



The Practice of Sanitary and Safe Vaginal Delivery by TBAs in Central Bayelsa State, Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Aim: This study examine the practice and sanitary condition maintained by TBAs when taking vaginal deliveries in Bayelsa state central using cross sectional descriptive random sampling method to select a total of 70 respondents and the required parameters with the aid of structured

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questionnaires. The respondents were randomly selected from Igbogene, yenegwe, Etege in yenagoa LGA and Angiama, Angiama-gbene, Aguobiri, Oporoma in southern ijaw LGA of Bayelsa state.

Results: Findings from this study showed that respondents within 43yrs and above were 38.57% with 31-37yrs making 22.86% compared with age 37-42 (15.71%), 19-24yrs (12.86%) while 25-30yrs (10%) in the study population. Their educational status was mostly informal (38.57%) and primary (28.57%) followed by secondary (20%) and tertiary education that falls between 7-9yrs and above 10yrs (35.71%) and (42.86%) compared with 1-3yrs and 4-6yrs of 7.14% and 14.29% respectively. The number of deliveries carried out by the TBAs shows that 80% of babies delivered survived compared with 20% death during and after labor. About 87.14% of respondents wear sanitary gloves when compared with 12.86% that do not when taking delivery. The study further reveal the use of pawpaw roots and other methods to stimulate contraction during labor while 71.43% agree to referral of difficult cases. The application of spoon deeply into the respondent's oral cavity to stimulate physiologic uterine contraction was the most adopted method to deliver the placenta.

Conclusion: The sanitary condition of TBAs centres labor room was observed to be regularly (80%) maintained with the use of antiseptics while 81.43% of their surrounding environment was being cared for regularly as well. We hereby recommend that more strategic training methods for TBAs be adopted by the government to acquire more skills that will enhance their proficiency in delivery safe babies without transmission of infections that may manifest after birth.

Keywords: Herbs labor; roots; pregnancy gloves.

1. INTRODUCTION

TBA is a community midwife who have acquired skills of delivering babies and provide care during pregnancy and childbirth to pregnant mothers. The history of traditional birth attendants in Nigeria begin from pre-colonial period that traditional medicine was so common. Health care mainly was provided by traditional birth attendants and Quranic healers. Colonial authorities provide health care to administrators and families only. Sepsis caused by infection is a leading cause of maternal and infant deaths worldwide. In respective of maternal personal hygiene, sepsis may be caused by vaginal examination with unclean hands during labor by TBAs [1,2,3]. Studies have shown that trained TBAs conduct vaginal examinations more than the untrained [4]. A vast majority of the people had no access to orthodox health care and thus depend mostly on traditional medicine. However during the postcolonial period strategic development plans were observed that lead to the provision of basic health services in urban centers [5]. Midwives in those circumstances, without cesarean surgery options, often faced maternal mortality [6,7]. Study conducted Ekor, (2014) and Ezekwesili et al., (2019) results proved most respondents (44.5%) sees TBAs as herbalist. With a strong attachment by Africans to the use of herbal preparations for treating health cases. Herbal drugs are also used during pregnancy for labour induction and postpartum

[8,9,10,11,12]. Most respondents are of the view that TBAs were nurses while few believe TBAs are community midwives [13-17]. A study conducted by Imogie, [18,19] in Edo state indicated that TBA- provide maternal health services is free from inhibiting factors of prohibitive hospital fees.

In developed countries, some lay mid-wives are becoming vocal in support of their right to practice without formal regulation and that it is women's right to choose her place of birth and attendants. Studies have shown that about 60 - 80% of deliveries in developing countries take place outside modern health care facilities, with a significant number being attended to by TBAs [20,21]. TBAs deliver most women in Nigeria as in other developing countries. In Chanchaga LGA of Niger State in northern Nigeria, 84% of households interviewed make use of TBA services [22]. Traditionally, TBAs role on reproductive health begins when a woman becomes pregnant as they are consulted for health issues occurring during the 1st – 2nd week of gestation and after delivery [23,24]. TBAs have vast knowledge of herbal plants used for managing pregnancy and child delivery (Swantz 2020; John et al., [25]. Furthermore, TBAs counsel pregnant women on appropriate diet and pregnancy-related taboos including the care required for infants after birth [26,27,28]. TBAs requires proper training for proper handling of umbilical cord care because studies have

observed harmful transfer of infections to both mother and child due to use of unsterilized blades and improper handling of cord care [29,30].

