Postpartum mothers' perspectives of comfort measures used by nurses and midwives during labor and delivery in a secondary level hospital maternity In Cameroon

ABSTRACT

Objective: The purpose of this study was to find out from women the comfort measures that are provided to them by nurses and midwives during labour and delivery.

Results: A majority of the study participants were between the ages 21-30 years (61%) and most of them (68%) had normal vaginal delivery. The women reported use of a good number of comfort measures, which were physical and emotional support measures. The physical measures included providing for elimination needs and adequate fluid intake (100%), walking (65.6%) and patterned breathing exercises (52.2%) while the emotional support measure were predominantly empowering of the women (90%) and using good communication strategies like active listening (97.8%), allowing for questions and providing adequate responses (97.8%), providing information on labour progress (90%) and use of comforting words (50%). However, a substantial number of women reported that although they would have loved to have someone other than the nurse/midwife with them during labour (75.6%) and delivery (92.2%), they were not allowed. In addition, most women also reported a lack of continuous presence by nurses and midwives during labour (81.1%).

Conclusion: Generally, women in this study reported use of both physical, and emotional measures for comfort by nurses and midwives during labour and delivery. However, having a companion in the delivery room was a wish which was not granted for most women.

Keywords: Comfort, labor, delivery, nurses, Cameroon

INTRODUCTION

Child birth is one of the most important events of a woman's life, thus it should be an experience in which every woman is supported and receives the most up to date, evidence based care ^[1,2]. To enable women sail through this process, continuous support during labor has been seen to provide clinically meaningful benefits to women and infants, with no known harm ^[3-5]. Some of these benefits include increased spontaneous vaginal delivery, shorter duration of labor and decreased cesarean births, ^[4] However, this is not the case as modern times have seen an increase in medicalization of the management of labor, with emphases being placed on safety, over the

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emotional aspect ^[1]. Maternal satisfaction during child birth is dependent on more than creating a painless labour, it is a multifaceted event which includes control and support of maternal preferences for labour and birth ^[6].

Common elements of the care for women during labor and delivery include emotional support like continuous presence, reassurance and praise, as well as giving information about labor progress and physical measures such as comforting touch, massage, warm baths/showers and adequate fluid intake and output [2,7]. The emotional and cognitive experience of childbirth can have impact on the postpartum physical and psychological state [2,8].. A positive experience can improve maternal wellbeing and facilitate mother-infant bonding, thereby leading to a smooth transition to motherhood [2,9,|10]. . A negative birth experience on the other hand, increases the risk of outcomes such as postpartum depression and post-traumatic stress symptoms [2,8,11,12]] Comfort measures during labor and delivery can be provided by healthcare professionals(like midwives, nurses, physicians) family members and doulas (who are personnel trained to provide comfort support to women during labor and delivery)^[1,3,13]. The WHO recommends respectful maternity care, effective communication between maternity care providers and women in labour and presence of a companion of choice throughout labour and childbirth, for effective maternal and child health care [14]. Maternal healthcare systems in high- and low- to middle-income countries throughout the world are thus advocating for supportive female companionship during labour [1,15,16]

In Cameroon however, there are barely any publications on labour support and comfort measures during labour and delivery. A majority of published works in the area of maternal and child health are geared towards maternal and child mortality. Haven understood the need to improve maternal and child healthcare, exploring the comfort measures used by nurses and midwives during labor and delivery in a hospital maternity in Fako, Cameroon can inform strategies to enhance maternal services in this country.

METHODS

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The study was conducted in a secondary level hospital maternity in Fako, Cameroon. This maternity has a labour room with 4 beds, 2 delivery rooms with 1 bed each, 5 postnatal wards with 3 beds each and two semi-private wards with 2 beds each.

The study was a descriptive, hospital based cross-sectional study, and data was collected within a 4 months period (from January to April 2019).

The study population consisted of postpartum women and included consenting women in the immediate post-partum period, who were admitted in the postpartum wards at the time of study.

A purposive sampling strategy was used to sample 90 women who had labored and delivered in this maternity because women in the immediate post-partum period were most suitable to achieve the objectives of the study.

