Self-care demands in water birth: a qualitative study

Demandas de autocuidado no parto na água: estudo qualitativo

Demandas de autocuidado en el parto en el agua: estudio cualitativo

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How to cite:
Camargo JC, Albuquerque RS, Osawa RH, Correa EE, Lavieri EC, Néné M, et al. Self-care demands in water birth: a qualitative study. Acta Paul Enferm. 2023;36:eAPE02601.

DOI
http://dx.doi.org/10.37689/acta-ape/2023AO026011

Keywords
Natural childbirth; Self-care; Nurse midwives; Nursing theory; Healthcare models

Descritores
Parto normal; Autocuidado; Enfermeiras obstétricas; Teoria de enfermagem; Modelos de assistência à saúde

Descriptores
Parto normal; Autocuidado; Enfermeras obstetrices; Teoría de efermería; Modelos de atención de salud

Submitted
September 6, 2021

Accepted
June 13, 2022

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Associate Editor (Peer review process):
Rosely Erlach Goldman
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Abstract

Objective: To analyze the puerperal women's understanding about the participation of obstetric nurses/nurse-midwives in water birth, under the light of the Self-Care Deficit Theory.

Methods: This is a qualitative study using the content analysis technique with the participation of 21 Portuguese women who had water birth at a hospital. The concept of self-care proposed by Dorothea Orem was used as a theoretical framework.

Results: The mean category "Need for self-care in the context of water birth" emerged, whose meaning units were: *Fear of not being able to experience water birth*; *Perception of dystocia safe management*; *Lack of knowledge about the severity of postpartum hemorrhage*; and *Incompetence in perineal trauma repair*.

Conclusion: Participants identified that the presence of obstetric nurses/nurse-midwives brought security for them to continue confident in the water birth model. Women's needs were met with permanent respect by professionals, which favored puerperal women's autonomy, harmony between parties and support by nurses.

Resumo

Objetivo: Analisar a compreensão de puérperas sobre a participação da enfermeira obstetra/obstetriz no parto na água, sob a luz da teoria do autocuidado.

Métodos: Estudo qualitativo por meio da técnica de análise de conteúdo com a participação de 21 mulheres portuguesas que tiveram o seu parto na água, em ambiente hospitalar. Foi utilizado, como referencial teórico o conceito de autocuidado, proposto por Dorothea Orem.

Resultados: Aflorou uma grande categoria "Necessidade de Autocuidado no Contexto do Parto na Água", cujas unidades de significados foram: Medo de não conseguir vivenciar o parto na água, Percepção do manejo seguro da distócia, Deconhecimento sobre a gravidade que constitui a hemorragia pós-parto e Incompetência no reparo de traumas perineais.

Conclusão: As participantes identificaram que a presença da enfermeira obstetra/obstetriz, trouxe segurança para que prosseguissem confiantes no modelo de parto na água. As necessidades das mulheres foram atendidas com respeito permanente pelas profissionais, o que favoreceu a autonomia das puérperas, a harmonia entre as partes e o suporte da enfermeira.

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Conflict of interest: nothing to declare.

Resumen

Objetivo: Analizar la comprensión de puérperas sobre la participación de la enfermera obstetra/partera en el parto en el agua, bajo la perspectiva de la teoría del autocuidado.

Métodos: Estudio cualitativo por medio de la técnica de análisis de contenido, con la participación de 21 mujeres portuguesas que tuvieron su parto en el agua, en ambiente hospitalario. Se utilizó el concepto de autocuidado propuesto por Dorothea Orem como marco referencial teórico.

Resultados: Surgió una gran categoría "Necesidades de autocuidado en el contexto del parto en el agua", cuyas unidades de significado fueron: Miedo de no poder realizar el parto en el agua, Percepción del manejo seguro de la distocia, Desconocimiento sobre la gravedad que constituye la hemorragia posparto e Incompetencia en la reparación de traumas perineales.

Conclusión: Las participantes identificaron que la presencia de la enfermera obstetra/partera les dio seguridad para continuar con confianza con el modelo de parto en el agua. Las necesidades de las mujeres fueron atendidas con respeto permanente por parte de las profesionales, lo que favoreció la autonomía de las puérperas, la armonía entre las partes y el apoyo de la enfermera.

