Umbilical Cord Care Practices by Traditional Birth Attendants in Yenagoa, Nigeria

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Abstract: Infection-related neonatal mortality due to omphalitis is common in developing countries where home deliveries take place and this has become an important public health problem. This study seeks to determine how Traditional Birth Attendants care (TBA) for the umbilical cord, as this knowledge will help broaden our view to the important role these rural women play in health care delivery. A qualitative study design of 31 traditional birth attendants was conducted in Yenagoa Local Government Area, Bayelsa State, Nigeria. Data were collected through focus group discussions (FGDs), and analyzed using thematic analysis. Results show that, only few trained TBAs saw the need to wash their hand before after cord care, razor blade is mostly used to cut the cord while black thread and peg is commonly used to tie/clamp the umbilical cord. In cases of emergency, rope from sac bag (commonly known as "Garri Bag") is used to tie the cord. This study also reveals that mostly used by TBAs for cord care are methylated spirit, and local herbs. The risks associated with harmful cord care practices remain real in our communities. Therefore, there is need for a wider coverage of TBA education, to discourage harmful cord care practices while encouraging beneficial ones. **Keywords:** Umbilical cord, Care, Practice, Traditional Birth Attendants.

I. Introduction

Infection-related neonatal mortality due to omphalitis is common in developing countries where home deliveries takes place and it has become an important public health problem ^[1, 2]. Newborn cord care practices may directly contribute to infections, which account for a large proportion of the 4 million annual global neonatal deaths ^[3].

In developing countries, infections of the umbilical cord constitute a major cause of neonatal morbidity and therefore pose a significant risk for mortality. Umbilical cord infections in developing countries can be prevented through increasing access to tetanus toxoid immunization during pregnancy, promoting clean cord care and reducing harmful cord applications and behaviors ^[4].

On the contrary, a study in Benin City, Nigeria, reveals that, practices such as the use of hot compress (that is, the use of a piece of cloth soaked in hot water to massage the cord stump); use of herbs e.g. leaves locally known as "Ocimum gratissimum", native chalk, petroleum jelly, palm oil, toothpaste, salt, sand and saliva are harmful traditional practice normally use for care of the umbilical cord while materials used in tying the cord were mainly thread and sterile plastic clamp ^[5]. In Borno State, a study has it that the traditional practices of cord care in this area include application of hot fermentation (31.5%), use of rag and lantern (19.5%), use of Vaseline (9.5%), ash/charcoal (9.3%), groundnut/palm, mangrove oil (8.3%) use of powder (6.5%) and red sand (3.5%). These practices are often harmful, because these substances are often contaminated with bacteria and spores, thus increasing the risk of infection ^[6].

Childbirth and umbilical cord care often varied through boundaries on traditional, cultural or superstitious beliefs ^[7,8]; in Benin City mothers may beliefs more in traditional cord care practices hence their low use of methylated spirit as a sole agent in the care of their babies' cord stump ^[5].

In Ibadan, a study conducted at the Infants' Welfare Clinic of the Institute of Child Health, College of Medicine, University College Hospital shows the relationship between the gender and the time of cord separation, result reveals that, among infants, male had a mean of 8.1 days while female had a mean of 8.7 days ^[7]. Empirical research by health care researchers has established the awareness on need for good practice and effective care for the umbilical cord, such as; clean cord cutting, hand-washing before and after handling the baby, bathing of the infant with antimicrobial agents and application of antimicrobials to the cord ^[4]. In a study, majority of the mothers (86.9%) practiced hand washing before cord care while (89.3%) washed their hands after cord care - a practice that must be encouraged ^[5].