A structured questionnaire with closed ended questions was used. The questionnaire was made of two sections. Section A was focused on demographic information and Section B had 24 closed ended questions on the use of comfort measures during labour and delivery by attending midwives and nurses. Data was analysed using descriptive statistics, with the aid of SPSS version 21.0.

RESULTS

The study participants had an age range from 17-38years, with a mean age of 26.6years (SD: 4.831years). A greater majority of the women were married (72%). A majority of the respondents (91%) were women who had had between 1 to 3 pregnancies and 1-3 deliveries (93%). Sixty eight per cent of the women had a normal vaginal delivery, 31% had caesarian sections and 01% forcep delivery.

A range of strategies, including physical measures, emotional support measures, like good communication strategies and use of companionship were reported by the women as strategies used by the attending nurses and midwives to comfort them during labour and delivery.

With respect to the physical measures, all the respondents reported that the nurses and midwives made provision for their elimination needs and fluid intake. In addition, they reported use of walking around (65.6%), massage (53.3%), position changes during labour (53.3%), patterned breathing exercises (52.2%) and therapeutic touch (50%) (Table 1). With respect to the

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emotional support strategies, all the women said that the nurses and midwives understood them and a good number reported that the nurses and midwives were empowering (95.6%) and provided safe and timely care (92.2%). Nevertheless, only a small proportion of women said nurses and midwives used distraction and reassurance (20.0%) for comfort provision. On the other hand however, most women (81.1%) said that nurses and midwives were only sometime present during the period of labor (Table 2).

Looking at communication with the nurses and midwives, most of the women (97.8%) reported that the nurses and midwives did actively listen to them. A greater proportion (94.4%) of the women said they were allowed to ask questions and got adequate responses from their nurses and midwives. In addition, most (90.0%) of them reported that updates on labour progress were provided and some nurses and midwives equally used comforting words (50%) as a comfort strategy (Table 3).

With regards to the use of companionship, 97% of the respondents reported that someone had accompanied them to the health facility. In this light, a greater proportion of the women said they would have loved to have someone other than a nurse or a midwife to be with them in the room during labor (86.7%) and delivery (81.1%). However, only a small proportion of women said they were allowed a companion during labor (24.4%) and during delivery (7.8%) (Table 3).

DISCUSSION

This study explored the various comfort measures used by nurses/midwives as they assisted women during childbirth. Generally, it could be said that the nurses and midwives in the study hospital used a wide variety of measures to comfort women during labour and delivery. Comfort for women during labour and delivery included a range of physical measures, good communication strategies and emotional support strategies.

In line with recommendations by WHO ^[14], there was adequate provision of elimination needs and fluid intake as a comfort measure. There was also a fair use of walking, patterned breathing exercises, position change and therapeutic touch. These measures have been shown to be beneficial as they are non-invasive, inexpensive, easy to use, safe and enhances comfort and bonding ^[18]. The findings in this study is similar to that of a study by Maputle ^[17] where there was

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limited use of physical comfort as companions were not encouraged and nurses were not present due to other roles. Also, report by Boateng et al ^[18] showed that some barriers to the use of comfort measures by nurse/midwives was shortage of staff, lack of knowledge and disbelief in relief strength. They also suggested that incorporating teaching sessions on physical relief methods during ante-natal care could empower the expectant mother to support the few nurses and midwives during labour management.

Generally, it could be said that emotional support measures were poorly employed. The fact that most of the nurses and midwives in this study were reported to be present only sometimes during labor and the poor use of reassurance, was short of adequate emotional support. Notwithstanding, it could be that the nurses and midwives could not provide for continuous presence as they have several roles to play and were caring for more than one paturient at the same time, as has been reported in previous studies ^[5,17,]. The emotional well-being of a woman has a big role to play in the overall birthing experience. From the findings in a study by Munkhondya et al on primigravid women, adequate childbirth preparation is vital to simultaneously improve their psychosocial well-being and enhancing their ability to give birth ^[19]. Similarly, as suggested by a previous study, the final stage of the whole labor process is likely to weigh heavily on the quality of the woman's emotional experience ^[20]. This goes to prove that sufficient emotional reinforcement throughout labor will be required for a positive birth experience.