2. MATERIALS AND METHODS

This study adopted a descriptive cross-sectional design to assess the practice and sanitary ethics maintained by TBAs during delivery including their demographic data.

2.1 Study Area

The selected Communities for this study include TBAs practicing in Igbogene, yenegwe, Etegwe in yenagoa LGA and Angiama, Angiama-gbene, Aguobiri, Oporoma in southern Ijaw LGA of Bayelsa state.

2.2 Study Population

The targeted population comprises of all the active Traditional Births Attendants residing in the selected communities totaling 70 in Bayelsa State central.

2.3 Inclusive Criteria

The study was limited to TBAs practitioners residing in Bayelsa state central only.

2.4 Exclusive Criteria

TBAs practitioners residing outside the study areas were excluded from this study.

2.5 Data Collection

Structured questionnaires were given to individual respondent and retrieved after completion.

2.6 Data Analysis

Data obtained were analyzed using SPSS version 23.0 and presented in tables.

3. RESULTS AND DISCUSSION

The results obtained from this study are presented in tables below.

Table 1. Demographic data of respondents

| Age (yrs) | Frequency | % | Cumulative % |
|-------------------|-----------|-------|--------------|
| 19-24 | 9 | 12.86 | 12.86 |
| 25-30 | 7 | 10 | 22.86 |
| 31-36 | 16 | 22.86 | 45.72 |
| 37-42 | 11 | 15.71 | 61.43 |
| 43 and above | 27 | 38.57 | 100 |
| Total | 70 | 100 | |
| Marital status | Frequency | % | Cumulative % |
| Married | 24 | 34.29 | 34.29 |
| Single | 24 | 34.29 | 68.58 |
| Divorced | 12 | 17.14 | 85.72 |
| Widow | 10 | 14.28 | 100 |
| Total | 70 | 100 | |
| Educational level | Frequency | % | Cumulative % |
| Informal | 27 | 38.57 | 38.57 |
| Primary | 20 | 28.57 | 67.14 |
| Secondary | 14 | 20 | 87.14 |
| Tertiary | 9 | 12.86 | 100 |
| Total | 70 | 100 | |

Table 2. Years of service deliveries and practice

| Years of Practice | Frequency | % | Cumulative % |
|-------------------|-----------|-------|--------------|
| 1-3 | 5 | 7.14 | 7.14 |
| 4-6 | 10 | 14.29 | 21.43 |
| 7-9 | 25 | 35.71 | 57.14 |
| >10 | 30 | 42.86 | 100 |
| Total | 70 | 100 | |

| Years of Practice | Frequency | % | Cumulative % |
|-----------------------------|------------------|----------|---------------------|
| Number of Deliveries | Frequency | % | Cumulative % |
| 1-3 | 8 | 11.43 | 11.43 |
| 4-6 | 14 | 20 | 31.43 |
| 7-9 | 12 | 17.14 | 48.57 |
| 10 and above | 33 | 47.14 | 95.71 |
| Nil | 3 | 4.29 | 100 |
| Total | 70 | 100 | |
| How many survive | Frequency | % | Cumulative % |
| 1-3 | 6 | 8.57 | 8.57 |
| 4-6 | 6 | 8.57 | 17.14 |
| 7-9 | 4 | 5.71 | 22.85 |
| 10 and above | 5 | 7.14 | 29.99 |
| Numerous | 10 | 14.29 | 44.29 |
| All | 32 | 45.71 | 89.99 |
| Nil | 7 | 10 | 100 |
| Total | 70 | 100 | |
| How many died | Frequency | % | Cumulative % |
| 1-2 | 10 | 14.29 | 14.29 |
| 3-4 | 4 | 5.71 | 20 |
| Nil | 56 | 80 | 100 |
| Total | 70 | 100 | |
| Do you wear gloves | Frequency | % | Cumulative % |
| Yes | 61 | 87.14 | 87.14 |
| No | 9 | 12.86 | 100 |
| Total | 70 | 100 | |
| Use of sanitary pad | Frequency | % | Cumulative % |
| Yes | 69 | 98.57 | 98.57 |
| No | 1 | 1.43 | 100 |
| Total | 70 | 100 | |

