

Comparison amongst vaginal birth and C- section in value-based obstetrics care

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Abstract

The increasing population of C -section birth has most social awareness in many countries. This research highlight the effect of C section on child mental health. The results shows that C-section birth may have adverse effects on child sensory perception, ability of sensory integration, neuropsychiatric improvement and mother child relationship. However future research should be improve refine grouping of child birth by C-section. The exploration of neural mechanisms as well as effective interventions also needed to reduce unnecessary C-sections.

Keywords: C-section, natural birth, ethnography, awareness, fear

Introduction

Pregnancy is a physiological phenomenon, and its end is associated with pain, fear, anxiety, and even fear of death for mothers. Child delivery is a multi-dimensional process with physical, emotional, social, physiological, cultural, and psychological dimensions. Childbirth can be a critical and sometimes painful experience for women. Pain is one of the most common medical problems, which adversely affects an individual's abilities and leads to fear and anxiety[1]. Attitudes towards labor pain are associated with physical, psychological, environmental, and supporting factors, which greatly affect the decision about mode of delivery [2]. Culture has a significant impact on people's perceptions and attitudes towards labor pain, definition of labor pain, coping mechanisms against pain, and related behaviors. The attitude towards labor pain can be determinant of women's decisions about mode of delivery. One of the main goals of every medical team, dealing with childbirth, is performing a safe delivery. C-section was first introduced to reduce the risks for the mother and fetus. However, today, C-section is perceived as an escape from labor pain, and the false assumption that C-section is painless, safer, and healthier than vaginal delivery has become prevalent among women[3]. In fact, more than half of the women voluntarily choose C-section as the preferred mode of delivery[4]. Also, the reason behind some women's inclination towards cesarean section was lack of pain during labor and closing of the uterine tubes. Few qualitative studies have been carried out in Iran to investigate the conditions which influence women's decision to choose either vaginal or cesarean delivery. In a focused ethnography conducted by Latifnejad Roudsari et al. (2014), fear of vaginal delivery, personal beliefs, cultural norms and values, and social network were reported as the factors affecting the choice of cesarean delivery[5]. A review of the studies conducted in Iran indicates that except for a few qualitative studies, other articles had mostly adopted quantitative methods. Also, the majority of studies were cross-sectional, evaluating different modes of delivery and the factors related to choosing a particular mode of childbirth. Therefore, there is insufficient knowledge about the perception and experiences of women on various modes of delivery. On the other hand, it is obvious that promotion of maternal health is not possible without a clear understanding of labor and women's views on the related problems; therefore, effective interventions are required in accordance with the culture of a country or region[6]. Given the high rate of C-section, the maternal and fetal risks associated with it, and lack of in-depth qualitative studies in Iran to describe the beliefs and perceptions of women about mode of delivery, it seems necessary to provide sufficient information about women's attitudes towards vaginal delivery and cesarean section.

Methods

This method was selected since the researcher aimed to investigate the common behavioral patterns, attitudes, beliefs, and perceptions of participants about different modes of delivery. Therefore, it was necessary to evaluate the subjects' interactions in the setting in order to identify the common patterns of behavior, attitudes,

beliefs, and perceptions of the subjects. For this reason, focused ethnography was selected as the study method. The main questions of this study were as follows: 1) What are the values, attitudes, beliefs, and perceptions of pregnant women, midwives, and gynecologists about different modes of delivery? 2) What is the cultural meaning of childbirth from the perspective of mothers and health care providers? Focused ethnography evaluates a specific problem in a specific field with a small number of sample [7]. The main features of this method are close observation of participants in the location, asking questions to gain an insight into current events, and using other available resources for a complete understanding of people, places, and events. Focused ethnography emphasizes on emic perspectives regarding specific activities and measures. In other words, in focused ethnography, it is not necessary to recognize the whole cultural background, but only certain elements of knowledge, related to the focus of the study, are targeted. The study participants included 12 pregnant women in the third trimester of pregnancy, 10 women with childbirth experience, nine non-pregnant women, seven midwives, and seven gynaecologists. The participants were selected using purposeful sampling and maximum variation strategy. The researcher selected the participants from different groups with different characteristics and points of view. The researcher introduced herself and explained the study objectives to the participants. The subjects were ensured about the confidentiality of the data, and were able to withdraw from the study at any point. By observing the ethical considerations, semi-structured interviews and observations were performed in a quiet and private environment by asking open-ended questions [8].

