



Perceptions of Obstetric Caregivers on Non-Pharmacological Analgesia use in Childbearing: A Qualitative Study

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Abstract

Childbirth is one of the most painful events that a woman is likely to experience, the multidimensional aspect and intensity of which far exceeds disease conditions. The study sought to gain an insight into the perceptions of obstetric care givers on non- pharmacological obstetric analgesia. A qualitative research design was adopted for this study which utilised an interview guide to conduct 8 key informant interviews with obstetric care givers. Interview sessions were recorded and the audio was transcribed and analysed using content analysis. The findings from this study revealed a common approach of obstetric care givers in being restrictive towards utilisation of non- pharmacological analgesia due to barriers such as time constraints, non-availability and non-accessibility of non-pharmacological obstetric analgesia, lack of manpower and ignorance of the childbearing women. However, majority expressed positive attitude to help mothers to cope with labour pain through psychological care, deep breathing exercises and massage. The study therefore concludes that adequate staffing, availability and accessibility to obstetric analgesia, training of staff on obstetric analgesia, adequate finance and promotion of awareness on non- pharmacological obstetric analgesia through antenatal classes should be ensured to enhance the management of labour pains by obstetric care givers.

Keywords: *Labour pain; Analgesia; Qualitative research; Non-pharmacological; Nigeria*

Introduction

Childbirth is one of the most painful events that a woman is likely to experience, the multidimensional aspect and intensity of which far exceeds disease conditions. With the advance in health care delivery, obstetric analgesia is now routinely administered in most developed countries; however, in developing countries including Nigeria, childbirth is still a painful natural process for most women (Iliyasu, Galadanci, Abubakar, Isah & Aliyu, 2012).

The perception of pain is influenced by an array of factors including the woman's culture, ethnicity, pain threshold, level of education, environment, preparation for childbirth, previous pain experiences and her support systems (Iliyasu *et al.*, 2012; Dutta, 2014). It is impossible to change a woman's culture, ethnicity, pain threshold or previous experiences with pain, but health care workers can educate and prepare the childbearing women to cope with the pain (Cochrane, 2016).

Although pain during childbirth is viewed as a normal process without any threats to a woman's life, some women may desire non-pharmacological obstetric analgesia for labour pain relief. The individual qualities of obstetric caregivers (midwives and obstetricians), including their years of professional experiences as well as the number of deliveries conducted, may influence labour pain assessment and the method employed in managing labour pain. According to Aziato, Kyei and Deku (2017), it is believed that the estimation of labour pain is lower when an obstetric caregiver has many years of work experience and in the case where an obstetric care giver had a lot of personal childbirth experience, her estimation of labour pain is higher. Thus, midwives must always remember the pain as an individual phenomenon and employ multidimensional assessment methods for labour pain and manage each woman as an individual (Aziato, Kyei & Deku, 2017; Almushait & Ghani, 2014).

In Nigeria, Iliyasu *et al.*, (2012), stated that it is a common myth that labour pain is a significant factor in the empowerment of women and in their relationship with their newborn babies. This concept is in line with a specific cultural and religious perception among Nigerian obstetric caregivers that is connected with the concept of natural childbirth. Labour Pain is the only circumstance in which it is considered acceptable for a person to experience untreated severe pain even while under a physician's care (Iliyasu *et al.*, 2012).

Therefore, two distinct approaches to labour pain management seemed to be adopted by health professionals. The first is the "working with pain approach", which involves providing women with support to help them cope with labour pain (Pilewska-Kozak *et al.*, 2017). The second is the "pain relief" approach, which involves offering pharmacological or non-pharmacological management to women in labour in order to

minimize labour pain. (Pilewska-Kozak, *et al.*, 2017; Klomp *et al.*, 2016; Tasnim, 2010).

The commonly used non-pharmacological approaches are deep breathing exercises, positioning and relaxation techniques which are particularly useful in early labour because they provide comfort and diversion of attention from the pain (Iliyasu *et al.*, 2012). Other methods include; hypnosis, massage, aromatherapy, praises, therapeutic touch, prayers, acupuncture, acupressure, transcutaneous electric nerve stimulation (TENS) as well as explaining or informing women of labour progress (Aziato *et al.*, 2017; Turan, Öztürk & Kaya, 2010; Cyna, McAuliff & Andrew, 2012; Dowswell *et al.*, 2009; Kaviani *et al.*, 2014).

