Journal of Women's Health, Issues & Care

Research Article

A SCITECHNOL JOURNAL

What Position do Laboring Women Actually Take and What is their Desired Position During this Time?

SOME Der Adolphe[1]*, MEDA Ziémlé Clément[1], OUATTARA Souleymane[1], KAM Sémon Paulin[1], SIB Sié Rodrigue[2], YAMÉOGO R Barnabé[1], KABORE W Edwige[1] and DAO Blami[3]

Abstract

Objectives: The objective of this study was to identify the known postures and desired by women during the expulsive phase of a normal delivery.

Methodology: This was a cross-sectional study led from 18 February to 06 May 2019 at Ouahigouya Regional Teaching Hospital in Burkina. Women were interviewed three hours after normal delivery in this hospital. Data were collected through semi-structured direct individual interviews and completed by an analysis of women's medical records. The statistical analysis was done with the software Epi info version 7.1.1.0.

Results: A total of 232 women were included. Lithotomy or Gynecological position was that used by women (99.56%). The reason for which the parturients gave birth in this position was related to the provider (90.00%). Six other positions were reported by 48 patients (20.69%).

Conclusion: A free choice of position during childbirth requires the identification and correction of possible causes that hinder it.

Keywords

Delivery; Positions; Determinants; Choice; Ouahigouya

Introduction

From ancient times till today, women have always adopted positions such as standing, sitting, squatting, kneeling or crawling to deliver with less pain and dystocia [1]. The medicalization of childbirth appeared around the 17th century to secure the parturient and the fetus. Thus, to this day, the position that the parturient adopts in most maternity hospitals when the fetal mobile is expelled is the one broadcast by François Mauriceau [2], called "gynecological position" or lithotomy position. Its main interest is to facilitate obstetrical maneuvers by allowing wide access to the perineum. Today, it is established that the majority of the 140 million births worldwide each year are to women without risk factors for complications for themselves or their children during childbirth [3,4]. The obstetrician's main concern during any childbirth is to ensure the survival of the mother and her child by the aims of the third objective of Sustainable development goals (SDGs) [5].

During childbirth, the critical moment remains the expulsive phase of the fetus during which the World Health Organization (WHO) recommends that any parturient, sub epidural or not, should be able to freely adapt the position of her choice to give birth [4]. The free choice of the delivery position is a fundamental component of humanized childbirth. Humanization means "cares based on respect for the needs, values, and beliefs of women and the respect for childbirth as a physiological process" [5].

In Burkina Faso, humanized childbirth is taught during the initial and continuous training of midwives. The policy developed in all public maternities is to break with the obligation for women to adopt only the lithotomy position since the personal is trained. Any position desired by women during childbirth should be accepted if there are no medical contraindications. The objective of this study was to identify the known postures and desired by women during the expulsive phase of a normal delivery.

Methodology

This was a descriptive cross-sectional study with prospective collection of data from February 18th to May 6th, 2019 at the Obstetrics Department of the Ouahigouya Regional University Teaching Hospital (ORUTH), Burkina Faso.

The women included aged at least 18 years old, had given birth vaginally to a singleton child alive at term between 37 weeks of Gestational Age (GA) and 41GA and 6 days. Each participant had given her free and informed verbal consent. Not included were women whose fetal expulsion was assisted by instrumental extraction as well as those who delivered a visibly malformed newborn child.

The expected sample size of 234 participants was calculated using the frequency of normal deliveries reported in 2017 by the statistical yearbook of the Ministry of Health of Burkina Faso and by using the table of Krejcie and Morgan [6].

Data were collected through semi-structured direct individual interviews completed by documentary analysis. The instruments used were a written questionnaire and a data analysis grid. The variables studied were the socio-demographic characteristics of the women who gave birth, their obstetrical history, their knowledge and preference about the positions during the expulsion phase, the justification of the gynecological position adopted for childbirth, as well as the information received concerning postures during labor and delivery.

