 years old [1]. Any pregnancy occurring in a young woman who has not reached her 20th birthday is considered as a teenage pregnancy [2]. Adolescent pregnancy is also defined as the occurrence of pregnancy in girls aged 10–19. Approximately a tenth of all births are to women younger than 20 years old, and more than 90% of such births occur in developing countries [1]. The W.H.O’s contribution to meet the Millenium Development Goals (MDGs) gave priority to the issues pertaining to the management of adolescent pregnancy [3].

The percentage of childbearing adolescent women highly varies by region depending on cultural, religious, political, economic and other factors [4]. Every year, an estimated 21 million girls aged 15 to 19 years and 2 million girls aged below 15 years become pregnant in developing regions. Approximately 16 million girls aged 15 to 19 years and 2.5 million girls under age 16 years give birth in developing regions [5]. The global adolescent birth rate has declined from 65 births per 1000 women in 1990 to 47 births per 1000 women in 2015 [6]. Despite this overall progress, because the global population of adolescents continues to grow, projections indicate the number of adolescent pregnancies will increase globally by 2030, with the greatest proportional increases in West and Central Africa and Eastern and Southern Africa [7].

The emergence of this adolescent problem has been attributed to various factors including early menarche, early marriage, social permissiveness (favoring early exposure to casual sexual activity), unmet needs for contraceptives, maternal deprivation and pre-existing psychosocial problems in the family. Overpowering effect of the partners, inadequate parental support, single-parenting factors, lack of education, poor socioeconomic background, unemployment and general non-functioning family unit could also contribute [8-10]. In many developing countries, lack of resources makes contraception and reproductive advice inaccessible and this situation may be exacerbated by religious beliefs that disapprove of artificial birth control methods. As a result, many adolescents both married and unmarried would find it difficult to locate or even seek help about sexual matters. Furthermore, there may be few facilities offering such support, particularly in remote rural areas where the poorest often lack the resources to travel to these facilities and any fees charged for the services on offer would push them even further out of reach.

The aim of the study was to determine the prevalence, pattern and predisposing factors to teenage pregnancies at University of Port Harcourt Teaching Hospital.

2. METHODOLOGY

This was a retrospective study of all cases of teenage pregnancy (198 cases) managed at University of Port-Harcourt Teaching Hospital (UPTH), from 1st January 2008 to 31st December 2015. It included those who had antenatal care (booked) and those who did not have antenatal care (unbooked) and also those with early pregnancy losses (consisting of miscarriages, ectopic pregnancies and molar pregnancies) [11]. Data was obtained from the labour ward, gynaecology ward and also obstetrics and gynaecology theatre registers. The case files of women with teenage pregnancy managed during the period of the study were retrieved from the medical records department for analysis. Data extracted included demographic and biosocial parameters of the patients and any notable predisposing factors.

3. RESULTS

As in Fig. 1, there were a total of 16,072 deliveries with 195 teenage births (booked and unbooked) within the study period. During this same period, early pregnancy losses totaled to
743, of which 58 were amongst teenagers. Therefore, the overall teenage pregnancy prevalence rate was 1.5%. Only 198 of the 253 case files were available for retrieval from the medical records department, giving a retrieval rate of 78.26%.

The peak age of incidence was 17-19 years with 85.9% of the cases, while 14.1% were aged 16 years and below. Nulliparous teenagers represented the modal parity with 84.3% as in Table 1.

The unbooked teenage mothers accounted for 15.1% of the study population. Meanwhile 58.1% of the teenage parturients were booked, as shown in Table 2.

Table 3 summarizes common predisposing factors to teenage pregnancy. The majority of patients had low level of education (below secondary) amounting to 81.3% of the women studied. Poor socioeconomic background accounted for 68.7% of the women and 44.9% of the teenagers were unemployed. Married patients made up 56.1% of the group. About 77.3% of the women attained menarche at less than 12 years. Only 26.8% of the teenage mothers had ever used any form of contraception. Teenage partners to teenage mothers were seen in 17.7% of the population, with older partners occurring in 82.3%.