It is noted that insufficient obstetric caregivers' support during labour could result in negative childbirth experiences for women (Aziato *et al.*, 2017). Certain factors such as shortage of health staff, inadequate resources, and stressful work setting increase midwives' workload and subsequently reduce the time staff allocates for pain management (Aziato *et al.*, 2017; Turan *et al.*, 2010; Abelas, 2011; Hyatt, Lange, & Diegmann, 2017). In spite of all these challenges, education of midwives can improve management of exceed pain (Aziato *et al.*, 2017; Turan *et al.*, 2010).

In Nigeria, previous researches in this area were limited and did not deal specifically with obstetric caregivers' perceptions and experiences on labour pain management, but centred on the childbirth experiences, knowledge and desire for pain relief of Nigerian women (Iliyasu *et al.*, 2012; Anarado *et al.*, 2015; Okeke, *et al.*, 2005, Olayemi *et al.*, 2003; Audu *et al.*, 2009). Therefore, the study sought to gain an insight into the perceptions of caregivers on non-pharmacological obstetric analgesia in a Nigerian hospital setting.

Methods and Materials

A descriptive exploratory qualitative research design was adopted for this study so as to

obtain an in-depth insight into the perceptions and experiences of the obstetric caregivers. The study utilised a semi-structured interview guide to conduct 8 key informant interviews with obstetric caregivers (4 Midwives and 4 Obstetricians) who attended to the women during labour at Aminu Kano Teaching Hospital and were selected using purposive sampling method.

Study Setting

This study was conducted at the labour ward of Aminu Kano Teaching Hospital, Kano, Nigeria.

Instrument

The interview guide encompassed questions and probes targeted at eliciting responses centred on the utilisation of non-pharmacological analgesia in AKTH. A structured interview guide was used to collect data from key informants who include doctors and midwives attending to women who deliver at AKTH. Demographic characteristics that were collected from respondents included: Age, length of time as an obstetric caregiver, occupation, gender, and education level. The interview questions inquired about the knowledge of non-pharmacological pain relief methods generally being used, specific methods that are being used at their institution, their personal beliefs on these methods, barriers to utilisation and strategies that will improve utilisation. The interviews were audio-recorded in their entirety and transcribed to enhance accuracy. An evaluation of the instrument by four (4) experts (two lecturers of Maternal and child health Nursing as well as two clinicians in the area of obstetrics and gynaecology) in the area of study deemed the instrument valid.

Ethical Consideration

Ethical approval with reference number NHREC/21/08/AKTH/EC/1785 was granted

by the Research Ethics Committee of Aminu Kano Teaching Hospital.

Study Population

The study population included 8 obstetric caregivers (4 obstetricians and 4 midwives). The purposive sample was made up of respondents who are 18 years of age or older and full-time employees at AKTH. All participation was voluntary. Respondents were recruited using purposive sampling, based on eligibility criteria, which include not less than five years of experience, occupation (Midwives and Obstetricians only) and interest to participate.

Data Collection and Analysis

The duration of data collection was from September 2018 to December 2018. The interviews were conducted during a convenient time decided on with each respondent. The researcher asked five main open-ended questions during the interview but the respondent responses guided the discussion.

A tape recorder was used to record the interview sessions which lasted between 45 minutes to 1 hour and the responses were transcribed by the researcher and then manually analysed using thematic analysis. The researcher organized and elicited meaning from the data collected by initially reading through the transcript and making brief notes on the margins when an interesting or relevant information is found, then making a list of all the information outlined in the margin. The researcher categorized these outlined information into themes (Major themes and minor themes) and merged those themes that are similar. This was done for all the 8 transcripts, after which each of the themes was examined in detail and considered for fitness and relevance.

