

Perception of Pain in Labour among Parturients in Hajia Gambo Sawaba General Hospital, Zaria

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Abstract: Women responses to pain during child birth might be different. Some women cried, some would shout, while some were observed to be quite, calm and responding to midwives' instructions. The aim of this study was to examine perception of pain and factors influencing pain response among parturients. Study would provide information regarding the needs of women for providing efficient care and support in labour. The study was a descriptive cross-sectional in nature in which 51 questionnaires were distributed to the women, 46 completed were collected, data analyzed and presented in descriptive form. Findings suggest that majority of women experienced mild to moderate pain in labour. Fear of labour and uncomfortable positions were the major factors aggravating labour pain. In order to reduce labour pain most women preferred reassurance, good attitude of midwives and good environmental condition. Therefore, midwives should provide support, encouragement as well as patient-centered care to women in labour.

I. Introduction

Pain in labour is a common experience to women, but its degree and the ability to withstand labour pain varies among women. Robertson (2008) viewed labour pain to be comforting, a bond among women and a special biological role which affirmed their contribution to the society. In Nigeria, it is assumed that labour is well tolerated and pain relief is not often considered as part of intrapartum care (Kuti & Faponle, 2006). The basic source of pain in labour has to do with the action taking place in the cervix and on other surrounding structures due to stretching and tearing. The sources of pain have different quality and are usually there in between contraction to give warning that something needs attention (Andrea, 2008). Severe pain in labour may initiate stress responses which may bring fatigue and difficulty in making efforts to give birth to a baby. However, many young and healthy mothers may cope with the stress of labour.

The perception of pain in labour varies among women in a social, cultural, education and psychological dimensions. Several factors may affect women responses to labour pain, these include the expectation that the labour will be terribly painful, fear of labour process, and unfamiliar environment to mention few (Goodman et al., 2008). In a study by Kuti and Faponle (2006), majority of women describe labour pain as severe and most women preferred pain relieve in labour. Similarly, most American women prepare for birth with the expectation that labour will be a terrible experience (Goodman et al., 2008). Further, the dimension of each woman affects how she perceives the pain of labour.

However, the presence of midwife/friend of the birthing woman to provide support and comfort may help in reducing pain in labour, as a result reduced the need for analgesia (Kitzinger, 2007). In addition, self-control is an important factor that enables women to have a satisfactory birth experience (Kabeyama, 2007).

Review of the literature indicates that there is need to examine the women concerns about labour pain as well as the measures perceived by the women to have influenced their pain responses. This study was aimed at identifying women perception about labour pain, the measures that aggravate labour pain, and the perceived measures that reduced labour pain. The study will provide empirical information that may help midwife in women-centered pain management in labour.

II. Methodology

Research Design

This study was a cross-sectional survey that involves examination of a cross-section of the parturients, aimed at collecting data relevant to the study.

Setting and Population

The study was conducted in Hajija Gambo Sawaba General Hospital located in the southwestern part of Zaria City. The nurses and midwives formed one-third of the work force. Services rendered include treatment of minor illness, maternity services, laboratory services, provision of drugs and surgical

operation. The population of study was women who gave birth (after delivery) in maternity ward of Hajiya Gambo Sawaba General Hospital estimated to be 58 (maternity ward records).

Sample and Sampling Technique

A sample size of 51 respondents was selected in accordance with, the formulae by Yamane 1969. To determine sample size, the formula used is:

$$n = \frac{N}{1+n(e)^2}$$

Where n = sample size
 N = target population
 e = level of precision

$$n = \frac{58}{1+58(0.05)^2}$$
$$n = \frac{58}{1+58(0.0025)}$$
$$n = \frac{58}{1.145} = 51.32$$

Approximately =51

Sampling technique: The population was unstable and some women might leave the hospital, immediately they delivered from the labour room. Accidental sampling technique was used to select those available respondents until the required numbers of respondents (51) were arrived at. The available respondents were those met on bed in the ward for observation after delivery and those who were in the labour room after delivery.

Instrument and Method of Data Collection

The instrument applied was a structured questionnaire. Section A focuses on socio-demographic profile. Section B focuses on pregnancy and birth profile. Perception of labour pain was assessed using a simple descriptive pain intensity scale in section C.

The draft of the questionnaire was presented to midwifery supervisor and peers for content and face validity. Suggestions and corrections were incorporated into final draft.