| Table 1. Age and parity distribution of teenage mothers |
| --- | --- | --- |
| Variable | Frequency (Percent) |
| Age | Parity | Total |
| 14-16 | 22 (11.1) | 6 (3.0) | 28 (14.1) |
| 17-19 | 145 (73.2) | 25 (12.7) | 170 (85.9) |
| Total | 167 (84.3) | 31 (15.7) |

| Table 2. Booking status of teenage mothers |
| --- | --- | --- |
| Booking status | Frequency (Percent) |
| Total deliveries | 145 (73.2) |
| Booked | 115 (58.1) |
| Unbooked | 30 (15.1) |
| Total early pregnancy losses | 53 (26.8) |

| Table 3. Predisposing factors to teenage pregnancy |
| --- | --- | --- |
| Predisposing factor | Frequency (Percent) |
| Older partner | 163 (82.3) |
| Low level of education | 161 (81.3) |
| Early menarche | 153 (77.3) |
| Poor socioeconomic background | 136 (68.7) |
| Early marriage | 111 (56.1) |
| Unemployment | 89 (44.9) |
| Contraceptive usage | 53 (26.8) |

Fig. 1. Prevalence of teenage pregnancies

Early P.L: Early Pregnancy Losses; T.P: Total Pregnancies; Overall Teenage pregnancy prevalence = 1.5%
4. DISCUSSION

This was a retrospective cross-sectional study that determined the prevalence of teenage pregnancies in Port Harcourt, by including all teenage parturients who delivered at the study centre and teenagers who were managed for other pregnancy complications. The prevalence rate of teenage pregnancy over the study period was 15 per 1,000 deliveries, which made up 1.5% of the total pregnancies managed over this period. This showed a decline in the prevalence of teenage pregnancy from 10% in a previous Port Harcourt study [8]. However, it was similar to results from other studies outside and within Nigeria [5-7,12,13]. The decline in the prevalence of teenage pregnancy in Port-Harcourt may be attributed to a lessening of teenage pregnancies patient load at UPTH, following the emergence of other secondary and tertiary health facilities in Port-Harcourt and environs since the previous study conducted was over two decades ago. Also, improved public health awareness, contraception services and older age at marriage may have contributed to the lower prevalence recorded.

The age range with peak prevalence was 17-19 years. Those aged 16 years and below accounted for the least proportion (12.4%) of the study population, probably due to less developed secondary sexual characteristics in these younger teenagers [2]. The age distribution findings were similar in studies done in Bayelsa and Calabar [9,10], as these are Niger delta areas with similar growth patterns and sociocultural backgrounds. Most of the women studied were nulliparous as also seen in studies in southwestern Nigeria [12]. However, nulliparous older teenagers [2] were in the minority for a similar study carried out in Kano [14]. This higher prevalence of older nulliparous teenagers in our study was attributable to the fact that the religious and cultural beliefs of southern Nigeria frowns more at early marriage as compared to Northern Nigeria.

Predisposing factors to teenage pregnancy, such as early menarche, unemployment, early marriage, low level of education, single parenthood, older partner and inadequate utilization of contraceptive services were all demonstrated in this study and were in keeping with findings from similar studies in Calabar, Benin, Bayelsa and Central America [6,7,10,12,13]. The higher proportion of married teenage parturients could be attributed to respect for societal norms, as the commonest ethnic groups noted were Igbos and Ikwerre who may have an aversion for childbearing outside wedlock. This is translated to a higher proportion of booked teenage pregnant women (56.1% of the population studied), as this group of mothers usually have spousal or parental support and approval of the pregnancy [10].

The low contraceptive usage rate recorded of 26.8% was likely due to the general low level of education and awareness about contraception. High unemployment rates as well as poor socioeconomic background may have also contributed to the low uptake of contraception due to financial constraints. Majority of the partners of the teenage parturients were older working men, with teenage partners seen in only 17.7% of the teenage pregnancies. This suggests financial gains as a motive for the girls’ sexual activity and pregnancy [15,16]. Similar findings were noted in other studies in Port Harcourt, Kano and other parts of sub-saharan Africa [3,4,6,7,14-17].

5. CONCLUSION

This study noted a decline in the prevalence of teenage pregnancy. It is advocated that contraceptive awareness campaigns for teenagers, affordable and accessible family planning services, as well as promotion of moral and sex education will help curb this menace. Overall, government should enact and implement teenage-friendly policies, empower the citizenry financially and encourage the education of the girl child.

CONSENT

It is not applicable.

ETHICAL APPROVAL

This was obtained from the Research and Ethics Committee of the University of Port Harcourt Teaching Hospital.

COMPETING INTERESTS

The authors have declared that no competing interests exist.

REFERENCES

1. Kassa GM, Arowojolu AO, Odukogbe AA, Yalew AW. Prevalence and determinants


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