For the statistical data analysis, the data were recorded on a microcomputer using the software Epi Info (version 7.2.2.6). For the comparison of proportions, Pearson's Chi-square (χ^2) test was performed between the socio-demographic characteristics of the patients and their preference for other delivery positions with a significant level of 0.5%. And if the expected values were less than 5, the Fisher test was performed.

To carry out this study, the study authorization was obtained from the Director-General of the ORUTH. Informed and verbal consent was

***Corresponding author:** SOME Der Adolphe, Associate Lecturer, Department of Gynecology and Obstetrics, Sourô Sanou University Teaching Hospital, Bobo-Dioulasso, Burkina Faso, Tel: (+226) 70 34 00 00; E-mail: adolphesomeder@yahoo.fr

Received: January 22, 2020 **Accepted:** March 03, 2020 **Published:** March 06, 2020

obtained before the data collection. The confidentiality of the information collected was ensured by limiting access to the data to investigators only and the need for the investigation.

Results

The final sample size consisted of 232 women giving a participation rate of 99.14%.

Socio-demographic characteristics of the participants

As shown in Table 1, almost all of the 232 women were living in couples and more than half (55.6%) had not attended school. The average age was 25.6 years-old ± 6.9 with extremes of 18 and 43 years.

Obstetrical history

The primiparous participants were the most represented (36.6%), followed by the multiparous participants (30.2%), the pauciparous participants (23.3%); and those who had more than 6 deliveries represented 9.9%.

Knowledge about positions during the delivery and position adopted during the last delivery

Out of the 232 respondents, only one parturient (0.4%) said that she gave birth in a squatting position. She was a 24-year-old woman, was not schooled and with parity of two. Her first delivery happened at home 3 years ago. All other patients (99.6%) had delivered by a gynecological position.

The existence of other delivery positions was reported by 48 patients (20.7%), of which 6.5% of them cited more than one position (Table 2).

Six (06) other postures have been reported. The best-known position was squatting (15.1%). About the position during delivery, women had received information from their parents (10.0%), through media (8.0%) and from training institutions (3.0%).

Justification of the lithotomy position adopted for childbirth

In 90.0% of the cases, the reason that participants gave birth in a lithotomy position was related to the midwives; and in 4.31%, it was for personal convenience.

They had adopted this position "at the request of the birth attendant" according to 143 women (61.6%) or " to put the obstetrician at ease" according to another 66 (28.5%). The other reasons were "for baby's safety" or "for personal convenience" in 5.6% and 4.3% respectively.

Regarding the positions that the women wanted to adopt freely, the participants cited: lithotomy position (79.3%), squatting position (15.1%), lateral decubitus position (3.9%), four-legged position (1.3%), and sitting posture (0.4%).

Relationship between variables and wished position

The distribution of patients according to variables and the wished position is presented in Table 3.

There was a statistically significant difference between socio-demographic characteristics (age group, level of schooling) and the position choice during delivery (Table 3). As well, there was a statistically significant difference between parity and the position choice during delivery (Table 3).

Table 1: Distribution of women by socio-demographic characteristics.

Socio-demographic characteristics	Effective	Proportion (%)
Age group (years)		
<25	109	47
25-34	87	37.5
≥35	36	15.5
Matrimonial status		
Lives in couple	227	97.8
Lives alone	5	2.2
Level of schooling		
Not schooled	129	55.6
Primary	55	23.7
Secondary	41	17.7
University	7	3.0

Table 2: Distribution of the other positions during the delivery and women knowledge about other positions (n=48).

S.No.	Other positions	Number*	Specific proportion (%)**	General percentage (%)***
1	Crouching	35	72.9	15.1
2	Lateral	11	22.9	4.7
3	On all fours	9	18.7	3.9
4	Standing	4	8.3	1.7
5	Seated	3	6.2	1.3
6	Delivery in water	1	2 .0	0.4

*more than one answers were possible; **Specific proportion=n/48; *** General proportion=n/232

Table 3: Distribution of deliveries by socio-demographic characteristics, parity and desired delivery status (n=232).