The questionnaires were distributed to the clients in the ward and labour room who had spontaneous or induced delivery and are willing to answer the questionnaire. The women who delivered by elective or emergency caesarian section were excluded from the study.

Ethical Consideration

The objective of the research was explained to each respondent by the researcher and permission was sought from the in-charge of maternity unit and the respondents. Confidentiality was conferred by using nameless questionnaire and the findings were assured to be used only for the study.

Data Analysis

Descriptive statistical methods were used in which data was analyzed and presented in form of frequency distribution tables and percentages.

III. Results

Socio-demographic data

Results in Table 1 below indicated that majority of the respondents were between the age of 25 and 34 (52%), followed by 15 and 24 years (37%), and 35 and 44 years with 11%. In ethnic distribution, most respondents were Hausa/Fulani (80%) while Yoruba and others constituted 9 and 1.1 % respectively. About 98% of the respondents were married with only one respondent that was a widow. In the area of level of education, most respondents had non-formal education (43%) followed by tertiary education (24%), primary education 92% and secondary education (11%).

Table 1: Distribution of respondents by socio-demographic profile

| a. | Age (years) | Frequency | Percentages |
|-----------|---------------------------|-----------|-------------|
| | 15-24 | 17 | 37 |
| | 25-34 | 24 | 52 |
| | 35-44 | 5 | 11 |
| | 45 and above | 0 | 0 |
| | Total | 46 | 100 |
| b. | Ethnic group | | |
| | Hausa/Fulani | 37 | 80 |
| | Yoruba | 4 | 9 |
| | Igbo | 0 | 0 |
| | Others | 5 | 11 |
| | Total | 46 | 100 |
| c | Marital status | | |
| | Single | 0 | 0 |
| | Married | 45 | 98 |
| | Widow | 1 | 2 |
| | Divorce | 0 | 0 |
| | Total | 46 | 100 |
| d. | Level of education | | |
| | Primary | 10 | 22 |
| | Secondary | 5 | 11 |
| | Tertiary | 11 | 24 |
| | Non-formal | 20 | 43 |
| | Total | 46 | 100 |

Pregnancy/Birth Profile

Majority of the respondents had 3-4 deliveries (35%), followed by those with 5 and above deliveries (26%). Booking status of the respondents indicated that most of the respondents were attending clinic (91%). Distribution by mode of delivery shows that most of the respondents had spontaneous delivery (69%), 20% had assisted delivery, while episiotomy and induction constituted 7% and 4% respectively. About 65% of mothers reported to have baby of medium size, 28% had big babies while only 7% had small babies (A detail is shown in table 2).

Table 2: Distribution of respondents by pregnancy/birth profile

| a. | Number of birth | Frequency | Percentages |
|-----------|---------------------------|-----------|-------------|
| | One | 8 | 17 |
| | Two | 10 | 22 |
| | Three - four | 16 | 35 |
| | Five and above | 12 | 26 |
| | Total | 46 | 100 |
| b. | Booking status | | |
| | Booked | 42 | 91 |
| | Unbooked | 4 | 9 |
| | Total | 46 | 100 |
| c | Mode of delivery | | |
| | Spontaneous | 32 | 69 |
| | Induction | 2 | 4 |
| | Assisted with instrument | 9 | 20 |
| | Episiotomy given | 3 | 7 |
| | Total | 46 | 100 |
| d. | Baby size at birth | | |
| | Small | 3 | 7 |
| | Medium | 30 | 65 |
| | Big | 13 | 28 |
| | Very big | 0 | 0 |
| | Total | 46 | 100 |

Pain Perception Profile

Result in Table 3 shows that most of the respondents (39%) had the expectation that labour pain is mild, while 28% reported that they expected severe pain prior to delivery.

In the area of degree of pain felt by the mothers when they laboured, majority of them said to have experienced mild pain (46%). About thirty seven (37%) respondents reported to have felt moderate pain, 15% said it was severe/terrible while only 2% reported no pain.

Table 3: Distribution of respondents by pain perception

| a. | Expectation about labour pain | Frequency | Percentages |
|----|-------------------------------|-----------|-------------|
| | No pain | 6 | 13 |
| | Mild pain | 18 | 39 |
| | Moderate pain | 9 | 20 |
| | Severe/terrible pain | 13 | 28 |
| | Total | 46 | 100 |
| b. | Degree of pain felt in labour | | |
| | No pain | 1 | 2 |
| | Mild pain | 21 | 46 |
| | Moderate pain | 17 | 37 |
| | Severe/terrible pain | 7 | 15 |
| | Total | 46 | 100 |

Situation/measures that aggravate and reduce labour pain

Majority of the respondents (70%) reported fear of birth process as a situation aggravating pain in labour, 17% reported uncomfortable position while 13% agreed that tiredness/lack of sleep increase pain in labour.