Results and Discussion

The mean age of the participants was 25.19 ± 4.68 years. Most of the subjects (80%) had high-school diplomas and the majority was housewives (70%); almost half of them (49%) were primiparous women. The most important points and views related to vaginal delivery and C-section were classified into two main themes. i.e. vaginal delivery, a facilitator of women's physical and mental health promotion, and c-section, a surgical intervention associated with less labor pain. Also, six sub-themes including vaginal delivery, a safe mode of delivery, vaginal delivery, elicitor of maternal feelings, vaginal delivery, a natural process with a pleasant ending, C-section, a procedure associated with future complications, C-section, a surgical intervention and sometimes a lifesaving procedure and C-section, a painless mode of delivery were derived from the data.

The participants' understanding of the advantages of vaginal delivery and the few associated complications was among the most important positive perceptions about vaginal delivery [9]. The participants believed that vaginal delivery led to minor complications and is not associated with problems of C-section such as back pain, pain/infection/irritation/or itching at the incision site, forgetfulness, death, or anesthesia-related complications. A small number of interviewees believed that vaginal delivery leads to pelvic floor dysfunction, perineal relaxation, and orgasmic disorders; such information was provided by their friends and relatives. However, these participants still considered vaginal delivery as an acceptable mode of delivery with very few complications [10]. Considering the mother's fast recovery and the few complications associated with vaginal delivery, the mother can regain her abilities to care for the child and play the maternal role. Therefore, she can establish an emotional relationship with her baby, and guarantee the infant's mental health and even his/her social health in the future [11]. The participants believed that only by performing vaginal delivery and enduring this difficult and exhausting experience, one can understand the mothers' pain and great value. The results of this study showed that vaginal delivery is a symbol of joy and birth. What distinguishes labor pain from other types of pain is the pleasant ending, which makes vaginal delivery more acceptable [12].

C-section associated future complications

Participants, in favor of vaginal delivery, believed that active maternal role during labor helps mothers form an enduring bond with their infants. They assumed that C-section deprives mothers of such feelings, since they do not experience the pain associated with vaginal delivery. Participants also mentioned some short- and long-term complications. The short-term complications include placental adhesion, inertia, hysterectomy, postoperative inability, leaving surgical instruments in the abdomen, anesthesia- and analgesia-related side effects, adverse gastrointestinal effects, several incisions on the body, postoperative pain, problems related to sutures, slow recovery, reduced lactation [13]. Most interviewees with previous experience of C-section complained about the long-term complications including weight gain, uterine adhesions, uterine disorders, twinges at the incision site, pain at the incision site, swelling of the stomach, itching of the incision site, back pain, reduced mental security of the child, loss of concentration, and amnesia [14]. One of the midwives, with a previous history of cesarean section, commented that pain after delivery in cases of cesarean section is mild and tolerable. Therefore, the mother is able to care for her baby and seems satisfied with cesarean section. She believed that pain after cesarean section is due to cutting multiple layers of the abdomen and uterus, which must be naturally greater

than vaginal delivery, but the cause of decreased pain after cesarean section is due to routine use of diclofenac suppositories at the maternity unit of the hospitals [15].

