CHILD DELIVERY CARE PRACTICES AMONG UNMARRIED YOUNGER ADOLESCENTS IN NIGERIA:

The Case of Akwa Ibom State

Turnwait Otu Michael

Department of Sociology, University of Ibadan, Ibadan, Nigeria

Ezebunwa E. Nwokocha

Department of Sociology, University of Ibadan, Ibadan, Nigeria;
School of Public Management, Governance and Public Policy
University of Johannesburg, South Africa

and

Damian Ukwandu

School of Public Management, Governance and Public Policy
University of Johannesburg, South Africa

ABSTRACT

Although a high premium is placed on children in Africa, child bearing is expected to occur within the context of a legitimate union. Yet, young people that become pregnant out of wedlock are assisted through the pregnancy-postnatal continuum to save their lives and their babies. This study examined the factors that influence delivery care practices for unmarried younger adolescents aged 16 and below in Nigeria. Findings show that more than half of the ever-pregnant adolescent respondents had access to traditional birth attendants, and health facilities were either not open or health providers were absent, especially at night when some women experience labour. Therefore, strengthening faith-based care and traditional midwifery is recommended in places where women have limited access to modern healthcare facilities.

Key words: Maternal morbidity and mortality, delivery care practices, unmarried young adolescents

JEL classification: D8, D91, I1, J1

1. Introduction

Most research on young people's sexuality conceives adolescents as a cohort that can hardly be categorized. Attempts to lump this segment of the population together often mask the quantum of information that is inherent in the specificity needed to drive effective policy and intervention. We disaggregated this group into younger and older adolescents in order to analyse issues of child delivery care practices, as opposed to the traditional conceptual trap that de-emphasizes the essence of particularity in analysing a complex group, which in the end yields results that reveal just a part of reality. For instance, although complications arising from childbearing among adolescents contribute largely to maternal deaths globally (WHO, United Nations Children's Fund, United Nations Population Fund, World Bank Group and the United Nations Population Division, 2015), younger adolescents are particularly more vulnerable to premature pregnancy and the dangers associated with childbirth (United Nations, Department of Economic and Social Affairs, Population Division, 2020).

Morbidity and mortality among this group result mainly from behavioral dispositions that are embedded in clandestine activities that reinforce the perceived anti-normative stance on out-of-wedlock pregnancies in some cultures on the one hand and the characteristic lack of financial capacity to meet healthcare needs on the other (WHO, 2018). Thus, birth outcomes are more problematic among adolescents aged 16 and below, with the number of deaths about four times higher than among older women (WHO, 2016; Phipps, Sowers and DeMonner, 2004).

The World Health Organization (2019) observed that childbearing among adolescents declined globally from 56 births per 1000 in year 2000 to 45 and 44 births in 2015 and 2019 respectively. Research further indicated that the declines reflect geographical disparities (Decker et al., 2017; UNFPA, 2013). In sub-Saharan Africa for instance, the situation varied across regions with some reporting moderate declines and others still experiencing increases (UNFPA, 2013). The 2018 Nigeria Demographic and Health Survey revealed that 19% of Nigerian adolescents aged 15-19 had begun childbearing, 14%

had given birth, and 4% were pregnant with their first child (NPC and ICF, 2019). Although some of these adolescents procured abortions to terminate unwanted pregnancies, this was more likely to happen among older adolescents. Younger adolescents who were either ignorant about the consequences of early childbearing or were not bold enough to approach healthcare facilities to seek abortion were more likely to carry their pregnancies to term (Nwokocha, 2010).

Like other stages of maternity, child delivery is a delicate period in the pregnancy-postnatal continuum and requires assistance by skilled personnel. However, in Nigeria, for several reasons, a good number of deliveries takes place at home or assisted by birth attendants that are relatively unskilled (Seun-Addie and Nwokocha, 2018; Adewusi and Nwokocha, 2018). Surely, adequate understanding of healthcare practices among younger adolescents during delivery is essential considering that they are less likely to seek healthcare as and when necessary, due to naivety, illiteracy, financial incapacity and adherence to harmful cultural practices which they are unlikely to interrogate considering their low level of assertiveness (Nwokocha, 2019; Pinzon and Jones, 2012). This study therefore examines the socio-cultural factors that influence delivery care practices among unmarried young adolescents in Akwa Ibom State, Nigeria, classified in the literature among the high-risk pregnancy groups.

2. Review of Literature

2.1 Global overview of pregnancy and childbirth among adolescents

The World Health Organization (2018) indicated that pregnancy and delivery among adolescents contribute largely to maternal and infant morbidity and mortality globally, and account for cycles of poverty across nations, particularly in sub-Saharan Africa. As Ganchimeg et al. (2014) observed that the risks associated with pregnancy and delivery arising from conditions such as eclampsia and other diseases are more common among adolescents aged 10-19 than women aged 20 and above. Darroch, Woog, Bankole and Ashford (2016) found that about 3.9 million unsafe abortions occur among adolescents aged 15-19 every year, with consequences including death, diseases and illness. The World Health Organization (2018) identified higher

psychological and social needs among pregnant adolescents than older women. Ganchimeg et al. (2014), in their study of pregnancy and delivery outcomes, found that children born by adolescent mothers are at higher risk of neonatal complications and pre-term delivery. They highlighted that infants born by adolescent mothers also are susceptible to lasting health challenges. According to Kozuki et al. (2013), adolescent mothers involved in repeated pregnancies have increased risk of morbidity and mortality.