Results from this study showed age 43 yrs and above (38.57%) as the most respondents, followed by age 31-36yrs, 37-42yrs and 25-30yrs when compared with those within age 19-24yrs of 12.42% that make the least number of TBAs in the study population. Their marital status indicate that both married and single were of the same frequency (34.29%) while divorced (17.14%) compared with widows of 14.28%. The educational level of the study population was 38.57% informal while primary/secondary was 28.57% / 20% compared with tertiary of 12.86%. The TBAs years of service showed that respondents above 10yrs was (42.86%) followed by 7-9yrs (35.71%) compared with 1-3yrs (7.14%). A total of 47.14% with a cumulative frequency of 95.71% among the study population have been able to carry out over 10 deliveries in comparison with 4.29% that are yet to experience delivery cases. However 45.71% have been able to deliver life babies compared

with 10% of non-delivery experience among the respondents.

Findings from this study further showed that 80% of the deliveries were successful while only about 20% died during the course of delivery. About 87.14% maintain sanitary measures of preventing infections during labor by putting on sterilized gloves to manipulate the delivery of the babies. To prevent the transmission of infection to mothers, 98.57% of the respondents encourage the use of sanitary pads accepted by WHO. The use of thread in clipping the neonatal cord was a common practice observed (81.43%) compared with the use of cord clamp technique of 11.43%. Most TBAs adopted the use of new blade (71.43%) to cut the cord after ligation and clear the neonate with olive oil (62.85%) though 14.29% use soap and water to clean the newborn.

Table 3. Cord care and neonatal management

| What do you use to clip the cord? | Frequency | % | Cumulative % |
|--|------------------|----------|---------------------|
| Thread | 57 | 81.43 | 81.43 |
| Rope | 5 | 7.14 | 88.57 |
| Cord clamp | 8 | 11.43 | 100 |

| Total | 70 | 100 | |
|---|----|---------------------|-------|
| What do you use to cut the cord? | | Cumulative % | |
| New Blade | 50 | 71.43 | 71.43 |
| Measure with finger | 10 | 14.28 | 85.71 |
| Scissors | 8 | 11.43 | 97.14 |
| Thread | 1 | 1.43 | 98.57 |
| Knife | 1 | 1.43 | 100 |
| Total | 70 | 100 | |
| How do you clear the neonate? | | | |
| Olive oil | 44 | 62.85 | 62.85 |
| Soap and water | 10 | 14.29 | 77.14 |
| Groundnut oil | 11 | 15.71 | 92.85 |
| King's oil | 1 | 1.43 | 94.28 |
| Olive oil and wrapper | 1 | 1.43 | 95.71 |
| Herbal medicine | | 1.43 | 97.14 |
| Spirit | 2 | 2.86 | 100 |
| Total | 70 | 100 | |

Table 4. Methods of controlling hemorrhage during delivery

| How do you stop bleeding? | Frequency | % | Cumulative % |
|---------------------------|-----------|-------|--------------|
| Herbs | 32 | 45.71 | 45.71 |
| Root | 23 | 32.86 | 78.57 |
| Injection | 10 | 14.29 | 92.86 |
| Cigarette to smoke | 1 | 1.43 | 94.29 |
| Coke | 2 | 2.86 | 97.15 |
| Herb and Root | 1 | 1.43 | 98.57 |
| Nil | 1 | 1.43 | 100 |
| Total | 70 | 100 | |

