

Patterns of delivery assistance among adolescent mothers in Nigeria

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Introduction

Adolescent motherhood in Nigeria has been shown to be at higher risk for perinatal mortality, low birth weight, preterm delivery and stillbirths compared to older mothers (Adebowale & Akinyemi, 2016; Ibrahim & Owioye, 2012; Mairiga & Saleh, 2009; Olusanya & Ebuehi, 2012; Onoh et al., 2014). These negative pregnancy outcomes may be tied to a low level of utilisation of skilled delivery attendance among this group of mothers. Skilled delivery assistance from trained health workers is necessary to help them manage the complications that may arise during the intrapartum period (Ibrahim & Owioye, 2012; Conde-Agudelo et al., 2005; Onoh et al., 2014). However, despite their need for healthcare, adolescent mothers have the lowest utilisation of skilled birth assistance (Babalola & Fatusi, 2009; Dairo & Owoyokun, 2010; Idowu, Olowookere, Abiola, Adebowale, & Adegbenro, 2017; Ovikuomagbe, 2017). Results from the Nigeria Demographic and Health Survey conducted in 2013 show that only a quarter of adolescent mothers made use of skilled delivery assistance at their most recent delivery (NPC and ICF International, 2014).

Increasing the utilisation of skilled birth attendance is critical if Nigeria will be on track to meet the third Sustainable Goal of decreasing maternal deaths to 70 deaths per 100,000 live births by 2030, and it is only through ensuring access to skilled birth attendance for women of all ages that this would be possible. However, despite the low rates of utilisation of skilled delivery attendance among adolescent mothers in Nigeria, little focus has been given to the factors which influence poor usage among this category of mothers, and how these factors can be addressed to increase utilisation levels. Therefore, this study examines the factors that influence skilled birth attendance among adolescent mothers aged 15-19 in Nigeria. It will examine the types of birth attendants that adolescent mothers use, as well as the sociodemographic factors which are enablers and barriers to adolescent mothers' usage of skilled birth attendants. Findings from this study will be useful for developing programmes to increase the utilisation of maternal healthcare among adolescent mothers in Nigeria and beyond. Study findings will

also serve to extend the knowledge on maternal healthcare utilisation among adolescent mothers in low and middle-income countries.

Research Objectives

1. To examine the patterns of adolescent mothers' usage of delivery attendance in Nigeria.
2. To investigate the factors that determine the preferred choice of delivery attendance among adolescent mothers in Nigeria.

Methods

The study used a pooled dataset derived from combining the women's recode dataset from Demographic and Health Surveys conducted in Nigeria between 2003 and 2013, with a sample size of 2,096 adolescent mothers. Data analysis was conducted at the univariate and bivariate levels to examine the factors influencing the timing of the first antenatal care visit as well as the total number of antenatal visits among pregnant adolescents and new mothers aged 15-19. At the univariate level, simple frequencies and percentages were computed to get a picture of the characteristics of the study population, while at the bivariate level, chi square tests of association were carried out. At the multivariate level, binary and multinomial logistic regression were carried out to examine the determinants of choice of delivery attendance for adolescent mothers in Nigeria.

The dependent variable was the choice of birth attendants, whether none/relative/friend or other; traditional and skilled birth attendants, while the independent variables were age, age at first birth, education, wealth status, religion, ethnicity, marital status, sex of household head, involvement in healthcare decision-making, partner age difference, getting permission to go to health facility, getting money for treatment, distance to health facility, pregnancy intention, place and region of residence, number of antenatal care visits and timing of first ANC visit.

Results

It was discovered that older adolescent mothers are less likely to use both traditional and skilled birth attendants than younger mothers (aOR= 0.62; 0.56; $p<0.01$). Mothers who gave birth at age 16 and above were more likely to use TBAs and SBAs than mothers who gave birth at age 15 and younger and their likelihood of using SBAs was slightly higher than that of using TBAs (aOR=1.45, $p<0.05$; aOR=1.65, $p<0.01$). Mothers from the rich wealth class were more than twice more likely to use SBAs compared with mothers from the poor wealth class (aOR=2.30, $p<0.01$). Igbo mothers were less likely to use TBAs compared to Yoruba mothers (aOR=0.03,

$p < 0.05$). Mothers from female-headed households were less likely to use SBAs than mothers in male-headed households (aOR=0.38, $p < 0.01$). Girls whose partners had only primary education were more likely to use TBAs than those whose partners had no education (aOR=1.51, $p < 0.05$), and those who had partners with at least primary education had a higher likelihood of utilising skilled birth attendance than those with uneducated partners (aOR=1.81 (primary education), aOR=1.66 (secondary and higher education), $p < 0.05$). Mothers in the North East, North West, South East and South South were more likely to use TBAs than mothers in the North Central region (aOR=5.87 (NE), aOR=8.29 (NW), aOR=69.84 (SE), aOR=27.63 (SS), $p < 0.01$), while mothers in the North East and North West were less likely to use SBAs compared to mothers in the North Central region (aOR=0.46 (NE), aOR=0.48 (NW), $p < 0.01$). Adolescent mothers in the South East region were more likely to use SBAs than mothers in the North Central region (aOR=16.39, $p < 0.01$). The use of antenatal care increased the likelihood of also using skilled birth attendance, as mothers who used partial ANC were nearly six times more likely to use a skilled birth attendant at delivery, while those who used full antenatal care were more than seven times more likely to use SBA than those who did not use ANC at all (aOR=5.52 (partial ANC), aOR=7.27 (full ANC), $p < 0.01$).

Conclusion

Interventions to increase the use of skilled birth assistance among adolescent mothers in Nigeria have to put their focus on girls from low socioeconomic backgrounds as they are the ones who are least likely to use SBAs. Also, culturally sensitive approaches must be used in ensuring that girls are encouraged to use SBAs. Additionally, as it is seen that the use of traditional birth attendants is high among this group of mothers, some sort of partnership, training and technical assistance should be given to these birth attendants to ensure that they are able to provide an acceptable level of help to mothers in the intrapartum period, and also be able to recognise the danger signs and refer their patients for emergency obstetric care. Furthermore, as the study showed evidence that even the partial use of antenatal care led to an increase in skilled birth attendance utilisation, efforts must be made to educate adolescent mothers during antenatal care delivery on the necessity of delivering with the help of a skilled attendant, as well as following up on them to ensure that they actually do so.

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