A report from the WHO (2018) revealed that pregnancy and delivery among adolescents do not have negative effects only on the adolescents but also on their newborns, their families and communities. The agency noted that premarital pregnancy among adolescents exposed them to rejection and stigmatization from friends, parents and community members. The UNFPA (2013) indicated that pregnant adolescents less than 18 years of age are more likely to encounter abuses from partners in both marital and non-martial unions. The WHO (2018) noted that dropping out of school is a common consequence of adolescent pregnancy and delivery, and such adolescents are more likely not to continue their education even after delivery. As the World Bank (2017) noted, in many countries of the world, about 5 to 33 per cent of girls aged 15-24 leave school because of pregnancy-related issues.

The World Bank (2017) reported that early childbearing predisposes girls to earning low income and reduces their future earnings by 9%. The WHO (2018) asserted that early pregnancy debars adolescents' country of origin or residence from enjoying the additional annual income, economic and social contributions which the girls would have provided had they not experienced early pregnancy. A report from the United Nations Population Fund (2013) indicated that in year 2010 alone, more than 36 million women aged 20-24 years in less-developed countries had a live birth before their 18th birthday, which amounted to an estimated average of 7.8 million births annually. By implication, if the trend continued, 78 million adolescents would have had childbirth in a decade after the survey.

The UNFPA (2013) noted that such a pattern will continually lead to increases in the fertility rates of the countries involved. The projection showed that West and Central Africa may experience an increase of about 67% adolescent childbirths from 2010 to 2030. That will account for a rise from 5.4 million in 2010 to 8.9 million in 2030.

2.2 Adolescent pregnancy and delivery in Nigeria

The Nigerian population census of 2006 reported that adolescents constitute 22% of Nigeria's population. Makinwa-Adebusoye (2006) observed that adolescent childbearing is a key contributor to Nigeria's high total fertility rate (TFR) and accounts for the country's rapid population increase. The NPC and ICF International (2019) noted that overall, the fertility rate of adolescents aged 15-19 has continuously increased in Nigeria, except for 2008 when there was a slight decline. The report revealed that the fertility rate among adolescents in rural Nigeria has remained consistently high over time compared to that of their counterparts in cities.

Ajala (2014), in a study of teenage pregnancy and fertility in Nigeria, found that adolescent fertility increased in 2003 more than what it used to be in 1999 but declined in 2008. The reduction in the three periods largely occurred in urban areas. Indeed, high fertility occurs more in rural than urban areas and is associated with personal, cultural and environmental factors that expose Nigerian adolescents to early childbearing. Makinwa-Adebusoye (2006) and Osakunle and Tayo-Olajubutu (2017) highlighted that the desire for virginity among girls and cultural expectation of sex within marital union should be the key to preventing early pregnancy and motherhood among adolescents in Nigeria. As studies have consistently shown (Makinwa-Adebusoye, 2006 and Adamu, 2011), pregnancies and deliveries among adolescents have contributed largely to academic backwardness among girls in the country, leaving them without skills to earn reasonable income in the future.

Action Health Incorporated (2011) revealed that among the core northern states, there is a very high incidence of adolescent childbearing within marital unions. The survey also showed that adolescent girls in northern Nigeria married about 4 years earlier than their counterparts in southern Nigeria. The Community Based Support [CUBS] Project for Orphans and Vulnerable Children in Nigeria (2010) showed that maternal risks associated with early pregnancy and childbirth in southern Nigeria can be equated with that of southern Nigeria, though adolescent pregnancy and delivery in the northern states are more likely to occur within marital unions. Babafemi and Adeleke (2012) in their study of teenage pregnancies in Bayelsa State, Nigeria found that while the stigma initially attributed to early premarital childbearing is

gradually waning, the health consequences associated with early pregnancy and delivery remained virtually unchanged and are much more pronounced in young adolescent mothers and their children.

3. Theoretical Framework

This study was guided by the Rational Choice Theory. The perspective assumes that individuals do not act on the basis of accident, but carefully weigh the benefits and costs of an intended action before embarking on it, and especially in consideration of available resources (Ritzer 2008). The theory opines that an actor who has the privilege of choice between alternative actions, in a social context, chooses an action considered more beneficial than the other considered more costly (Nwokocha and Michael, 2015). This perspective is hinged on the assumption that pregnant young adolescents are aware of the expected healthcare practices during pregnancy, delivery and postpartum, and the consequences surrounding their choices. However, rationality itself is relative to individuals based on exposure, socioeconomic status, beliefs and practices, and times, among other factors. As a corollary, what appears rational to an actor may not appear so to another person due to variations in availability and content of information on the phenomenon (Charles, 2010).

The relevance of this theory is premised on the conception that actions are undertaken to attain goals that are consistent with actors most preferred choices (Ritzer, 2010). A young adolescent in Akwa Ibom State could choose modern or traditional healthcare or probably none of the options based on cultural beliefs and practices, family orientation and values, available information and/or resources among others that could have shaped her perception of available alternatives. By implication therefore, a young adolescent's choice facility is hinged on the context in which she operates, especially her family, considering that most times the male that is responsible for such a pregnancy will deny responsibility. We argue here that since the onus of care is usually on the family, it should be very proactive in inculcating the right values in the children to forestall behaviours that, in the future, could be financially and morally costly, not only to the family but also the community at large.