Results

Table 1: Bio-Demographic Data

Variables	MW- 1	MW- 2	MW- 3	MW- 4	OB- 1	OB- 2	OB- 3	OB- 4
Age (years)	48	50	36	35	49	35	40	44
Gender	Female	Female	Female	Female	Male	Female	Male	Female
Educational Qualification.	Tertiary RN & RM	Tertiary (MBBS)	Tertiary (MBBS)	Tertiary (MBBS)	Tertiary (MBBS)			
Occupation	Midwife	Midwife	Midwife	Midwife	Doctor	Doctor	Doctor	Doctor
Length of time as an obstetric care giver	26	28	10	12	20	8	14	20

Table 1 indicated that the key informants are aged between 35-50years and half of them have more than 20years experience as the staff of the O & G department of the Aminu Kano Teaching Hospital.

The responses from key informants were coded and analysed and the following themes emerged from the analysis:

Non-Pharmacological Pain Relief Methods

When asked about knowledge on obstetric analgesia, majority of the midwives stated that they received most of their education from midwifery school course work and other continuing education conferences. While, some of the obstetricians stated that their knowledge on non- pharmacological pain relief was obtained through a pain management seminar organized by the American Cancer Association. Excerpts of their responses are stated below;

“I got the information on non-drug methods of pain relief in labour from post-basic midwifery school and also from an in-house lecture I attended at AKTH” (Midwife 2).

“My knowledge on non-pharmacological obstetric analgesia was obtained from a pain relief seminar I attended at AKTH” (Obstetrician2).

The non-pharmacological methods used most frequently at AKTH were similar between all the respondents. They cited deep breathing exercises, relaxation techniques, reassurance,

massage, and therapeutic touch as the main methods they use for pain relief. The sub-themes identified were psychological care, massage, and deep breathing exercises.

Psychological Care

The midwives believed that reassuring and conversing with the women during labour, distracts the childbearing women from their pain and gives them confidence. Excerpts of their responses are stated below;

“I tell them ‘with the help of God, it will be all right and everything will be successful’. She should just keep praying” (Midwife1);

“I tell her to calm down and I reassure her that in a few minutes she will be holding her baby and all the pain would be gone ” (MW2).

Other midwives explained the nature and rationale of labour pain and also inform the woman of her progress throughout the labour process, this prepared their minds for the pain to come. Excerpts of their responses are stated below;

“I inform the woman that she is fully dilated, the head of her baby is visible at the perineum..... This usually motivates some women who were reluctant to push” (MW 4)

“We encourage the woman saying “there, touch your baby’s hair, you need just one or two more pushes” ... then she will say. “Really! The head is there” then she will

touch with her hand... then the woman will push” (MW3).

Massage

Some midwives massaged the sacral region of the women to relieve them of labour pain. Excerpts of their responses are stated below;

“When they get the contractions, I ...give a sacral massage and in instances, I am overwhelmed by many patients, I teach the women how to rub the back to relieve their labour pain” (MW 2)

Deep Breathing

Some midwives admitted that during labour pain, they encouraged the women to deeply breathe in and out. They were of the view that breathing through the mouth would supply more oxygen to the foetus. Excerpts of their responses are stated below;

“We encourage them to open their mouths and take deep breaths in and out. Some of them comply but others don’t” (MW4).

“We advise them to avoid shouting and screaming and conserve their energy for the actual pushing” (MW1).

When asked, the obstetricians explained that they play very little role in providing non-pharmacological pain relief but rather they prefer to use pharmacological pain relief. Excerpts of their responses are stated below;

“Most of these non-pharmacological analgesia are not as effective as the pharmacological, so, I personally do not offer them to patients but rather I prefer to prescribe a mild to moderate opioid or non-opioid analgesic depending on the severity of the pain”.(Obstetrician 4)

Pharmacological Pain Relief Methods

This theme describes different pain control methods used by obstetric caregivers in the management of labour pain. Most of the obstetricians stated that both opioids and non-opioids pharmacological agents such as

Pethidine, Phenergan, Diclofenac, Buscopan, Midazolam, Ketamine, Xylocaine 1% and Tramadol were used to manage labour pain. While, the midwives affirmed that they prefer to use non- pharmacological methods of analgesia because they have little or no side effect. Excerpts of their responses are stated below;

“We prescribe Pethidine or Diclofenac in situations of serious pains, just to provide some relief for the labouring woman” (Obstetrician 2).