The objectives of this study is to determine how Traditional Birth Attendants (TBA) in Yenagoa Local Government Area (LGA) care for the umbilical cord. Although, there had been similar studies on umbilical cord care done in both developed and developing countries; including Nigeria, there has not been any empirical study up to the time of this study that the researchers are aware of, on Umbilical Cord Care Practices by

Traditional Birth Attendants in Yenagoa LGA. By exploring this gap, this study seeks to clearly understand how Traditional Birth Attendants care for the umbilical cord, as this knowledge will help broaden our view to the important role these rural women play in health care delivery, and it will serve as empirical evidence to enhance better training of traditional birth attendants, aiming at reducing fetal and maternal mortality. The researchers have observed that, care of umbilical cord is a common practice by traditional birth attendants; and lots of concerns are awaken on whom is caring for the cord and how soon it falls off. Therefore, the question is, how do TBAs care for the umbilical cord in Yenagoa LGA?

II. Methodology

3.1 Research Design

A qualitative research design, was adopted since data will be collected through discussion with the traditional birth attendants.

3.2 Description of Study Area

The study was conducted at Yenagoa, Bayelsa State. Yenagoa is a metropolitan town and the head quarter of Bayelsa State. Yenagoa Local Government Area is made of made up of three different districts namely: Epie/Attissa, Okodia/Biseni/Zarama and Gbarian/Ekpetiama.

3.3 Target Population

The target population for the study population comprised only traditional birth attendants resident in Yenagoa Local Government Area.

3.4 Sampling Technique and Sample Size

A convenient sampling technique was used and a total of 31 traditional birth attendants were used for this study.

3.4.1 Inclusion criteria:

- 1. TBAs must be a mother
- 2. Must have been practicing for more than 10 years
- 3. Must be a resident in the Community

3.4.2 Selection of interviewees

Participants for each FGD were selected based on the inclusion criteria. We included TBAs who are both indigenes and non-indigenes residing at the different communities. The Community leaders were informed of the study objectives and participant inclusion criteria, and we requested they help us identify the participants in advance. Ten to eleven TBAs were selected for FGDs from each clan (a total of 31 TBAs took part in the FGD).

3.5 Instrument for Data Collection

Instrument for data collection was a self-structured interview guide intended to guide the Focus Group Discussion (FGD) of traditional birth attendants.

3.6 Data Analysis

Data collected from participants were based on their experiences on how they practice umbilical cord care, what happens if there are complication and if they offer any service during prenatal period. The responses from the FGDs were interpreted by a native of the community, transcribed and typed into a Microsoft Word program on a computer. Key phrases were identified, coded and categorized.

III. Findings of the Study

The Focus Group Discussion was conducted with a total of 31 TBAs, area identified where: Acquired Skills, Hygienic practice, Referral and Care for the umbilical cord.

1.1. TBAs Skills

In these communities, majority of traditional birth attendants acquired their skills as gifts from God. Some reported that they started this practice as early as 5 years of age while other says they know this is their area of "calling" because they receive directions and instruction through dreams. Age unknown mother has this to say.

"I used to see my father in the dream showing me the leaves that could be used to treat women body, and women and children crying and following me in the dream, that is how I know I was called to do this work", in confirmation, she added that, "...and when women that had problem come to me; I take care of the woman without problems, after I touch her body".

In another FGD, an elderly woman said,

"My mother and other women were doing this work, and I love the way they took care of women. So I got interested and started learning it. I did not go to school so this is what I have being managing to feed myself my children.

1.2 Hygiene Practice

3.2.1 Emergency Situation

Majority of participant says that, they do not wash their hands either before or after care because must time pregnant women come at night as emergency, when the baby is almost out at the time of their arrival. While very few women, particularly those that are trained TBAs, says they do wash their hands before and after care.

A 52 year old woman says that,

"When they train us, they told us to wash our hands whether it is emergency or not, that if we don't wash our hand before we take care of woman or the child, they might be infected and disease might occur, and we can also be infected from a sickness the woman is carrying, so I started washing my hand".

Another woman (55 years) says that;

"[During Delivery] I don't wash my hands, because after I deliver the woman, the next thing is to cut the cord. It is after I have finished taking care of both mother and child that I wash my hands".

1.3 Prenatal Service

All participants agreed that they don't carry out any routine form of prenatal/antenatal care and service, although most women come to them complaining of one issue or the other, and in those complain comes, they attend to women the best way they know how to.