Table 5. Neonatal care and labor room

| Do you weigh the babies? | | | |
|--|-----------|-------|--------------|
| | Frequency | % | Cumulative % |
| Yes | 33 | 47.14 | 47.14 |
| No | 37 | 52.86 | 100 |
| Total | 70 | 100 | |
| Do you wash labor room with antiseptic regularly? | | | |
| | Frequency | % | Cumulative % |
| Yes | 56 | 80 | 80 |
| No | 14 | 20 | 100 |
| Total | 70 | 100 | |

Table 6. Environmental condition of TBAs Centres

| | Frequency | % | Cumulative % |
|-------------------------------------|-----------|-------|--------------|
| Sanitized | 57 | 81.43 | 81.4 |
| Not sanitized | 13 | 18.57 | 100 |
| Total | 70 | 100 | |
| How do you deliver Placenta? | | | |
| | Frequency | % | Cumulative % |
| Massage belly | 13 | 18.57 | 18.57 |
| Spoon | 24 | 34.29 | 52.86 |
| Pawpaw leaves | 6 | 8.57 | 61.43 |
| Nil | 12 | 17.14 | 78.57 |
| Others | 1 | 1.43 | 80 |
| Root | 5 | 7.14 | 87.14 |
| Cigarette smoke | 9 | 12.86 | 100 |
| Total | 70 | 100 | |

Table 7. Herbs used for contractions

| | Frequency | Percentage | Cumulative Percentage |
|-------------|-----------|------------|-----------------------|
| Pawpaw root | 24 | 34.29 | 34.29 |
| Other | 46 | 65.71 | 100 |
| Total | 70 | 100 | |

| Do you refer difficult cases? | | | |
|--------------------------------------|-----------|------------|-----------------------|
| | Frequency | Percentage | Cumulative Percentage |
| Yes | 50 | 71.43 | 71.43 |
| No | 20 | 28.57 | 100 |
| Total | 70 | 100 | |

In a bid to control bleeding after labor, the study observed that 45.71%, 32.86% and 1.43% adopt the use of herbs, roots and combination of herbs/roots to stop bleeding compared to the use of injections (14.29%) from auxiliary/regular nurses during and after delivery while 1.43% and 2.86% make use of cigarette smoke and coke while 1.43% make nonuse of the above mentioned. The environmental sanitary condition was encouraging as 80% and 81.43% of the respondents make use of antiseptics to sanitize labor room regularly. The reduction of maternal mortality by well-trained TBA will go a long way in reducing maternal mortality during child birth [31,32].

The delivery of the placenta was mostly done by introducing spoon deeply into the oral cavity to increase the physiologic intrauterine and abdominal pressure to evacuate the placenta from the uterine linings outward. However 18.57% apply abdominal massage topically while 8.57% use pawpaw leaves and 7.14% roots. Observation from this study also showed that about 71.43% referred difficult cases of delivery to the primary/secondary health centres while 28.57% do not.

This findings are in congruent with other studies, especially from the northern region of Nigeria where TBAs have been found to be generally elderly women [33-37].

4. CONCLUSION

Findings from this study indicate that the respondents in Bayelsa state central practice good sanitary methods to a reasonable degree during labor to prevent the transfer of infections from attendants to mother or child. We hereby recommend that the respondents (TBAs) from the study population be subjected to regular training with enlightenment by government health workers- nurses and midwives for an improved management of labor and safe vaginal delivery cases among pregnant women in Bayelsa state.

CONSENT AND ETHICAL APPROVAL

Institutional ethical approval was duly obtained from the Research and Ethics Committee before the commencement of this work while written consent was obtained from individual respondents.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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