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ORIGINAL RESEARCH – QUANTITATIVE

Malawi women's knowledge and use of labour and birthing positions: A cross-sectional descriptive survey

Barbara Debra Zileni [a,*], Pauline Glover [b], Meril Jones [b], Kung-Keat Teoh [c], Chisomo WaaZileni Zileni [d], Amanda Muller [b]

[a] Kamuzu College of Nursing, Maternal and Child Health Department, Chipatala Avenue, off Mzimba Street, Opposite Kamuzu Central Hospital, Lilongwe, Malawi
[b] School of Nursing & Midwifery, Faculty of Health Science, Flinders University, Sturt Road, Bedford Park 5042, South Australia, Australia
[c] Student Learning Centre, Affiliate member, School of Computer Science, Engineering and Mathematics, Flinders University, Sturt Road, Bedford Park 5042, South Australia, Australia
[d] DanChurchAid, Area 12/ 682, Along presidential way, Lilongwe, Malawi

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ABSTRACT

Problem: Despite research evidence supporting use of upright birthing positions, most women give birth in supine position. Little is known about women's knowledge and use of labour and birthing positions. Specifically, there is a lack of evidence on Malawi women's knowledge and use of birthing positions, and this limits the possibility of improvement in childbirth practices.
Aim: To assess women's knowledge and use of different positions during labour and birthing.
Methods: The study used a cross-sectional descriptive survey in a Malawi maternity unit where 373 low-risk postnatal women participated in face-to-face exit interviews, using a structured questionnaire. A descriptive analysis of the categorical variables was conducted to examine frequencies and percentages.
Findings: The majority of women knew about walking (66.4%) and lateral (60.6%) as labour positions, whereas 99.2% knew about the supine as a birthing position. Half of the women (50%) walked during labour and the majority (91.4%) gave birth whilst in supine position. Midwives were the main source of information on positions used during childbirth.
Discussion: Education about different birthing positions is needed for women who deliver at the maternity unit so that they can make informed decisions on their own options for childbirth. However, midwives must have the competence to encourage and assist women give birth in different positions, so professional development of midwives in childbirth positions is a priority.
Conclusion: Childbirth education should include information on the various labour and birthing positions. Midwives should be equipped with appropriate skills to help women use different positions during childbirth.

Summary of Relevance:

Problem or Issue

- Despite research evidence supporting the use of upright birthing positions, the current literature shows that most women in developed and developing countries give birth whilst in supine position. In addition, little is known about women's knowledge of labouring and birthing positions. Results from a few studies done in Netherlands and Nigeria show that most women in these countries know and use recumbent position when giving birth. A thorough search of the literature could not find any evidence on Malawi women's knowledge and use of birthing positions. This lack of knowledge limits the possibility of improvement in educational and birthing practices in Malawi.

What is Already Known

- Research evidence shows that ambulation and use of upright positions during childbirth is associated with favourable childbirth outcomes compared to the supine position.

* Corresponding author. Tel.: +265 1751622x2257; mobile: +265 882077343.
E-mail address: bamlewah@kcn.unima.mw (B.D. Zileni).

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The favourable outcomes include reduced numbers of episiotomies, perineal traumas, assisted births, as well as reduced labour pains, and reduced duration of first and second stages of labour. Despite this evidence, the literature also shows that most women in developed and developing countries give birth whilst in the supine position. The question one could ask is whether women are aware of other positions such as the upright positions that can be used during childbirth and are associated with favourable childbirth outcomes.

What this Paper Adds

- This paper establishes a baseline measure of Malawi women's level of knowledge and use of different labour and birthing positions. Due to a lack of knowledge found among these women, the paper recommends changes to women's childbirth education and professional practice. The childbirth education should include information on the various positions that can be used during labour and birthing, and their associated benefits. In addition, midwives should allow and encourage women to labour and give birth in different positions, such as the upright positions, that have shown to be associated with favourable maternal and neonatal outcomes.