We found out that communication between the women and the nurses and midwives was effective as a majority of the respondents affirmed that the nurses and midwives were understanding, empowering and listened to them. In addition, we found out that safe and timely care was provided for 87% of the women. This is similar to the findings of Shimoda ^[21] who noted that midwives developed and maintained good relationships with women by having positive verbal interactions, offering emotional support, and providing timely care for safe deliveries.. This has the potential to reduce anxiety and improve the cooperation of the parturient. This was however contrary to findings by Namujju et al where lack of provision of adequate information about labor processes and progression, poor communication and low involvement of mothers in their plans of care was noted ^[19]. This led to a deprivation of full situational control, increased anxiety, stress and other emotional tendencies ^[22].

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Although companionship was a wish of all the women, their choice of a companion varied from a member of their family/partner to just the attending nurse/midwife. However, a good number of women would have loved to have a family member/partner as a companion in the ward with them, but only a lucky few were allowed to do so. This could be attributed to the challenges of having companions in labour wards in developing countries, which are often shared with other parturient. There could be a breach of privacy for other parturient, thereby making others uncomfortable [1,18,23]. Also, there is sometimes mistrust of companions by health personnel [23].

In our setting, there is diversity in culture and people have gone through various experiences in life giving rise to various schools of thoughts. Thus, this might lead to practices which are not scientifically sound, with questionable outcomes as nurse/midwife will not be present at all times to monitor the interaction between the woman and companion. Some women however did not wish for a companion. In line with other studies, this wish is not strange, as this goes to challenge the assumption that all women want birth companion [23,24]. This could be attributed to the fact that, some women have reported their presence emotionally stressful, of no help, embarrassing with regards to nakedness, gossip of birth process and abuse [4, 23]. Also, the disparity with regards to presence of a companion during labor and delivery shows that, the preferences of women vary throughout the process. This was also the case with study by Afulani et al [23], where they also stated that the presence of a companion was not guarantee that the woman will be supported or feel supported. This goes to support the notion that companionship during labor and delivery is dependent on the woman's preference. A woman's experience during childbirth, can vary considerably from how a caregiver or relative may experience the same event, there is the tendency for the companion to be more focused on tangible, observable aspects and underestimate psychological aspects [9]. Therefore, health professionals need to care for woman during labor and birth, taking into consideration their preferences given that every woman is unique and will have a unique birth experience [22]. This is to ensure a positive experience for the woman and her family, while maintaining their health, preventing complications and responding to emergencies [7]. Notwithstanding, some authors have suggested that where it is not feasible to allow for a companion in the delivery room, the presence of **Comment [WU15]:** Discuss other study the findings difference than your study

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women's husbands or mothers in the waiting room or being allowed to make a short contact with them could give women comfort and reassurance and make them feel loved [23].

CONCLUSION

Comfort for women during labour and delivery in this study was through use of both physical, emotional and psychological measures by nurses and midwives. For majority of the women their experience was comfortable because of good communication with their Nurse/Midwives which involved using active listening and answering the questions of the woman and also providing updates on progress of labour. There was also a fair use of therapeutic touch, massage, patterned breathing exercises, walking and intake of fluid during labour. Overall the Nurses and Midwives provided comfort measures for women during labour and delivery. With regards to companionship, there was noted variation in companions desired by the women, which also varied across the different stages of labor. In this light despite global orientation towards the presence of a companion during childbirth, it is worth noting that the woman's preference be taken into consideration, as each is unique.

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Limitations

Recall bias as data was collected after the event. Also, the study did not explore deeply women's birth experience to bring out reasons for their choices or thoughts.

List of abbreviations

WHO-World Health Organization

Ethical approval and consent to participate

Authorization for this study was gotten from the Regional Delegation of Public Health and the director and charge nurse of the maternity of the study hospital.