This is especially the case in Akwa Ibom State where health care services are not only paid for mainly by individuals but also where some functional healthcare facilities are far away from rural areas. The theory postulates that actors will more likely either seek orthodox medical care if the benefits outweigh the costs, or choose alternative options such as staying at home or visiting traditional birth attendants for care if the costs of accessing healthcare services in modern medical facility outweigh perceived benefits. We note however that the choice of facility is in reality not based on financial cost alone, but also other factors such as the distance to such facilities and the level of care and professionalism exhibited by healthcare providers among others.

4. Methodology

The cross-sectional *ex-post-facto* survey design was adopted. Qualitative and quantitative instruments were triangulated for the purposes of eliciting rich and complementary data. A multi-stage sampling technique was employed, beginning with the purposive selection of Akwa Ibom State based on its high ranking among areas with a high percentage of unmarried adolescent mothers (NDHS 2013). Having selected Akwa Ibom State, the second stage involved reconnaissance visits to identify specific areas of the state where the number of pregnant young adolescents or mothers was appreciably high. Consequently, Southern Iman of Etinan in Akwa Ibom State was purposively chosen. A report shows that this part of the state recorded 18 per cent prevalence of adolescents in the category being discussed, which is higher than the figures reported for other localities in the state (Akwa Ibom State Ministry of Health, 2017).

The next stage involved random selection of 20 communities in Southern Iman, and purposive administration of 562 copies of a questionnaire on ever-given-birth unmarried young adolescents, aged 16 and below. In households with more than one eligible respondent, the simple random technique was employed to select one respondent. Thirty-five in-depth interviews were conducted among unmarried young adolescents (10), skilled (5) and unskilled healthcare providers (10) and caregivers (10). Twelve focus group discussions were conducted among unmarried young adolescents (4),

community leaders (4) and community members (4), while four life histories were conducted among unmarried young adolescents.

The sample size for the study was determined using Cochran's (1977) formula:

$$n_o = \frac{Z^2 p * q}{e^2}$$

where:

n_o = the desired sample size

Z = the abscissa of the normal curve that cuts an area α at the tails (1 – α equals the required confidence level of 95% or 1.96)

e = the expected level of precision (e = 0.04)

p = the assumed population variance, or variability. Because we do not know the actual population variability, we assume maximum variability (.5), and q is 1-p

$$n_o = \frac{(1.96)^2 [.5 * (1-.5)]}{(.04)^2}$$

$$= \frac{3.842 * 0.25}{.0016} = 600.25 \text{ plus 10\% (attrition)} = 660$$

However, following questionnaire administration, only 562 copies of the questionnaire were returned and found valid for analysis. The design of each section of the questionnaire was guided by a pilot study which revealed the salient variables and values needed to comprehensively investigate issues connected with maternal healthcare practices among young adolescents. The approved questionnaires were administered by the researchers, and one trained male and four trained female field assistants under the supervision of the researchers. After being edited to minimize errors, the valid and returned questionnaires were coded for analysis using the SPSS. Qualitative data collected through IDI, FGD and life history guides recorded on tape were transcribed and analysed by both content and thematic analysis using ATLAS.ti. Interviews and discussions conducted in local languages were translated into English and back-translated to local languages by experts in

order to avoid misinterpretation and mistranslation of context and contents of messages.

To ensure the validity of study instruments, a pre-test of the instruments was carried out among a population other than the intended population of the study, but with similar attributes to ensure that they reflect the content as designed. Moreover, the study instruments were subjected to content validity assessment by experts in the field. To ensure the reliability of the study instruments, Nunnally (1978) acceptable reliability coefficients of 0.7 and above were employed. Quantitative data were analysed at univariate and bivariate levels; qualitative data were content-analysed.

Ethical approval was obtained from the University of Ibadan Social Sciences and Humanities Research Ethics Committee as indicated in number UI/SSHEC/2018/0005. Permission was also obtained from the local authorities and communities in Akwa Ibom State where the study was conducted. Consent to participate in the study was obtained from each respondent/participant and their parents/guardians, where applicable, by making them understand the nature and purpose of the study, the potential risks and benefits of their participation, both to them and their community. In addition, their right to decline participation or withdraw voluntarily at any stage, without harm of any kind, was adequately communicated to them. Figure 1 is a map of Nigeria and Akwa Ibom State showing the study communities.

5. Results

5.1 Socio-demographic characteristics of the unmarried young adolescents

More than half of the respondents (66.5%) were in the middle stage; most were in secondary schools and 59.1% had a single parent or no parent at all. More than 73% of these young adolescents had cohabited with a man and about 74% had at least one child.

Figure 1. Map of Nigeria and Akwa Ibom State showing study communities.

5.2 Delivery practices of unmarried young adolescents

Table 1 shows the percentage distribution of unmarried young adolescents by first place of visit for delivery, place of delivery, assistance during delivery and duration of stay at place of delivery after birth, for the most recent birth. The results show that 47% indicated that their first place of visit for delivery was a faith-based facility.