A 57 year old mother, trained traditional birth attendant says;

"after they come and train me, they give injection for tetanus, say it's good for women that are pregnant before she delivers; so me I have the TT injection, because them teach me how to give injection. But sometimes other women don't like the injection, and they request for native medicine".

The others "not trained traditional midwives" says they do attend to any pregnant woman that comes to them, depending on the problem they come with. Which covers care such as; massage, relieving the tightness of the womb as to allow room for the child to turn frequently, for telling the sex of the baby, positioning the baby. One participant mentioned that,

"Most women come because they prefer our medicine, and the way we take care them before they deliver, they like it".

1.4 Care of the Umbilical Cord

3.4.1 Cutting the Umbilical Cord

Razor blade is used to cut the umbilical cord, while the few trained TBAs said they have and use surgical blades

A 58 year old Trained TBAs commented that;

"I used surgical blade".

Claiming that; they were given to her by health worker, she added that,

"...sometimes, they'll call me to come and work with them, and after working, they'll give me some materials to go home with, including surgical blade"

3.4.2 Tying/Clamping of the Umbilical Cord

After cutting the cord, black thread or Peg were mentioned by majority of the TBAs, as what they normally use to tie or clamp the umbilical cord but if there is no black thread or peg, strands of rope from sac bag is used as described by one of the participant.

A 64 year old grandmother said,

"We use black thread, but sometimes some women come at midnight and all stores where black thread is sold are close; no where to buy anything. When the woman delivers; we improvise by using rope from [garri bag], and change it to black thread in the morning".

Another participant age 59 year old noted that,

"...they don't just cut the cord but there are techniques applied to cutting the cord..."

In her description, she outlined three areas considered important, such as;

First, if the placenta is delivered with the newborn; she said,

"...we don't just cut the umbilical cord when the baby is delivered together with the placenta; we watch the breathing of the child through the placenta and know the time to cut it...".

Secondly, if the newborn is delivered alone and still attached to the placenta,

"...we will first tie the cord at two places before cutting it, because if we do not, the cord will retract into the woman's abdomen and kill her".

While another participant (Age Unknown, Mother) noted that,

"in this case we'll tie the cord attached to the placenta and wrap it around the mothers' leg and take care of the baby first",

3.4.3 Treating and Dressing the Umbilical Cord

For majority of TBAs in all FDGs, Care of the umbilical cord is given from time of delivery until the cord falls off, while in terms of dressing the umbilical cord, most TBAs says; nothing much is done apart from covering it with the baby's pampers.

Responses from the participants show that:

A 68 year old untrained midwife says;

"Nothing is done on the first day, but for the second day; the umbilical cord is taken care of after the bath of the newborn".

She further explained that,

"I used dusting powder and methylated spirit, twice a day until the cord falls off. After the care, the cord is tucked inside the baby's pampers without bandage".

All participants agreed that, dressings should be done. One TBA expressed it this way;

"If we don't cover it, air will enter the novel (especially when the cord has fallen off), and brings sickness.

Although, all participants agreed to the use of methylated spirit, methelaton (normally called "Rob"), hot water; they added that, some native remedies could also be used [which majority of the participants refused to name]. Meanwhile, a midwife (Age Unknown) said,

"I normally use a local herb, mixed with white ash and salt, we use the tip of fowl feather to touch the mixture and apply it at the cord stump", she named it as "Biokpokpa".

And caution is always applied to the use of "Biokpokpa". She gave the reason of the caution to the use of this herbal mixture as;

"Because it make the cord falls off faster. And when I use this medicine, I don't use spirit".

While another midwife added that; a leave called "never die" is used, she said,

"...but I don't like using it, because it causes the umbilical cord to smell and does not keep it dry; so I prefer using methylated spirit", she said.

3.4.4 Treatment for infectious umbilical cord

TBAs in the various discussion groups have established the fact that rural women prefer being treated with local herbal remedies. All TBAs agreed that they know how to cure infected umbilical cord, by using different plants, roots, stems and making a mixture.