Introduction

Birth care with excessive, inadequate and unnecessary interventions can have consequences as serious as lack of care, and can cause more harm than benefits, endangering the life of women and their babies.[1]

Rescuing the physiology of birth is necessary to favor the reduction of interventions and even avoidable maternal death. Obstetric nurses/nurse-midwives in the birth scenario qualify care aimed at women's needs and increase the offer of practices that favor non-pharmacological pain relief and vaginal birth.[2]

Water birth is listed as a natural birth modality, mild, devoid of unnecessary interventions[3] and with a high proportion of physiological birth.[4] It is defined by immersion in hot water during the second phase of labor, resulting in birth entirely under water, regardless of the place of discharge.[5] It relates to good maternal and neonatal outcome.[4-7]

Nursing care in natural birth reduces maternal pain levels, postpartum hemorrhage (PPH), infection rate, promotes breastfeeding, improves women's emotional conditions, triggering physiological maternal recovery. This care is based on a relationship of trust and empathy, in which parturient women feel their needs are met, by allowing professionals, through their clinical judgment and adoption of good practices, to propose useful interventions for a meaningful and safe birth experience,[8] based on goodwill and readiness to provide care focused on women's needs in the birth process.[9]

To base the care, nurses have nursing theories that guide clinical practice, and this study adopted Dorothea E. Orem's Self-Care Deficit Theory as a theoretical framework, defined as "the performance or practice of activities that individuals initiate and perform on their own behalf to maintain life, health, and well-being".[10] It supports the World Health Organization (WHO) considering "the ability of individuals, families and communities to promote health, prevent disease, maintain health, and cope with illness and disability with or without the support of a health worker".[11] Therefore, human beings learn to take care of themselves, dispensing with the help of nursing. However, if there is inability to self-care, nursing takes over this role.[10]

The focus on self-care deficit, a deficiency that parturient women have in their care, in this article, is due to the fact that, over many years, most practices and research have focused on self-care/self-management, related to diseases chronicles of individuals and families;[12] however, even in non-pathological conditions, such as birth, parturient women need nursing care to maintain birth safety.

In water birth, whose scenario is usually natural, with nurses' assistance, the present study was built from the question: How do obstetric nurses/nurse-midwives promote self-care during water birth? Thus, this study aimed to analyze the puerperal women's understanding about the participation of obstetric nurses/nurse-midwives in water birth, under the light of the Self-Care Deficit Theory.

This study supports the knowledge of the need for self-care that emerges in the water birth model. It can favor the development of technical-scientific and ethical-political skills for the performance of care and teaching in obstetrics, in addition to configuring strategies, tools and theoretical-practical models for the need for self-care in obstetric care.

Methods

This is qualitative research, guided in the light of Content Analysis, with an in-depth interview about the need for self-care, following the Consolidated Criteria for Reporting Qualitative Research (COREQ).[13]

The population consisted of 15 women who voluntarily participated in the "*Projeto Birth na Água*" (Water Birth Project) at a public hospital in Setúbal/Portugal, with a protocol and systematization of care, proposed by the team of obstetric nurses, who after a technical visit to other similar projects in Europe, prepared an institutional protocol for care. They trained 25 obstetric nurses and initiated care. They applied at the end of the process a survey of satisfaction with the care received to puerperal women. Six women who has water birth at a private hospital in Porto/Portugal also participated, totaling 21 study participants.

Women who experienced water birth, who did not use pharmacological methods for pain relief, with a gestational age of 37 weeks or more, who agreed to participate in the study and who needed the intervention of obstetric nurses/nurse-midwives were included. Women whose babies were not born in water were excluded; they used pharmacological practices to relieve pain and who went into premature labor.

In the present research, the non-probabilistic "snowball" sampling technique was used, where the first participant indicated the others until speech saturation. The interviews were semi-structured, containing 19 questions, recorded in audio with an average duration of 60 minutes, carried out between October 2015 and September 2016 (home, cafes, squares or workplace), according to the puerperal women's availability to participate in the study.

