

THE PRACTICE OF SANITARY AND SAFE VAGINAL DELIVERY BY TBAs IN CENTRAL BAYELSA STATE, NIGERIA.

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 questionnaires. The respondents were randomly selected from Igbogene, yenegwe, Etegwe in yenagoa LGA and Angiama, Angiama-gbene, Aguobiri, Oporoma in southern ijaw LGA of Bayelsa state. **Results:** Findings from this study shows 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. 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

INTRODUCTION

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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 respect of maternal personal hygiene, sepsis may be caused by vaginal examination with unclean hands during labor by TBAs (Asghar, 2019; Hussein & Fortney 2017; Parashar *et al.*, 2023). Studies have shown that trained TBAs conduct vaginal examinations more than the untrained (Jahn *et al.*, 2020). 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 (Yusuf 2020). Midwives in those circumstances, without cesarean surgery options, often faced maternal mortality (Uche, 2020; Titaley, 2017). 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 (Sibley, 2017; Safe, 2019; Prata, 2018; Perez, 2018; Oladele *et al.*, 2020). Most respondents are of the view that TBAs were nurses while few believe TBAs are community midwives. (Okechukwu, 2021; WHO, 2016, 2018, and 2020). A study conducted by Imogie, (2016, 2017) 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 (Grieco & Turner, 2015; Tsui *et al.*, 2022). 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 (Itina, 2021). 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 (Kayombo, 2017; Cosminsky 2019). TBAs have vast knowledge of herbal plants used for managing pregnancy and child delivery (Swantz 2020; John *et al.*, 2021). Further, TBAs counsel pregnant women on appropriate diet and pregnancy-related taboos including the care required for infants after birth (Waite, 2020; Good, 2021; Mbiydzennyuy, 2022). 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 (Mullany, *et al.*, 2016; Alam, *et al.*, 2018).

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.

Study Area

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

Study Population

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

Inclusive Criteria

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

Exclusive Criteria

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

Data Collection

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

Data Analysis

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

Ethical Consideration

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

RESULTS

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	
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	

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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?			
	Frequency	%	Cumulative %
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
Cigarrete 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
Cigarrete 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	

DISCUSSION

Results from this study showed age 43yrs 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.

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 (Aborigo *et al.*, 2015; Adebayo *et al.*, 2019)

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 (Bhardwaj *et al.*, 2022).

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 delivery cases among pregnant women in Bayelsa state.

Conflict of Interest: Non declared

Disclaimer (Artificial intelligence)

Option 1:

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 the writing or editing of this manuscript.

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Details of the AI usage are given below:

- 1.
- 2.
- 3.

REFERENCES

- Aborigo ER, Bergstrom S & Goodburn E (2015). The *Role of Traditional Birth Attendants in the Reduction of Maternal Mortality Online* at: <http://www.jsieurope.org/safem/collect/safem/pdf/s2933e/s2933e.pdf>
- Adebayo A & Okonkwo C (2019). Challenges and Opportunities in Integrating Traditional Birth Attendance with Modern Maternal Healthcare in Nigeria. *International Journal of Reproductive Health*, 25(4): 210-225.
- Alam M, Ali N, Sultana L, Mullany K, Teela *et al* (2018). Newborn umbilical cord and skin care in Sylhet District, Bangladesh: Implications for the promotion of umbilical cord cleansing with topical chlorhexidine. *Journal of Perinatology* 28 (2):61. Retrieved from http://go.galegroup.com.ezproxy.liberty.edu:2048/ps/i.do?p=AONE&u=vic_liberty&id=GALE|A190851207&v=2.1&it=r&sid=summon&userGroup=vic_liberty.
- Asghar RJ (2019). Obstetric Complications and Role of Traditional Birth Attendants in Developing Countries, *Journal of College of Physicians and Surgeons Pakistan*, 9(1): 55-57.
- Bhardwaj N, Kukade JA, Patil S, Bhardwaj S (2022). Randomised Controlled Trial on Modified Squatting Position of Delivery, *Indian Journal of Maternal and Child Health* 6(2): 33-39.
- Cosminsky S (2019) Traditional Midwifery and Contraception. In : R. H. Bannerman, John Burton and Che'n Wen -Chieh (eds.) *Traditional Medicine and Health Care coverage*. World Health Organization, Geneva.
- Good C. M (2021). Pioneer Medical Missions in Colonial Africa. *Social Science and Medicine* 32, 1-10.
- Grieco M & Turner J (2015). Maternal Mortality: Africa's Burden; Toolkit on gender, Transport and maternal mortality. www4.worldbank.org/afr/ssatp/Resources/HTML/Gender.