“Epidural Analgesia is been utilised for patients who can afford it, but it is not very commonly used especially in this setting” (Obstetrician 1)

“Honestly, we concentrate on non- drug method because they have little or no side effect, ...we only use drugs when they are prescribed by the doctor” (MW2).

“The Doctors prefer to use drugs to treat pain while we the midwives prefer non-pharmacological methods to manage pain” (MW1)

Personal Beliefs on Non-Pharmacological Pain Relief Methods

Obstetric caregivers whose approach was to help women “work with pain” described childbirth as a natural biological process. They believed that certain hormones are released during labour which allows women to manage labour pain without the need of pharmacological pain management. Excerpts of their responses are stated below;

“I personally believe that labour pain is an indispensable part of the labour process The body releases endorphins which influences the awareness of pain, so, with the help of the midwives women can work with the pain without the need for pharmacological interventions whose side effects sometimes outweigh their benefits” (MW 4).

While those that adopted the “pain relief” approach supported their argument with the fact that non-pharmacological treatments are not as effective as pharmacological treatment and that they should not be used as a substitute for pharmacological treatment but rather as a complement to them. Excerpts of their responses are stated below;

“Women have the right to be absolutely relieved from pain, which is what pharmacological pain relief does. In my opinion, non-pharmacological methods should complement, not replace, pharmacological treatments” (Obstetrician 2)

“Do not assume that all non-pharmacological treatments are safe, some have contraindications, just because natural remedies, such as herbs, have been around for a long time does not mean that they work or that they are harmless” (Obstetrician 3)

Barriers that Hinder the Utilisation of Non-Pharmacological Pain Relief Methods

Non-availability and non-accessibility to obstetric analgesia, time constraints, lack of continuous training and retraining of the staff on these non-pharmacological methods, lack of finance, lack of manpower and ignorance of the childbearing women are some of the barriers to utilisation of non-pharmacological obstetric analgesia identified by the key informants. Excerpts of their responses are stated below;

“...what stops us from utilizing non-pharmacological methods is mostly lack of time, sometimes, you have 3 to 4 patients all in need of urgent care, that hinders us from suggesting or offering these services to the women that are interested” (MW 3)

“From my experience, what I have to say that lack of knowledge on both the part of the women and the health staff on these methods is the most important factor obstructing the use of these non-drug methods. But I assure you that, it is a welcomed idea” (Obstetrician 4)

Strategies to Improve Utilisation of Non-Pharmacological Pain Relief Methods

The Key Informants stated that availability and accessibility to obstetric analgesia, training of staff on obstetric analgesia, adequate finance, improved manpower and promotion of awareness on non-pharmacological obstetric analgesia through antenatal classes are some of the strategies that could improve utilisation of non-pharmacological obstetric analgesia. Excerpts of their responses are stated below;

“The first strategy that will improve utilisation will be to educate the women on these non-pharmacological pain relief in labour since they are the consumers; secondly, hospitals should be adequately financed so that they make these products and services obtainable and easily reached by the general public” (MW 3).

“Improving the availability and accessibility of this non-drug products and services will go a long way in improving utilisation. Also ensuring manpower training will help improve utilisation” (Obstetrician 2).

Discussion

The findings from this study revealed a common attitude of obstetric caregivers in being restrictive towards utilisation of non-pharmacological analgesia for normal labour. However, the majority expressed a positive attitude to help mothers to cope with labour pain through psychological care, deep breathing exercises, and massage. These findings are similar to (Aziato *et al.*, 2017) which stated that non-pharmacological care provided by midwives were inadequate due to increased workload and although some of the midwives showed empathy towards women and supported the women, most of the midwives perceived labour pain as normal and encouraged women to bear the pain. Other studies that support the findings are Klomp *et al.*, (2016); Tasnim (2010); Pilewska-Kozak *et al.*, (2017).