Conclusion

Based on the findings of this study, vaginal delivery, given its particular nature and physical, psychological, and social advantages, is highly valued by most people. According to the interviewees' statements, one of the reasons for mothers' tendency towards vaginal delivery was their belief in the superiority of vaginal delivery, due to its positive outcomes for both mother and infant [16,17]. The results of the present study demonstrated that vaginal delivery is a symbol of birth and happiness. The fact that childbirth pain is associated with positive outcomes distinguishes it from other sorts of pain. Participants in the present study mentioned the short- and long-term effects of C-section. In their opinion, one of the major complications of c-section is forgetfulness and memory loss following the administration of anesthesia or analgesia [18]. In addition, lack of conducted research about women's assumptions and views about vaginal delivery and C-section in Iran shows the importance of the current study [19]. This study, by determining the viewpoints and beliefs of pregnant women about vaginal delivery and C-section, can greatly influence the cultural beliefs about C-section and reinforce positive attitudes towards vaginal delivery; therefore, individuals may be more inclined to choose vaginal delivery.

References

1. Hamilton BE, Martin JA, Ventura SJ. Births: Preliminary Data for 2007. *National Vital Statistics Reports*. 2009;57(12):1–21.
2. Lumbiganon P, Laopaiboon M, Gülmezoglu M, et al. Method of delivery and pregnancy outcomes in Asia: the WHO global survey on maternal and perinatal health 2007–08. *The Lancet*. 2010;375(9713):490–9.
3. Rebelo F, da Rocha CM, Cortes TR, et al. High cesarean prevalence in a national population-based study in Brazil: the role of private practice. *Acta Obstet Gynecol Scand*. 2010;89(7):903–8.
4. Okada H, Kuhn C, Feillet H, et al. The 'hygiene hypothesis' for autoimmune and allergic diseases: an update. *Clin Exp Immunol*. 2010;160(1):1–9.
5. Bach JF. The effect of infections on susceptibility to autoimmune and allergic diseases. *N Engl J Med*. 2002;347(12):911–20.
6. Strachan DP. Hay fever, hygiene, and household size. *BMJ*. 1989;299(6710):1259–60.
7. Caicedo RA, Schanler RJ, Li N, Neu J. The developing intestinal ecosystem: implications for the neonate. *Pediatr Res*. 2005;58(4):625–8.
8. Rautava S, Walker WA. Commensal bacteria and epithelial cross talk in the developing intestine. *Curr Gastroenterol Rep*. 2007;9(5):385–92.
9. Eberl G, Lochner M. The development of intestinal lymphoid tissues at the interface of self and microbiota. *Mucosal Immunol*. 2009;2(6):478–85.
10. Sears CL. A dynamic partnership: celebrating our gut flora. *Anaerobe*. 2005;11(5):247–51.
11. Steinhoff U. Who controls the crowd? New findings and old questions about the intestinal microflora. *Immunol Lett*. 2006;99(1):12–6.
12. O'Hara AM, Shanahan F. The gut flora as a forgotten organ. *EMBO Rep*. 2006;7(7):688–93.
13. Qin J, Li R, Raes J, et al. A human gut microbial gene catalogue established by metagenomic sequencing. *Nature*. 2010;464(7285):59–65.
14. Guarner F, Malagelada JR. Gut flora in health and disease. *Lancet*. 2003;361(9356):512–9.
15. Khoruts A, Dicksved J, Jansson JK, et al. Changes in the composition of the human fecal microbiome after bacteriotherapy for recurrent *Clostridium difficile*-associated diarrhea. *J Clin Gastroenterol*. 2010;44(5):354–60.

16. Dethlefsen L, McFall-Ngai M, Relman DA. An ecological and evolutionary perspective on human-microbe mutualism and disease. *Nature*. 2007;449(7164):811–8.
17. Group NHW, Peterson J, Garges S, et al. The NIH Human Microbiome Project. *Genome Res*. 2009;19(12):2317–23.
18. Mshvildadze M, Neu J, Schuster J, et al. Intestinal microbial ecology in premature infants assessed with non-culture-based techniques. *J Pediatr*. 2010;156(1):20–5.
19. Goldenberg RL, Culhane JF, Iams JD, et al. Epidemiology and causes of preterm birth. *Lancet*. 2008;371(9606):75–84.