Table 1. Percentage distribution of respondents by selected delivery practices for the most recent birth

Delivery practice: variables/categories	Young Adolescents		
	Early Stage 10-13 (N=179)	Middle Stage 14-16 (N=383)	Both Stages 10-16 (N=562)
Place of 1st visit for delivery			
Faith-based maternity centre	44.2	49.6	47.9
TBA facility	22.3	20.9	21.3
Govt. hospital/health centre	28.5	15.7	19.8.
Private hospital/clinic	2.0	4.1	3.4
None	3.0	9.7	7.6
Place of delivery			
Faith-based maternity centre	41.7	45.2	44.1
TBA facility	19.3	12.5	14.7
Public health facility	31.6	24.1	26.5
Private health facility	2.0	6.1	4.8
Home	5.4	12.1	9.9
Assistance during delivery			
Faith-based birth attendant	41.7	45.2	44.1
TBA	19.6	13.5	15.4
Doctor/nurse/midwife	26.1	21.3	22.8
Community extension health worker	7.5	8.9	8.5
Relative/friend	5.1	11.1	9.2
Duration of stay at place of delivery after giving birth			
≤1 day	25.1	26.1	25.8
2 – 6 days	65.7	56.9	59.7
7 days +	9.1	16.9	14.4

Adolescents in the middle stage were more likely than other young adolescents in the early stages to visit birth attendants at faith-based facilities for delivery. Although, the faith-based and traditional midwives also provide delivery services to adolescents at early stage, they were more likely to encounter anxieties from such adolescents due to their tender age at delivery.

Table 1 shows that overall, about 69% of the respondents did not deliver in modern healthcare facilities. As the qualitative data indicated, this

was not surprising given that most of the people had access to traditional birth attendants and/or that modern health facilities were either not open or health providers were absent, especially when labour occurred at night. The implication is that even those who were educated and wished to be delivered by skilled providers were compelled to seek assistance from traditional midwives. The results show that less number of girls in early adolescence delivered their babies at home (5.4%) compared to those in middle adolescence (12.1%).

The interview responses indicate that any attempt to go to the city for delivery was usually discouraged due to the distance and the lack of transportation to the city. In cases where it was attempted, pregnant girls often gave birth before getting to a health care facility. Respondents also noted that it was not safe to travel at night in the area due to its notoriety with regard to activities of criminals. Therefore, even during emergencies, it is difficult to have pregnant women conveyed to facilities that could assist them during delivery. Motorcycles are the common means of transportation in the area, apart from bicycles, both of which are unsafe for conveying pregnant women. An adolescent mother aged 15 revealed during an in-depth interview:

> During my last childbirth, my parents wanted the delivery to take place in the primary health centre located in our community. For the fact that the labour started in the night and nurses had returned home and the health facility closed for the day, I was taken to a nearby church to be assisted by a midwife...We could not go to the city during the labour for delivery due to lack of transportation. Moreover, it is very risky to move about here in the night. (IDI/Adolescent mother/15years/Ikot Obio Eka/2018)

Table 1 shows that nearly 60% of the respondents remained at the place of delivery for 2-6 days after childbirth. Staying back at the delivery facility for a couple of days may suggest that the mother or the baby required more medical observation, which could be due to complications. In-depth interviews with traditional delivery attendants/faith-based midwives and some adolescent mother-respondents also revealed that adolescents from poor homes whose parents/guardians were unable to defray hospital bills on time,

were compelled to spend more days at the place of delivery. For instance, an IDI conducted with a 13-year-old adolescent mother revealed that she stayed at her place of delivery for two weeks because of complications following delivery. It was revealed that her baby had meconium aspiration syndrome. Meconium is the first faeces or stool of the newborn. Meconium aspiration syndrome takes place when a newborn breathes a combination of meconium and amniotic fluid into the lungs during the period of delivery. It is a principal cause of morbidity and mortality in newborns, which is reported in about 5-10 percent of births (Johns Hopkins Medicine, 2018). According to a mother whose child was diagnosed with the syndrome:

> After delivery, my baby was very sick. She had bluish skin colour, breathing difficulty, and limpness, maybe because of the stress the baby experienced during the prolonged delivery . . . I was told my baby breathed in amniotic fluid containing meconium into her lung, thereby blocking her airways and affecting part of her lungs when I visited hospital . . . I had to remain in the traditional birth delivery centre for two weeks after delivery for my baby to be well before going home. (IDI/Adolescent mother/13years/Ikot Obio Eka/2018).

Pregnant adolescents exhibited confidence in traditional birth attendants whose constant follow-ups and availability were highly valued. This could have enhanced a cordial relationship between the respondents and traditional midwives in the study community.

An IDI conducted with the father of one of the babies revealed that money was the reason for prolonged hospitalization of the mother of his baby after delivery. He revealed that the amount collected for the delivery of a girl child was cheaper than that collected for the delivery of a boy child. Incidentally, his wife was delivered of twin boys and the amount was doubled. In his words:

> The mother of my baby and her two boys were not sick after delivery. What kept them so long at the place of delivery was money to pay the midwife for the services she rendered. Since my wife delivered a set of two boys, I had to pay fourteen

> thousand naira (₦14,000), which is less than 50 dollars. Seven thousand naira is charged for assisting in the delivery of a male child, while five thousand naira is for a female child. Being unable to pay for delivery services, a relative came to my rescue after several days. (IDI/Father of adolescent's baby/26years/Ikot Akpan Esa/2018)

Fee differences re-echo the reality of male child preference in Akwa Ibom State. Although such predisposition is common in Nigeria and other African countries, disparities in charges for delivery services between boys and girls are hardly reported in studies. It is also stated that the differentials apply irrespective of the circumstances surrounding pregnancies and deliveries.

Data show that some midwives discharged adolescent mothers and their babies whose families were unable to pay relevant bills on time. This was with a view to forestalling expenses incurred in feeding them. Instead of accumulating more debts which may never be recovered, some midwives discharged the adolescent mother and her baby after spending a day or more at their facilities. The interview also revealed that some traditional midwives now prefer to visit adolescents at their homes for postnatal care rather than allow them to spend more days at the place of delivery. A traditional midwife noted that:

> These days I do not allow pregnant mothers to stay long at my place of delivery, for lack of money to pay for delivery, except they experience serious complications during delivery. After delivery, I assess the financial capacity of the patient and discharge some to go home and pay later, whenever they could. (IDI/Traditional birth attendant/53years/Ikot Ukpong/2018)

The decision to discharge early is largely the product of past experiences. While some traditional midwives do not discharge adolescent mothers until the delivery fee is paid, others do not keep their patients longer than necessary, particularly in the absence of complications.