Most of the respondents (46%) agreed that reassurance, good attitude of midwives and good environment were the most important measures to reduce pain in labour. Some women (32%) said that none of the measures can reduce labour pain while 13% would prefer back massaging. Only nine percent (9%) of the respondents recommended the use of drugs to reduce pain in labour (Result is shown in Table 4).

Table 4: Distribution of respondents by situation/measures that aggravate and reduce labour pain

| a. | Situation that aggravate labour pain | Frequency | Percentages |
|----|---------------------------------------|-----------|-------------|
| | Fear of birth process | 32 | 70 |
| | Uncomfortable position | 8 | 17 |
| | Tiredness/lack of sleep | 6 | 13 |
| | Fear of midwives/environment | 0 | 0 |
| | Total | 46 | 100 |
| b. | Measures that can reduce labour pain | | |
| | Reassurance/good attitude/environment | 21 | 46 |
| | Massaging the back | 6 | 13 |
| | Drug | 4 | 9 |
| | None | 15 | 32 |
| | Total | 46 | 100 |

IV. Discussion Of Findings

In this study, majority of the respondents were between the ages of 25 and 34 years and Hausa/Fulani by tribe. According to their cultural orientation, Hausa/Fulani women often cope well with labour pains. Further, almost all the respondents were married. It was likely that they have had supportive care from birth partners and other family members. Their educational background was non-formal education.

Result on factors that may affect women perception of labour pain found in this study shows that most respondents were multiparous which may suggest that they were experienced mothers as such they might tolerate labour pain. The women were booked, thus, they were prepared physically and emotionally to face the strain of labour at ANC visits. Majority of them had spontaneous delivery and most had babies of medium size at birth. This finding was supported by Olayemi et al. (2005) who found in his study that parity, mode of delivery and size of the baby can have influence on the mother's perception of pain in labour. For instance induction, assisted deliveries increase pain perception, larger babies trigger more pain perception etc.

In this study women had the expectation that labour pain is mild, with few women expecting the pain to be severe/terrible. Similarly, most of these women said to have experienced mild pain when in labour. This finding was in line with the assumption of Goodman et al. (2008) that when you go into labour with expectation it will be painful, you would increase the probability of experiencing more pain. In contrast to these findings, Kuti and Faponle (2006) found that labour pain was severe as reported by most Yoruba women. However, a good information about labour pain and good expectation that the pain is such that will come and go away may increase women pain thresholds in labour.

The major situations that aggravate pain in labour as reported by most respondents were fear of birth process and uncomfortable position. The state of mind of a woman through labour plays a vital role in the process. The finding agreed with Mc-Crea (2008) that fears can influence the perception of pain. A woman who was afraid of pain will describe the sensation as much more intense and painful than woman who was not. Andrea (2008) also found that fear can disrupt natural flow of labour by increasing adrenalin that in turn inhibit oxytocin release prolonging labour and causing more pain.

As found in this study, the most important measures to reduce pain in labour were reassurance, good attitude of midwives and good environment. Kitzinger (2007) supported this idea that the presence of midwife or friends of the birthing woman to provide support and comfort yield positive effect in reducing labour pain and the need for analgesia. This implies that a midwife needs to carefully evaluate the labouring woman, provide a tranquil environment, adequate care and support to each woman in labour.

V. Conclusion

Despite the fact that almost all women experienced pain during labour, their response to labour pain were different and may be influenced by culture, prior expectation, other conditions and information they have about labour pain, fear of labour can worsen the situation, therefore the emotional and physical support given to labour woman by people around her is very important. These findings indicate that management of pain in labour is patient-centered and requires careful assessment of client in order to design intervention to relieve/reduce labour pain.

VI. Study Limitation

The scope of his study was limited to one hospital using small sample size, which may affect generalization of findings. Hence, similar study should be carried out with a larger randomized sample to make comparison and generalization. Also a more complex analysis is required to determine the relationship between pain perception in labour and parity, mode of delivery and culture of a woman in labour.

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