Recently, there has been a notable rise in the use of pharmacological birth pain relief (Tasnim, 2010) and such medical management during natural birth carries a lot of risks like drowsiness, changes in heart rate breathing problems and reduced muscle tone for childbearing women and their child. As such, non-pharmacological methods of pain relief are increasingly being appreciated by both the obstetric caregivers and childbearing women (Pilewska-Kozak *et al.*, 2017). This study revealed that the obstetricians favoured towards pharmacological pain relief rather than non-pharmacological, reason been that they felt they have a very little role to play in the utilisation of non-pharmacological obstetric analgesia. This trend was observed in similar researches conducted on non-pharmacological pain relief methods (Pilewska-Kozak *et al.*, 2017; Klomp *et al.*, 2016; Tasnim, 2010). The tendency toward using non-pharmacological methods during labour is becoming so popular that some countries like Ghana consider including the training about the application of these methods in the educational courses of midwifery students (Kaviani *et al.*, 2014; Pilewska-Kozak *et al.*, 2017).

The study revealed that majority of the midwives were of the opinion that the childbearing women should be aided to “work with the pain” as they believed that hormone released during labour does alleviate pain. While, the majority of the obstetricians opined that the “pain relief” approach is best, supporting their argument with the fact that non-pharmacological treatments are not as effective as pharmacological treatment. These findings are similar to the studies conducted by Cochrane (2016), Aziato *et al.*, (2017) and Klomp *et al.*, (2016), which stated that some of the midwives showed empathy towards women and supported the women while most of the midwives perceived labour pain as normal and encouraged women to bear pain.

The findings indicated that an overwhelming majority of the key informants mentioned that non-availability and lack of accessibility to

hospitals that provide non-pharmacological obstetric analgesia, time constraints, lack of continuous training and retraining of the staff on these non-pharmacological methods, lack of finance, lack of manpower and ignorance of the women are some of the barriers to utilisation of non-pharmacological obstetric analgesia. They stated that tackling these issues will be the solution to improving utilisation of non-pharmacological obstetric analgesia. This is similar to findings of studies conducted by Hyatt *et al.*, (2017), Cochrane (2016) and Almushait & Ghani, (2014), which stated that in order to provide patients with options for non-pharmacological methods for pain relief, health care workers need to be educated on the various methods available and the latest evidence-based practice, and there need to be recruitment of more manpower and education of the women on these methods of pain relief.

Strengths and Limitations

The major strength of the study is that the qualitative research design enabled researchers to obtain in-depth information from key informants by using probes targeted at eliciting responses on findings identified. Literature at the time of this study suggests that this is the first study to evaluate the perceptions of obstetric caregivers in Nigeria regarding the management of labour pain.

Although this study had a small sample size, it was adequate for the descriptive qualitative nature of the study, but the ability to generalize the results is limited because there were only eight respondents. Also, this study did not employ clinical observation of the obstetric caregivers to triangulate their experiences and using just an interview guide might not have elicited the underlying factors, thus a combination of other qualitative techniques might improve salient information. Future research should compare labour pain management at different levels of the health care delivery system including private and government own facilities. This will provide evidence to institute context appropriate interventions for labour pain management.

Also, other qualitative techniques should be used and the viewpoint of the women regarding support versus non-support of non-pharmacological pain relief will provide an insight on the need for and the willingness of the women to accept these methods.

Conclusion

Although childbearing women have a say in the care they receive, and hospitals have control over available resources and policies; the obstetric caregivers have the greatest effect on utilisation of non-pharmacological methods. Therefore, the findings highlight the need for adequate staffing, availability, and accessibility to obstetric analgesia, training of staff on obstetric analgesia, adequate finance and promotion of awareness on non-pharmacological obstetric analgesia. These

can be achieved through educating pregnant women during antenatal classes and caregiver during workshops and seminars to enhance labour pain management effectively.

Recommendation

The study recommends that women are involved in the decision making process regarding all aspects of childbirth, including options for pain management and also, provision of information, education, and communication for the women and provision of equipment/supplies and provision of a wide range of choices of methods of obstetric analgesia in this and similar settings.

Conflict of Interest

We do not have any conflicts of interest to disclose.

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