Consent to Publish

Not applicable

Availability of Data and Materials

The datasets used during the current study are available from the corresponding author on reasonable request.

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Table 1: Physical comfort measures during Labor

Table 2: Psychosocial comfort measures used

Table 3: Interaction between Parturient and Nurses/Midwives and companionship during labour and delivery

REFERENCES

- Senanayake H, Wijesinghe RD, Nayar KR. Is the policy of allowing a female labor companion feasible in developing countries? Results from a cross sectional study among Sri Lankan practitioners. BMC Pregnancy &childbirth. 2017;17:392.
- **2.** Fenaroli V, Molgora S, Dodaro S. the childbirth experience: obstetric and psychological pedictors in Italian primiparous women. BMC Pregnancy & Childbirth. 2019;19:419.
- **3.** Hodnett ED, Gates S, Hofmeyr GJ, Sakala C. Continuous support for women during childbirth. Cochrane Database Syst Rev 2013;7:CD003766
- **4.** Bohren MA, Hofmeyr GJ, Sakala C, Fukuzawa RK, Cuthbert A. Continuous support for women during childbirth. Cochrane Database Syst Rev. 2017;7(7):CD003766
- **5.** Lunda P, Minnie CS, Benadé P. Women's experiences of continuous support during childbirth: a meta-synthesis. BMC Pregnancy & Childbirth. 2018;18:167.
- Garlock AE, Arthurs JB, Bass RJ. Effects of comfort education on maternal comfort and labor pain. J Perinat Educ. 2017;26(2):96-104.
- 7. Getachew S, Negash S, Yusuf L. Knowledge, Attitude, and Practice of Health Professionals Towards Labor Companion in Health Institutions in Addis Ababa. Int J Women's Health Care. 2018;3(2): ISSN: 2573-9506.
- **8.** Bell AF, Anderson E. The birth experience and women's postnatal depression: a systematic review. Midwifery 2016;39:112-23.
- Nilvér H, Begley C, Berg M. Measuring women's childbirth experiences: a systematic review for identification and analysis of validated instruments. BMC Pregnancy & Childbirth. 2017:17:203.
- 10. Nelson AM. Transition to motherhood. J Obstet Gynecol Neonatal Nurs. 2003;32(4):465-77.
- **11.** Tani F, Castagna V. Maternal social support, quality of birth experience, and post-partum depression in primiparous women. J Matern Fetal Neonatal Med. 2017;30(6):89-692.

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- **12.** Garthus-Niegel S, Von Soest T, Vollrath ME, Eberhard-Gran M. the impact of subjective birth experiences on post-traumatic stress symptoms: a longitudinal study. Arch women's Ment Health. 2013;16(1):1v10.
- **13.** Kabakian-Khasholian T, Portela A. Companion of choice at birth: factors affecting implementation. BMC Pregnancy & Childbirth. 2017; 17: 265.
- 14. World Health Organization. WHO recommendations: intrapartum care for a positive childbirth experience. World Health Organization; 2018; ISBN 978-92-4-155021-5.
- 15. Diniz CSG, d'Orsi E, Domingues RMSM, Torres JA, Dias MAB, Schneck CA et al. Implementation of the presence of companions during hospital admission for childbirth:data from the brazil national survey. Cad. Saúde Pública [online]. 2014;30(1):pp.S140-S153. ISSN 0102-311X.
- **16.** Najafi TF, Roudsari RL, Ebrahimipour H. The best encouraging persons in labor: A content analysis of Iranian mothers' experiences of labor support. PLoS One. 2017; 12(7): e0179702.
- 17. Maputle MS. Support provided by midwives to women during labour in a public hospital, Limpopo Province, South Africa: a participant observation study. BMC Pregnancy & Childbirth. 2018; 18: 210. 12.
- 18. Boateng EA, Kumi LO, Diji AK. Nurses and midwives' experiences of using non-pharmacological interventions for labour pain management: a qualitative study in Ghana. BMC Pregnancy & Childbirth. 2019; 19:168.
- 19. Munkhondya BMJ, Munkhondya TE, Chirwa E, Wang H. Efficacy of companion-integrated childbirth preparation for childbirth fear, self-efficacy, and maternal support in primigravid women in Malawi. BMC Pregnancy and Childbirth. 2020;20:48.
- 20. Fenaroli V, Molgora S, Dodaro S, Svelato A, Gesi L, Molidoro G et al. The childbirth experience: obstetric and psychological predictors in Italian primiparous women. BMC Pregnancy and Childbirth. 2019;19:419.
- **21.** Shimoda K, Horiuchi S, Leshabari S, Shimpuku Y. Midwives' respect and disrespect of women during facility-based childbirth in urban Tanzania: a qualitative study. Reprod Health. 2018; 15: 8.
- 22. Namujju J, Muhindo R, Mselle LT, Waiswa P, Nankumbi J, Muwanguzi P. Childbirth experiences and their derived meaning: a qualitative study among postnatal mothers in Mbale regional referral hospital, Uganda. Reprod Health. 2018;15:183.