1. Introduction

Prior to the 18th century, there is evidence that women gave birth whilst in upright positions (sitting, squatting, kneeling, standing, and 'hands and knees') as this was thought to help with the childbirth which usually occurred in the home.[1] In the early 18th century, the supine position was introduced by a prominent French physician, Francois Mauriceau.[2] Mauriceau believed that the supine position would assist health professionals with monitoring of the maternal and foetal condition during childbirth.[2] Since that time, the use of the supine position has become very popular,[3] and current evidence shows that it still remains the most commonly used birth position in both developed and developing countries.[3–9]

Despite the popularity of the supine position, the World Health Organisation encourages women to ambulate and assume upright birth positions because these are associated with favourable childbirth outcomes.[7] Ambulation and change in maternal position during labour and birthing help to increase the frequency and duration of uterine contractions, cervical dilatation, and descent of the foetus.[10–12] Thus, a change in the maternal position during labour assists with effective progress, and hence may prevent a prolonged labour,[11,13] and reduce its complications such as postpartum haemorrhage.[14,15]

One possible reason for the high use of the supine position, despite the benefits of non-supine positions, is that women are not aware of the variety of options available to them for labour and birth. Various studies have examined women's knowledge of birth positions and birthing position practices. Unsurprisingly, these studies found that most women knew about the supine position and regarded it as the position to use during childbirth and, accordingly, the majority of women gave birth whilst in the supine position, although a few of them knew about other positions.[3,5,6,8,9,16–18]

The question remains whether this trend is true for women in Malawi. There is no reported information on birthing position practices in the 2010 Malawi Demographic Health Survey and the 2006 Multiple Indicator Cluster Survey, the country's major survey reports.[19,20] Only one study which audited a Malawi maternity unit makes mention of Malawi women's awareness of birthing positions, and this was only a secondary observation outside of the main focus of that study.[21] Thus, little is known about Malawi women's actual knowledge and use of labour and birthing positions. This gap in the literature on birthing position practices in Malawi suggested a need for research in this area, and an understanding of Malawi women's knowledge and use of labour and birthing positions is one step in remedying this situation. Therefore, this study was conducted in order to assess knowledge and use of different positions during labour and birthing at the New Bwaila Maternity Unit (NBMU) in Lilongwe, Malawi.

2. Methods

2.1. Design, setting and participants, sampling technique, and sample size

A descriptive cross-sectional survey was conducted from July 2012 to October 2013 in the low-risk postnatal ward of the NBMU in Lilongwe, Malawi. Face-to-face exit interviews were conducted using a structured questionnaire with low risk postnatal women. Probability sampling (a systematic sampling method) was used where every woman who had picked an even number during the morning health education session (and was being discharged from the postnatal ward) was approached and asked if she would participate in the study. This process was conducted on a daily basis until the desired number for the sample size (373) was reached. The sample size was calculated using Raosoft sample size calculator with the margin of error of 5%, 95% confidence interval, and a response distribution of 50%.[22]

2.2. Participant inclusion and exclusion criterion

The inclusion criterion was: all postnatal women who had a normal spontaneous vertex delivery with a term pregnancy (37–42 weeks) and had received initial postnatal care in the first 24–48 h after birthing. The exclusion criteria were: (1) all women who had mal-presentation of the foetus, multiple pregnancies, and complications such as eclampsia and severe anaemia, because these conditions may have prevented them from walking around during labour and using upright positions during birthing, (2) all women receiving subsequent postnatal care at one and six weeks after birth.

2.3. Data collection tool

A questionnaire incorporating 35 open-ended questions and closed-ended questions with multiple responses was used for the data collection. Examples of the questions include: "How old are you (in years)?", "Which birthing position/s do you know?" (options given), and "Briefly mention the advantage/s and disadvantage/s associated with the birthing position/s that you have mentioned in question 12 above." Face-to-face interviews were conducted using trained data collectors (who were unknown to the participant) to ask the questions (using the structured questionnaire) and they circled or wrote down the responses made by the participant. The face-to-face interviews were used to collect data because most of the participants did not have the ability to self-administer the questionnaire due to their inability to read and write. The data collectors were trained on how to collect the data using the structured questionnaire. Some of the questions were adapted from a questionnaire found in Nieuwenhuijze, Jong, Korstjens, and Lagro-Jansse.[9] In an email communication on 26 June 2012, Marianne Nieuwenhuijze gave permission to the

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