Discharging patients with the hope of receiving delivery payment later is very rare in the hospital/clinic setting. Perhaps this explains the high

patronage of traditional midwives by pregnant women in the area and adolescents in particular. In addition, the cost of delivery services in orthodox health facilities is generally higher and the payment plan is usually not flexible. The situation is exacerbated by the dysfunctionality of most orthodox health facilities. Table 2 indicates the reasons given by young mothers for not delivering in orthodox health facilities (for the most recent birth).

Table 2. Percentage distribution of respondents by reasons for not delivering in an orthodox health facility for the most recent birth

Reasons	Young Adolescents		
	Early Stage 10-13 (N=118)	Middle Stage 14-16 (N=264)	Both Stages 10-16 (N=382)
Financial cost of delivery	15.5	16.2	16.0
Health facility not open at time of labour	36.3	32.4	33.6
Distance from health facility	12.3	14.6	13.9
Quality of service	6.6	9.3	8.4
Partner/family preference	20.9	19.2	19.7
Baby came suddenly	6.2	5.0	5.4
Other	2.2	3.3	3.0

As table 2 indicates, 33.6% of the respondents stated that facilities were not always ready to receive patients at the time of labour. This was the main reason for not delivering their babies in orthodox facilities. The financial cost of delivery and family preference were the reasons adduced by 16% and 20% of the respondents respectively.

Group discussants agreed that the closure of the primary heath care centres in their communities was one of the key reasons for not patronizing orthodox health care facilities for child delivery. They noted that the health centres are open only on Wednesdays for child immunization after which they are shut for another week. Although the claim was confirmed during field visits, one of the participants who seemed to have captured the opinion of most of the others stated:

> Most of us did not visit the primary health care centre in our community for delivery because when we go there at night there would be no health provider to attend to us. Even during the day, except on immunisation days, the facility is usually closed. (FGD/Adolescent mother/14years/Iwo Etor/2018)

The point advanced by the discussants is crucial to improving orthodox health care services in Akwa Ibom State where the study was conducted and indeed in most other locations in Nigeria with similar challenges. The fact that the closest primary health care centres are mostly not available for services is a major disincentive for patronage and may likely portend danger for maternal health. Thus, considering the dismal nature of orthodox health facilities in the area, traditional birth attendants are considered as critical stakeholders for attaining safe maternal health outcomes.

As an adolescent mother corroborated during an in-depth interview, distance and lack of modern health facilities in their communities are major determinants of failure to present themselves for child delivery assistance at orthodox health facilities. She noted:

> We do not have any health centre in our community. The one closest to us is located at Ikot Obio Eka (over 15 kilometres). We cannot go to a very distant place for delivery, especially at night. Moreover, the probability of meeting a nurse in the place at night is quite slim. Therefore, we are left only with the option of visiting traditional birth attendants who are ready to assist with delivery at any time of the day. (IDI/Adolescent mother/13years/Ikot Ibok/2018)

Clearly, the above narrative contradicts the position of the National Primary Health Care Development Agency (Gyuse, Ayuk and Okeke 2018; NPHCDA, 2015) that every ward in Nigeria should have a functional primary healthcare centre. This was with a view to ensuring availability of minimum healthcare services across the country.

Given that a significant number of sampled adolescents were assisted during their most recent delivery by traditional birth attendants, this section is devoted to understanding some practices ascribed to non-institutional

delivery. Hence, the content and context of child delivery in traditional birth facilities are examined and include issues such as delivery kits available to attendants, instrument used in cutting the umbilical cord, what was applied on the stump after cutting the umbilical cord, kangaroo mother care (a practice of placing a newborn on the belly/breast of mother while covered with a dry cloth) as well as covering the head of the baby with a cap or cloth after delivery. These are compared to the recommendations made by the World Health Organization (2015).

It is important to note that given the close similarity in percentages on delivery practices between early and middle young adolescents, disaggregation of data was considered unnecessary in this section. In order to assess the adequacy of home delivery kits used during childbirth, reference was made to a set of materials consisting of a pair of gloves, a piece of cotton cloth, a small gauze pad, one laundry soap, a piece of cotton wool, a metre of polythene sheet, scissors and cord ligature recommended by the World Health Organization (2017). While a set of vaginal delivery instruments should include amniotic hook, forceps, scissors, speculum, laparoscopy sponges, sutures, vacuum and haemostat, among others, a set of home delivery kits called ‘mama kits’ were recommended for non-health orthodox facility delivery (NPC and ICF International, 2014).

The use of clean home delivery kits is essential in preventing life-threatening infections (such as neonatal tetanus) during delivery, especially in rural areas where access to health facilities is grossly limited. Respondents were asked questions and, in some cases, showed a sample set of ‘mama kits’ for them to ascertain whether they were used during their most recent delivery. Responses were computed ranging from 0-8 to represent the sum of kits used. This was to be further reclassified into clean (hygienic) and not clean (not hygienic) categories.

