



Upright Birthing Positions: The Positive Impacts on Labor

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Abstract

The lithotomy position is the most common birthing position currently used in Western medicine. Historically, women used upright birthing positions which include sitting, kneeling, squatting, and standing. This article reviews the advantages of upright birthing positions in comparison to lithotomy. Studies have shown benefits in reduced episiotomies, perineal trauma, and labor time, while providing the most optimal pelvic position.

Introduction

In Western society, lithotomy has been adopted as the optimal labor position; however, prior to the 17th century more natural birthing positions such as upright and squatting were utilized by many expecting mothers.¹ Lithotomy has been widely accepted by most mothers until interest was expressed in different delivery positions the last couple of decades. Why did Western society adopt the lithotomy birthing position? Was it for better outcomes or convenience for the provider? Research comparing outcomes of upright birthing positions to lithotomy began in the 1990s.¹ Many studies used women in the second stage of labor by looking at their personal outcomes such as episiotomies, perineal trauma, pain, cesarean sections, labor time, and many others in either delivery position. Research suggests that upright birthing positions reduce several undesirable results, including reduced labor time, perineal trauma, and episiotomies.

Total duration of Labour			
Gravida	Group A (mean ± SD)	Group B (mean ± SD)	p Value
Primigravida	25.35 ± 1.46	35.51 ± 1.08	< 0.05
Multigravida	25.37 ± 1.45	35.49 ± 1.07	< 0.05
Total duration of stage of labour			
Second stage of labour	25.35 ± 1.45	35.50 ± 1.07	< 0.05
Third stage of labour	12.19 ± 1.23	21.98 ± 1.26	< 0.05
Amount of blood loss during labour			
Amount of blood loss	335.89 ± 9.91	323.84 ± 20.98	< 0.05
Necessity of episiotomy			
	GroupAn(%)	GroupBn(%)	p Value
Necessity of episiotomy	58 (54.7%)	64 (60.4%)	> 0.05
Requirement of oxytocin			
Requirement of oxytocin	42 (39.6%)	58 (54.7%)	< 0.05

Figure 1: Shows differences in total duration of labor time between upright birthing positions (group A) and supine positions (group B).¹²

Methods

This study included pregnant women both nulliparous and multiparous. They were often in their second stage of labor when an upright position was implemented. Patients did not have any known complications or previous medical history that could interfere with the study. A mix of prospective studies, retrospective cohort studies, and randomized control trials were used.

Discussion

Upright birthing positions, when compared to the lithotomy position, overall, positively impacted labor. Upright birthing positions were found to have significantly less episiotomies^{1,3,11,13,14}, pain^{1,3,6,9}, perineal trauma^{1,8,10,13,14}, and labor time^{4,6,11,12,13}. Specifically, the squatting position was noted to have impacts on lowering pain and labor time. Additionally, research found that the mother having a more erect position allowed for better pelvic capacity and position to promote gravitation pull for the baby to easily descend through the birth canal^{4,12}. Upright positions are a more dynamic and involved approach to childbirth for the patient in comparison to lithotomy. Qualitative studies revealed that the use of the lithotomy position during the second stage of labor is geared toward the ease of the provider who is delivering the baby^{5,7}. The lithotomy position offers medical staff the direct visualization of patient progression and a readily accessible position if the patient were to have any complications^{5,7}. According to Giacomozzi, et. al., most women were denied the choice of which position they would like to labor in². With this research in mind, providers still need to provide patient-centered care. That includes deciding what is best for one's patient as multiparous and complications may alter decisions.

Conclusion

The studies utilized in this research compared the lithotomy position to various upright positions: sitting, kneeling, squatting, and standing. Upright birthing positions are being researched and utilized more frequently. Research has shown significant outcomes in the reduction of episiotomies, perianal trauma, and labor time. An upright labor position optimizes pelvic position as well. With this research and continued research, women will be better informed on the safest, most efficient, and most comfortable birthing position for themselves.

Future Direction

This research was based on pregnant women that had no medical history and a pregnancy free of complications. In the future, it would be useful to see if upright birthing positions would also benefit different demographics of pregnant women. In upright birthing positions, assistive devices can be used including a bar, chair, ball, etc. It would be interesting to compare the use of different upright assistive devices and the outcomes it has on the mother and child.

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