Variables	Wished position		Khi-2 test	p-value
	Lithotomy n (%)	Other n (%)		
Age group (years)				
<25	74 (40.2)	35 (72.9)	16.498	0.0003
25-34	77 (41.9)	10 (20.8)		
≥ 35	33 (17.9)	3 (6.3)		
Level of schooling				
Unschooled	97 (52.7)	33 (68.8)	3.972	0.0463
Schooled	87 (47.3)	15 (31.2)		
Marital status				
Lives alone	11 (73.3)	4 (26.7)	-	0.7537*
Lives in couple	173 (79.7)	44 (20.3)		
Parity				
<2	57 (30.9)	28 (58.3)	12.76	0.0017
2-3	45 (24.5)	9 (18.8)		
≥4	82 (44.6)	11 (22.9)		
*Fisher's test				

Discussion

As in the present study, Gottvall et al. noted that 83.9% of births took place in a horizontal position [7]. Similar results are reported by Lepleux in France and Sylva in Brazil, with a rate of 82.3% in each of these studies [8,9]. Although WHO recommends that parturients have to be encouraged for adopting the position of their choice during childbirth [4], other postures than gynecological ones are still rarely used. Da Sylva found that 16% of women give birth in a lateral position, 0.8% in a squatting one, 0.7% in a "four-legged" position and 0.2% in a standing position [9]. The horizontal position has been advocated

in the past for the obstetrician to be comfortable while performing obstetric maneuvers [2]. So, up to today, this position has always been taught at almost midwifery schools. It is time to take into account the socio-cultural values of women as evoked by Hélène Vadeboncoeur [10] and to make adaptations in the modules taught at the basic schools. It is now established that only 15% of women giving birth are at risk of complications [3].

Several positions were not used positions but they were known positions by the women studied. Almost all women in our series adopted the lithotomy position. This could be explained by several factors.

First, labor and delivery are a delicate period during which the parturient places all her hope in the person in charge of assisting her. In this context, and particularly in Burkina Faso, the expectant mother feels obliged to behave well in order not to upset the midwife. It is this fear of "hurting" that has certainly justified that 90% of the women in our study have adopted the lithotomy position "to put the obstetrician at ease". Then, the woman needs to be expressly invited to adopt a position of her choice. In Dénakpo's series in Cotonou where midwives were trained for birth in free postures, parturients who had experienced horizontal position opted for the new ones [11]. According to the Public Health Agency of Canada [12], only 47.9% of parturients had given birth in a lithotomy position. That is only possible if there are midwives trained to assist women with these varieties of positions. In addition to giving information orally on the different positions, training and/or demonstrations could have helped to convince and reassure women of their choice. It thus appears decisive in this maternity, to integrate this practical training for pregnant women in the third trimester of pregnancy. Good training is essential to offer a wide range of postures to women. These results suggest that to improve the situation, midwives must be monitored regularly.

Secondly, during childbirth, the expulsive phase remains a critical moment for the patient because of the physical pain associated with uterine contractions since none of the women in our series were under epidural anesthesia. At this stage of delivery, the woman's primary concern is the state of her unborn child. In these conditions, any woman could accept, without opposing, the posture in which she will be installed. Finally, primiparous in our series were more numerous, representing more than a third of the sample; indeed, many authors report that primiparity is associated with dorsal decubitus position during expulsion [2,9,13].

In the present study, there was a significant difference between the level of schooling and the ability to choose the desired position during fetal expulsion. In the Beninese study, educated women represented 78.2%; and those who chose the free position were mostly women with no previous experience and with a significantly higher level of education [11]. In Benin, this choice was probably facilitated by the awareness and the presence of personnel able to ensure the delivery according to the position chosen. This was not the case in our study.

The only one woman in our study, who had given birth in a free position, got fast labor and gave birth in a squatting position, less than two hours after admission, without having had time to be installed on a delivery table. According to Desseauve [14], labor less than 2 hours was significantly less often associated with the use of the supine position during the expulsion. The author adds that delivery in less than two hours without an epidural, as it was the case in our study, increases the probability that the patient "looks for an analgesic position" which is not necessarily the supine position.