Figure 2 shows that about 51% of the respondents stated that birth attendants used clean home delivery kits during their most recent childbirth. This implies that some traditional birth attendants were relatively aware of the essence of appropriate hygiene behaviour during delivery. This was corroborated by interview respondents who observed that though some midwives did not have all basic home delivery kits at the time of the survey, the ones they had were kept in a hygienic state and ready for delivery

services. It was also noted that some of the traditional midwives adhered to use of hand gloves specifically for fear of contracting diseases, especially HIV/AIDS.

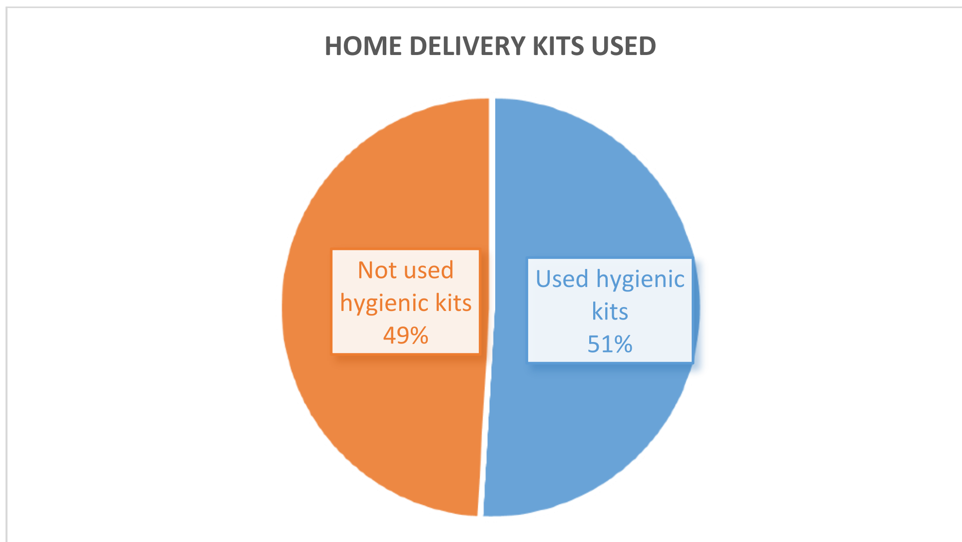

Figure 2. Percentage distribution of respondents by home delivery kits used by birth attendants during the most recent deliveries.

As some of the birth attendants stated, the pregnant women they attend to must undertake HIV/AIDS tests in an orthodox facility before they assist them in child delivery. Such a requirement is borne out of the need for precaution, and as the traditional birth attendants conceded, they lacked the skills and instruments to conduct HIV/AID tests. As a further precautionary measure, a traditional birth attendant described the importance of hand gloves in assisting deliveries:

> I don't joke with the use of hand gloves during delivery. You know that HIV doesn't show in the physical look of a pregnant woman, hence prevention is better than cure... Before delivery at most hospitals, women are usually subjected to a series of tests including HIV/AIDS test. We have to use hand gloves during deliveries to be doubly sure

> that we are protected against exposure, both the patient and the assistant, to HIV/AIDS. (IDI/Traditional birth attendant/57years/Ikot Iyang/2018)

Thus, observing appropriate hygiene practices benefits every stakeholder and must be re-emphasized at every opportunity. Perhaps making meeting some of the requirements a precondition for accepting to assist in child delivery may go a long way in sensitizing young mothers on the imperative of safety during and after delivery. As one of the attendants explained:

> Adolescents coming to deliver in my facility are usually made to be aware that they must come with a pair of gloves, baby wrappers, one laundry soap, cotton wool, and a new razor blade before or during labour; this I tell everyone of them during antenatal visits to prepare their minds ahead of time. (IDI/Traditional birth attendant/46years/Nkana/2018)

Indeed, the idea of pre-informing young adolescents on the basic requirements prior to delivery is commendable and ought to be the general practice among birth attendants as a way of minimizing avoidable maternal risks. Table 3 shows that 81.4% of the traditional and faith-based midwives used a new or heated razor blade to cut the umbilical cord during delivery. Some of the adolescents were noted to have brought some of the delivery kits to the delivery facilities days before delivery. The practice of using a heated blade was mainly adopted when adolescents could not afford new razor blades or delivery took place at night when most shops were closed or inaccessible. The use of a knife (3.8%) was rarely the case and must have been employed as the last resort.

The World Health Organization (2014) recommended the use of scissors for cutting of the umbilical cord following the placing of a clamp on one side of the cord and a haemostat to clamp the other side. As revealed in this study, traditional and faith-based birth attendants did not have haemostats at the time of data collection. However, the birth attendants improvise by using their fingers to clamp the side of the cord while cutting the umbilical cord. The implication is that since traditional midwives do not have all the necessary instruments to assist women appropriately during delivery, they

need adequate orientation that will equip them with basic skills to navigate difficult situations as is often the case in most Nigerian communities.

Table 3. Percentage distribution of respondents by umbilical cord cutting and caring by traditional and faith-based birth attendants

Variables/categories	(N=382) Per cent
Instrument used to cut umbilical cord	
New/boiled blade	81.4
Knife	3.8
Scissors	14.9
Substance applied on stump after cutting the umbilical cord	
Olive oil	25.9
Ointment/powder	26.2
Dettol	7.8
Methylated spirit	14.6
Toothpaste (Closeup)	24.0
Other	1.5

Table 3 also shows that ointment, such as Vaseline, and powder (26.2%), olive oil (25.9%) and toothpaste (Closeup) (24%) were the substances mostly applied by mothers on the stump. It has however been recommended that the umbilical cord be kept clean and dry to prevent infection until it falls off naturally (World Health Organization, 2013). To achieve this, it is expected that the mother or caregiver should dip a cotton swab in warm water, squeeze to remove excess water and carefully use this to clean the base of the cord and the surrounding skin, while the stump is held with a clean absorbent cloth to dry completely.