- 23. Afulani P, Kusi C, Kirumbi L, Walker D. Companionship during facility-based childbirth: results from a mixed-methods study with recently delivered women and providers in Kenya. BMC Pregnancy and Childbirth. 2018; 18: 150
- 24. Alexander A, Mustafa A, Emil SAV, Amekah E, Engmann C, Adanu R, et al. Social Support During Delivery in Rural Central Ghana: A Mixed Methods Study of Women's Preferences for and Against Inclusion of a Lay Companion in the Delivery Room. J Biosoc Sci. 2014;46:669–85.

TABLES
Table 1: Physical comfort measures used

Indicators	Categories	Frequencies	Percentages
Use of Therapeutic	Yes	45	50.0
touch	No	45	50.0
Use of Massage	Yes	42	46.7
	No	48	53.3
Use of Patterned	Yes	47	52.2
breathing exercises	No	43	47.8
Assisted with	Yes	59	65.6
Walking around	No	31	34.4
Provision for	Yes	90	100.0
elimination needs	No	0	00.0
Position changes	Yes	48	53.3
during labour	No	42	46.7
Allowing for intake	Yes	90	100.0%
of fluid	No	0	00.0%

Table 2: Psychosocial comfort measures used

Table 2. Tsychosocial comfort measures used				
Indicators	Categories	Frequencies	Percentages	
Use of Distraction	Yes	18	20.0	
	No	72	80.0	
Use of Reassurance	Yes	18	20.0	
	No	72	80.0	
Use of Comforting	Yes	45	50.0	

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words			
	No	45	50.0
Presence of	All the time	17	18.9
nurse/midwife	Sometime	73	81.1
throughout labour	Not at all	00	00.0

Table 3: Interaction between Parturient and Nurses/Midwives and companionship during labour and delivery

Area	Indicators	Categories	Frequencies	Percentages
	Was understanding	Yes	90	100
		No	0	0
	Was encouraging	Yes	88	97.8
		No	2	2.2
	Was empowering	Yes	86	95.6
		No	4	4.4
	Did listen to you	Yes	88	97.8
		No	2	2.2
	Encouraged you to ask questions	Yes	85	94.4
nteraction with urse/midwives		No	5	5.6
urse/illiawives	Answered your questions	Yes	88	97.8
		No	2	2.2
	Provided safe and timely care during delivery	Yes	83	92.2
		No	7	7.8
	Provided updates on fetal and maternal progress	Yes	81	90
		No	9	10
	Education on physiological changes of Labour	Yes	77	85.6
		No	13	14.4
Companionship during labour and delivery	Had a family member as a companion during Labour	Yes	22	24.4
		No	68	75.6
		Total	90	100
	Had a family member as a companion during delivery	Yes	7	7.8
		No	83	92.2
		Total	90	100

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	Wanted a family	Yes	78	86.7
	member as a companion during labour	No	12	13.3
	Wanted a family	Yes	73	81.1
	member as a companion during delivery	No	17	18.9
	·	Family members/Partner	71	78.9
	Companion of choice	Nurses and/or Midwives only	19	21.1