Regarding the childbirth postures, the sources of information were parents, media and training schools in the present study. Health workers or health facilities were not mentioned. This corroborates the lack of general promotion of free postures in maternal care facilities and especially in delivery rooms in Burkina Faso. This finding is explained by the lack of competences of birth attendants. Six sorts of positions other than gynecological ones were reported by the women we interviewed. However, nearly one in three women (61.6%) gave birth in a gynecological position. As we have found, it is mainly primiparas and women under 25 years old who wish to adopt other positions ($p<0.05$). The experience and the well-being of women in the birth room are closely correlated with the feeling of freedom that a woman may have during her delivery, and this involves the possibility of varying positions during labor and childbirth [15].

Conclusion

Almost all women gave birth in a gynecological position. The reason was to put the birth attendant at ease. Initial and on-site training of midwives, targeting a position to adopt during labor and childbirth, followed by an organization of the environment of birth rooms is necessary so that parturients can choose their whished posture while delivering.

References

1. Lucas C, Racinet C (2005) Maternal positions for childbirth. Gynecol Obstet Fertil 33: 533-538.
2. Dunn PM (1991) Francois Mauriceau (1637-1709) and maternal posture for parturition. Arch Dis Child 66 (1 Spec No): 78-79.
3. World Health Organization (2018) WHO recommendations: intrapartum care for a positive childbirth experience: transforming care of women and babies for improved health and well-being: executive summary. World Health Organization.
4. WHO recommendations. Intrapartum care for a positive childbirth experience, pp: 210-125.
5. WHO. Sustainable Development Goal 3: Health.
6. Krejcie RV, Morgan DW (1970) Determining sample size for research activities. Educ Psychol Meas 30: 607-610.
7. Gottvall K, Allebeck P, Ekeus C (2007) Risk factors for anal sphincter tears: the importance of maternal position at birth. BJOG 114: 1266-1272.
8. Lepleux F, Hue B, Dugue AE, Six T, Riou C, et al. (2014) Obstetric data in a population with postural changes during labor and delivery. J Gynecol Obstet et Biol Reprod 43: 504-513.
9. da Silva FMB, de Oliveira SMJV, Bick D, Osava RH, Tuesta EF, et al. (2012) Risk factors for birth-related perineal trauma: a cross-sectional study in a birth centre. J Clin Nurs 21: 2209-2218.
10. Vadeboncoeur H (2005) L'humanisation des pratiques entourant l'accouchement est-elle limitée ? Le Médecin du Québec 40: 19.
11. Dénakpo J, Lokossou A, Tonato-Bagnan JA, Alao J, Hounkpatin B, et al. (2012) Can delivery in a free position be an alternative to conventional delivery in birth rooms in Africa: results of a prospective study in Cotonou, Benin. J Obstet Gynaecol Can 34: 947-953.
12. Public Health Agency of Canada (2009) What mothers say: The Canadian maternity experiences survey, pp: 1-225.

13. Atwood RJ (1976) Parturitional posture and related birth behavior. Acta Obstet Gynecol Scand Suppl 57: 3-25.

14. Desseauve D, Gachon B, Bertherat P, Fradet L, Lacouture P, et al. (2016) In which position do women give birth in 2015? Results from a prospective multicenter study. Gynecol Obstet Fertil 44: 548-56.

15. De Jonge A, Lagro-Janssen ALM (2004) Birthing positions. A qualitative study into the views of women about various birthing positions. J Psychosom Obstet Gynecol 25: 47-55.

Author Affiliations

Top

[1]*Department of Gynecology and Obstetrics, Sourô Sanou University Teaching Hospital, Bobo-Dioulasso, Burkina Faso*
[2]*Department of Gynecology and Obstetrics, Regional University Teaching Hospital of Ouahigouya, Burkina Faso*
[3]*Department of Gynecology and Obstetrics, John Hopkins Program for International Education in Gynecology and Obstetrics (Jpiégo), Burkina Faso*