All the participants in a group that comprised adolescent mothers confirmed that they applied substances on the stump of their babies after it was separated from the umbilical cord. Most of them mentioned substances such as toothpaste, saliva, fluid from a dead spider, ointment and powder daily. One of the discussants stated:

> I started to apply toothpaste immediately the umbilical cord was separated from the baby. That made the stump to dry up fast and the child to experience less pains. (FGD/Adolescent mother/16years/Eso Efa/2018)

The respondent was either unaware of the appropriate way to handle the umbilical cord and/or lacked the financial capacity to afford the appropriate materials described earlier. Whatever the case, it is medically wrong to apply toothpaste on the stump of an umbilical cord because the chemical composition of toothpaste and how compatible it is with the umbilical cord of a newborn have not been proven. The practice further depicts the cultural beliefs and practices that influence delivery and postnatal activities in the study location.

Another participant noted that her grandmother advised her to apply the fluids from a spider on the stump until it was completely healed. She stated:

> My grandmother who is also a traditional midwife advised me to apply the fluid from a dead spider on the umbilical cord until the wound was healed. When I did, it was very effective and it made the wound to dry up without the stump protruding to give a bigger belly button after the wound was healed. (FGD/Adolescent mother/13years/Eso Efa/2018)

Indeed, the sources of information for the inexperienced and often illiterate adolescents are many and may negatively affect their maternal healthcare practices. Another discussant reported applying her saliva on the umbilical cord so that it could dry up and fall off at the appropriate time based on the advice of her midwife since she could not afford methylated spirit. She stated:

> I used my saliva on the umbilical cord on a daily basis after the cut. We believe that saliva is a powerful agent capable of performing the same function as methylated spirit. (FGD/Adolescent mother/14years/Eso Efa/2018)

Table 4 presents data on the 'kangaroo mother care' practice by birth attendants. The kangaroo care refers to a technique whereby the newborn is

kept skin-to-skin with the mother. The technique is medically recommended especially for low birth-weight and preterm babies, who are more likely to suffer from hypothermia. It is meant to keep the baby warm as well as encourage early onset of breastfeeding. Medical evidence shows that the practice is effective in reducing infant mortality rate and the risk of contracting infections at the facility or hospital (Cheng, Fowles and Walker 2006; WHO, 2015). As table 4 shows, only 34% of the respondents had the kangaroo experience after delivery. The implication is that traditional birth attendants are either not aware of the importance of the technique or consider it unnecessary. It is also recommended by the World Health Organization (2014) that the heads of babies be covered with a cap or cloth immediately after delivery. The table indicates that virtually all the birth attendants observed this rule.

Table 4. Percentage distribution of respondents by kangaroo care and covering of baby's head immediately after delivery

Variables/categories	(N=562) Per cent
Child placed on belly/breast & covered with dry cloth after delivery	
Placed	34.3
Not placed	65.7
Child head covered with cap or cloth after delivery	
Covered	98.1
Not covered	1.9

Table 5 examines issues related to the first bath of the newborn. The World Health Organization (WHO 2018) recommends an interval of at least 24 hours for reasons such as preventing the baby from developing hypothermia and hypoglycaemia, avoiding disruption of mother-child bonding, and preventing the skin from drying out by not removing vernix from the body of a newborn too quickly (see also American Academy of Pediatrics, 2019). Table 5 shows however that 23% of the adolescents sampled whose deliveries were assisted by TBAs had their babies take the first bath less than one hour after delivery. However, all skilled providers

bathed the newborns a day after delivery. Some had their babies bathed for the first time in two days or more due to complications during delivery.

To be sure, some of the traditional birth attendants (TBAs) did not adhere to the recommended time probably due to ignorance. As a traditional birth attendant maintained, bathing babies with water and soap allowed her to dress them with appropriate clean dry clothes. She stated:

> What I do immediately after the umbilical cord is cut is to wash the baby with water and soap, so that it would be clean, before being dressed with napkins, wrapped and kept to relax. (IDI/Traditional Birth Attendant/61years/Ikot Ukpong/2018)

Table 5. Percentage distribution of respondents by time at first bath of newborn by delivery assistants

	Delivery assistants (N=562)	
Time at 1st bath	Skilled provider	Faith-based/TBAs
Immediately/Less than 1 hour after birth	-	23.1
A day after delivery	47.3	44.2
2-6 days after delivery	52.7	23.8
7 days+ after delivery	-	8.9

Some of the traditional birth attendants were ignorant without knowing it and perhaps acted in line with their social and cultural expectation wherein friends and relatives start visiting a mother and her baby from the day of delivery. Therefore, bathing the baby immediately after delivery for presentation to visitors is usually the main consideration rather than the health implications. Another traditional birth attendant revealed that what sometimes prevented her from bathing babies immediately after delivery are birth complications. In that case, the baby is cleaned with olive oil so as to look attractive while the conditions are treated.