- Hussein J & Fortney JA (2017). Puerperal Sepsis and Maternal Mortality: What Role can New Technologies Play?, *International Journal of Gynecology and Obstetrics*, 85(Suppl. 1): S52-S61.
- Ichizie A (2021). *Human immunization*. New York: Creyon Publications.
- Imogie, A.O. (2016). The practice of traditional birth attendants and women's health in Nigeria. *Medical Women's International Association Online* at http://www.regional.org.au/au/mwia/papers/full/28_imogie.htm
- Imogie OI (2017). The practice of traditional birth attendants and women's health in Nigeria. *25th Congress Medical Women's International Association*, 2017. Available from: http://www.regional.org.au/au/mwia/papers/full/28_imogie.htm. Accessed January 16, 2012.
- Itina SM (2021). Characteristics of traditional birth attendants and their belief and practices in the Ofot clan, Nigeria. *Bull World Health Organ* 75(6): 537-538.
- Jahn A, Carvalho I & Kalinga MJ (2020). Evaluating Traditional Midwife Training Programs: Lessons Learned from Tanzania, *International Journal of Gynecology & Obstetrics*, 73: 277-278.
- John TJ & Bodhankar U (2021). Birth Attendants: One or Two?, *Indian Pediatrics*, 38(327-331).
- Kayombo EJ, Uiso FC, Mbwambo Z, Mahunnah R, Moshi MJ *et al* (2017). Experience in initiating collaboration of traditional healers in managing HIV/AIDS in Tanzania. *Journal of Ethnobiology and Ethnomedicine* 3:6 .
- Mbiydzenyuy N (2022). Traditional birth attendants: Filling the blank space in rural Cameroon. *Maternal and Child Aid Cameroon*. Retrieved from <http://amplifyyourvoice.org/u/engala/2021/12/11/traditional-birth-attendants-filling-the-blank-space-in-rural-cameroon/>
- Mullany L, Darmstadt G, Katz J, Khattry S, LeClerq S, Adhikari R *et al* (2016). Risk factors for umbilical cord infection among newborns of Southern Nepal. *American Journal of Epidemiology*, 165(2), 203-211. doi: 10.1093/aje/kwj356.
- Parashar UD, Bennett JV, Boringa JR, Hladyd WG (2023). Topical Antimicrobials Applied to the Umbilical Cord Stump: A New Intervention Against Neonatal Tetanus, *International Journal of Epidemiology*, 27: 904-909 O908.
- Okechukwu C & Ibe A. (2021). Synergy in Action: Successful Models of Collaboration between Skilled and Traditional Birth Attendants in Nigeria. *Global Health Innovations*, 7(1): 45-58.
- Oladele O & Ibe A (2020). Understanding the Beliefs and Knowledge of Traditional Birth Attendants in Nigeria: Implications for Maternal Health Policies. *African Journal of Reproductive Medicine*, 18(3): 150-165.

- Perez M, Rowen T, Prata N & Passano P (2018). Evaluation of a traditional birth attendant training programme in Bangladesh' *Midwifery Online* at: <http://bixby.berkeley.edu/wpcontent/uploads/2017/06/Evaluation-of-a-TBA-training-program-in-Bangladesh-6.09.pdf>
- Population Statistics Charts Map and Location (2024). Southern Ijaw (Local Government Area, Nigeria) -. Citypopulation.de. Retrieved 2024-01-30.
- Prata N, Passano P, Rowen T, Bell S, Walsh J, Potts M (2018). Where there are (few) skilled birth attendants. *Journal of Health Population and Nutrition*, 29(2): 81-91.
- Safe JA (2019). *Ripoti Fupri Inayohusu Wakungawa Jadikwa Wizaraya Afya*. Ghana 2018.
- Save the Children (2018). State of the World's Mothers 2017: Saving the Lives of Mothers and Newborns (Connecticut, Save the Children).
- Sibley L & Sipe T (2017). Transition to Skilled Birth Attendance: Is there a future role for trained Traditional Birth Attendants? *Journal of Health, Population and Nutrition, suppl. Special Issue on Reproductive and Newborn Health*, 24(4): 472-478
- Suleiman HU & Adaji SE (2019). Integration of traditional birth attendants (TBAs) into the health sector for improving maternal health in Nigeria. *Systematic Review*, 6(2): 55-62
- Titaley OO, Awotunde AA, Adesina OAA, Fehintola D (2017). Determinants of utilisation of traditional birth attendant services by pregnant women in Ogbomoso, Nigeria. *International Journal of Reproductive, Contraceptive and Obstetric*, 6 (2017): 2684. <https://doi.org/10.18203/2320-1770.ijrcog20172894> .
- Tsui AO, Wasserheit JN, Haaga JG (2022). *Reproductive health in developing countries: Expanding dimensions, building solutions*. Washington DC
- Uche OA (2020). Factors Associated with the Utilization of Traditional Birth Attendants (TBAs) among Pregnant Women in Nigerian Rural Communities, *International Journal of Research in Arts and Social Sciences* 13, 1-15.
- Waite G (2020). Traditional medicine and the Quest for National identity in Zimbabwe, *Zambia, 2000, xxxvII (ii)*
- WHO (2018). Care of the umbilical cord: A Review of the evidence (Geneva, Division of Reproductive Health, World Health Organization).\
- World Health Organization (2016). *The world health report: make every mother and child count*. Geneva: WHO online at http://www.who.int/whr/2005/whr2005_en.pdf
- World Health Organization, International Confederation of Midwives, & International Federation of Gynecology and Obstetrics (2016). Making pregnancy safer: The critical role of the skilled attendant. *Bulletin of the World Health Organization*. Geneva: 2004. <http://apps.who.int/iris/bitstream/10665/42955/1/9241591692.pdf>

World Health Organization.(2020). *Sixty-second world health assembly*.Retrieved from <http://www.who.int/mediacentre/events/2020/wha62/en/index.html>

Yusuf S, & Ahmed R (2021).Perceptions and Practices of Traditional Birth Attendance in Urban Nigeria. *Journal of Health and Social Sciences*, 8(3): 130-145.

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