One 64 year old woman said she uses (Oxalis Camiculata), locally called "Ofunguru beri", for treating infected umbilical cord.

"You see this medicine [Ofunguru beri], I use it to treat any child with umbilical cord infections, and it work perfectly well for me".

Another woman said she uses (Centellia Astiatica), locally called "Ombusa-diri", is also used for infected cord treatment.

3.4.5 Separation of the Umbilical Cord

For those who have some of the local remedies, they said, the reasons for the use of these remedies were associated to early fall off of the umbilical cord, which majority gave as; three days for a baby boy and four days for a baby girl.

1.5 Referral

According to the participant in all FGDs, it was expressed that referral was made to all cases including umbilical cord care, that they are not able to manage.

A mother (unknown age) expressed that;

"You see many people go do some things they know they cannot handle, but if I see those kind cases; I send them to hospital immediately".

Another TBA said;

"When women comes, I use my hand check them...", she added in a laughing tone saying; "...my hands is my scanning device. Seriously she said; "as I check and see that the woman has a problem that I cannot treat, I advice them to go to the health center or hospital".

IV. Discussion of Findings

This study adopted Focus Group Discussion method and the following areas were identified. There areas are: how TBAs acquire their skills, Hygiene practices, care for the umbilical cord and Referral.

This study revealed that traditional birth attendant do not offer routine antenatal care for pregnant women, but only do so if the woman comes for any service. The services offered by traditional birth attendant are; massage, positioning of the fetus, freeing the womb (if it is too tight during pregnancy), herbal treatment. Majority agreed that they don't give tetanus toxoid (TT) during pregnancy, while few trained TBAs said, they do give tetanus toxoid vaccine if the client is comfortable with it. The importance of this was reported in a study stating that, umbilical cord infections in developing countries can be prevented through increasing access to tetanus toxoid immunization during pregnancy^[4]. Also, this study revealed that, most women prefer local remedies. This is in line with a study conducted in Benin City, where mothers' beliefs more in traditional cord care practices hence there is a low use of methylated spirit as a sole agent in the care of their babies' cord stump ^[5]. Regarding the practice of hand washing before and after handling of the umbilical cord, very few TBAs of participants agreed to always maintain hand washing practice before and after cord care. Contrary to our study, a study shows that, majority of the mothers (86.9%) practiced hand washing before cord care while (89.3%) washed their hands after cord care - a practice that must be encouraged ^[4]. Our study shows that black thread was the most used materials used to tie the cord, but in cases where the black thread is not available; ropes from sac bag (popularly known as "garri bag"), while razor blade is used by all participant to cut the cord. This is in line with a study which stated that materials used in tying the cord were mainly thread and sterile plastic clamp ^[4]. Our study reveals that mostly used by TBAs for cord care are methylated spirit, dusting powder, hot water and local herbs. Supported by a study conducted in Borno State, revealed that traditional practices of cord care in this area include application of hot fermentation, use of rag, Vaseline, ash/charcoal, and use of powder ^[6], while in Benin City, a similar study shows that use of methylated spirit, and local herbs are used for the umbilical cord care ^[4]. In cases of umbilical cord infection, herbal remedies used by TBAs in Yenagoa are: Oxalis Camiculata, locally called "Ofunguru beri", and Centellia Astiatica, locally called "Ombusa-diri", This findings of this study also indicated that, referrals to health centers or hospitals are made when the health issues on ground are technically above their knowledge.

V. Conclusion

The risks associated with harmful cord care practices remain real in our communities. This study has shown that most TBAs practices are harmful, because materials or substances used are often contaminated, thus increasing the risk of infection. Therefore, there is need for a wider coverage of TBA education, to discourage harmful cord care practices while ensuring healthy practices. interventions to increase hygienic care of the cord should include, promoting hand washing practices, cord cutting with clean instruments, avoiding unclean use of home materials to the cord, avoiding harmful topical applications, and topical cord antisepsis, avoid use of herbal products that are not recommended.

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