6. Discussion and Recommendations

The results of this study show that nearly two-thirds of adolescent mothers who were respondents in this research had their first delivery in settings other

than orthodox facilities. Although the latter have skilled delivery personnel, for several reasons, such as accessibility both to facilities and personnel, prospective mothers preferred traditional and/or faith-based assistance; this is similar to the findings by Ntoimo et al. (2019). The choices by these women could be adjudged rational. The rationale for their choices is that minimal assistance, especially during emergencies, is safer than no assistance at all, even though it may portend some danger due to ignorance that is sometimes embedded in cultural beliefs. Reversing this trend, and by implication reducing maternal morbidity and mortality, among women of reproductive age generally and adolescents with limited social support in particular, will require political will to provide the requisite maternal health facilities as well as sustained engagement of the populace through maternal health education and sensitization.

This call to action is even more critical in places where, due to poor road network and conditions that aggravate transportation challenges, pregnant women and their families prefer the nearest facility irrespective of inherent limitations. The case of rural Akwa Ibom State is exacerbated by the nocturnal activities of criminals that pervade the transportation corridor to further fuel the impetus among expectant mothers to seek recourse to faith-based midwives and traditional birth attendants. Moreover, these women noted that taking such risk would not be necessary where these midwives and traditional attendants are always available and also undertake regular follow-ups for necessary updates pertaining to food intake, physical exercises and other therapeutic advice. Some of these reasons have been reported in other studies within and outside Nigeria (Yaya et al., 2018; Gbadamosi and Olorunfemi, 2016).

Preference for non-orthodox facilities by pregnant women was also linked to the flexibility of paying bills for delivery services provided by TBAs and midwives. Orthodox facilities founded on formal bureaucratic principles are less likely to entertain excuses for non-payment of medical bills no matter how plausible (Ntoimo et al. 2019). On the contrary, based on social and cultural affinity between traditional birth attendants and these prospective mothers, the care providers often exhibit some form of discretion on payment for child delivery services, which in some cases is written off. Such act of grace on the part of the TBAs and the characteristic humanism shown by the

midwives could increase people's confidence in their services (Ugboaja et al. 2018). We however argue here that such exhibition of goodwill while commendable may be abused and could serve as incentive for unwanted pregnancies among young people in the future. Thus, apart from ensuring that cancellation of bills is exercised only in extreme situations, sexuality education for in-school and out-of-school adolescents should be vigorously implemented to drive positive attitudinal and behavioral change among young people (Nwokocha, 2019; Isiugo-Abanihe et al. 2015; Udegbe et al. 2015; Nwokocha et al. 2015).

One major limitation of relying on TBAs and midwives for delivery is the paucity of delivery kits such as amniotic hook, forceps, scissors, speculum, laparoscopy sponges, sutures, vacuum and haemostat, among other recommended kits for non-facility deliveries (NPC and ICF International, 2014). The implication is that these birth attendants inevitably struggle to improvise with instruments that may not be very adequate and perhaps undermine the health of mother and baby. Studies consistently indicate that maternal health outcomes in Nigeria, particularly in rural areas, reflect fatality that could have been avoided through the provision of adequate equipment and trained personnel (Ntoimo et al., 2019; Amutah-Onukagha, Rodriguez and Farag, 2017). Additionally, TBAs and midwives admitted their inability to carry out HIV testing among pregnant adolescents and therefore resorted to the use of hand gloves in assisting delivery. This portends danger both for the midwives and subsequent patients given that the use of gloves alone is not adequate protection against contracting HIV which could also be spread over time. As such, there is a need to properly educate TBAs and midwives on insisting that HIV and other tests be carried out as part of antenatal activities to forestall increase in the incidence of HIV among child-bearing women in the area.

Equally, using toothpaste, saliva, powder and substances from a spider, which are common among women in Akwa Ibom State, has not been proven to be efficacious for use on the stump of the umbilical cord and could expose the newborn to various kinds of infections and illness. This is even in the context of apparent lack of awareness about the essence of the kangaroo therapy, which has been reported to reduce infant mortality and the risk of contracting infection at facilities (WHO, 2015). In addition, respondents

stated that some of the TBAs and midwives had the newborn bathed a few hours after delivery, which is far less than the at least 24-hour period prescribed by the World Health Organization (WHO, 2018). The import of these scenarios cannot be mistaken and suggests that irrespective of the many years of assisting deliveries, TBAs and midwives need to be trained and retrained at regular intervals on delivery procedures, including identifying precarious situations quite early for referral (Amutah-Onukagha et al., 2017).

7. Conclusion and Recommendations

In the context of a weak orthodox healthcare system, which is not even available in most rural communities of Nigeria, the role of traditional birth attendants and faith-based midwives in assisting child delivery among younger adolescents in Akwa Ibom State cannot be overlooked. Therefore, training these frontline birth assistants on basic practices related to antenatal, delivery and postnatal care services, including effective referral activities, has become a critical public policy issue and should be considered an emergency.

Beyond understanding the issues around child delivery care practices among younger adolescents, a conversation should be opened up on the factors that drive out-of-wedlock pregnancy in this group in the first place. This should be with a view to undertaking advocacy and community sensitization towards inculcating the right values that would discourage risky sexual behaviours and vulnerability to unwanted pregnancies and the concomitant consequences among adolescents in Akwa Ibom State. In addition, the findings of this study are relevant to policy formulation and implementation as they provide evidence-based data that could inform context-specific interventions.

There is a need to prioritize sexuality education in the household and schools in order to adequately equip adolescents with the right message that will counter some of the misleading information often canvassed by peers who themselves are victims of lack of or poor sexuality education. Therefore, designing policies and programmes that will be aimed at overhauling the content of sexuality education curricula and implementation will go a long way in bridging the knowledge gap, not only in Akwa Ibom State, but also the country in general.

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