For systematization, the full transcription of all oral content was carried out, followed by the analytical description of the information and meanings contained in the messages. After an exhaustive reading of content, the discourses related to each theme were identified, emerging the analytical categories, whose findings were interpreted in the light of symbolic interactionism, and the narratives were organized based on content analysis, according to Laurence Bardin,[14] contemplating the stages: interview text skimming; constitution of a textual corpus with treated and interpreted material; content organizing core identification; and category formation, expressing consensus and particularities.[14]

For data processing, a textual corpus was organized with the transcripts of interviews made possible in Nvivo®10, for speech coding and later theme grouping with participants' reports about the need for self-care in their experiences in water birth. Key expressions (fragments of testimonies that reveal the argument's essence), central ideas (synthesis, made by the researcher, which reveals the testimonies' meaning) and anchors (evaluative statement, belief or theory that is explained by the participant) were identified, from which the Discourse of the Collective Subject was formed, which consists of a qualitative way of representing the thought of a collectivity, aggregating, in a synthesis-discourse, the discursive contents of similar meaning issued by different people.[15]

To guarantee confidentiality, the narratives were identified by the initial "P" of participant, followed by a form identification number, for instance P1, and so on. The interviews were conducted by a single interviewer, after ethical approval by the Brazilian National Data Protection Commission (CNPD - *Comissão Nacional de Proteção de Dados*) 9885/2015 and voluntary acceptance with the signing of the Informed Consent Form.

Results

The survey included 21 postpartum women aged between 35-45 years (61.9%), with a prevalence of nulliparity (66.7%), complete higher education (76.2%), stable union (81%), preparation for water birth (100.0%), companions as companions (95.2%) and satisfaction with the birth experience in water (100.0%), projecting its repetition. To answer the study's problem and objective, the narratives' analytical process was carried out through the experience that each participant brought with them in the water birth process, which enabled interpre-

tations and inferences developed, giving rise to the main category "Need for self-care in the context of water birth", with the subthemes:

Category – Need for self-care in the context of water birth

Subtheme 1 – Fear of not being able to experience water birth

Fear was a feeling reported by the possibility of not being able to live the idealized birth choice. It was configured as a possible cause of blockage to parturient women, with repercussions on self-care, with the necessary intervention of an intermediary.

> *(...) my fear was due to the protocols. I didn't know to what extent someone or a doctor wouldn't come in there and say, "boys, it's past two o'clock (immersion) and there's a protocol. This lady has to leave now!" I was scared, but a nurse grabbed my hands and pressed some good points to calm me down and told me to calm down, to reassure me, that I could do it, that I had strength. He empowered me there, that went into a cloud then he was born (...). (P2)*

> *(...) my fears, one of them was pain control, I was afraid of not being able to control it and I thought about my mother's situation because she spent the whole night in the hospital without support, without analgesia, with the right to episiotomy and episiorrhaphy, and more traumatic than that I could not bear. I was also afraid of making a deep laceration, and I was controlling a little and doing perineal exercises to also overcome this in pregnancy (...). (P13)*

Subtheme 2 – Perception of dystocia safe management

Dystocia was configured in just one speech about the need for care and intervention for a successful birth. Partner support allowed security and tranquility, in addition to the wisdom of the nurses who helped the experience of a planned birth.

> *(...) when I entered the pool, I was able to relax and the pain of contractions decreased a lot, I felt that the whole environment of privacy and tranquility, along with the presence and support of my husband. In the expulsive period, I felt frustrated, I had been without eating, sleeping and without physical capacity for that moment for almost 24 hours. After several attempts, after almost 2 hours that I had entered the pool, the nurse advised me to leave. She patiently explained to me that if the baby was not born within minutes, she would have to call a doctor to intervene. He asked me if I wanted to try expulsion in the pool again and I said yes. I gained the strength I didn't have and in the process the nurse realized that there was an added problem: my baby had his head in a position that made it almost impossible for him to come out naturally. Fortunately, this professional decided to act and gave the necessary help to keep the baby's head where it should, which made it possible to have a eutocic birth (...). (P16)*

Subtheme 3 – Lack of knowledge about the severity of postpartum hemorrhage

Hemorrhage is a life-threatening condition and imminent maternal death if left unchecked. The need for care is perceived when the participant shows unconcern with PPH.

> *(...) an hour or so passed and the hemorrhage wouldn't stop, but I didn't care (...). (P4)*

> *(...) I will ask you something, "This is a little complicated, it is not stopping the blood and I would like to apply oxytocin to stop it, can I give it to you?", and I said, "Go ahead now that she's out there can give me whatever she wants" (...). (P4)*

Subtheme 4 – Incompetence in perineal trauma repair

In physiological birth, hemorrhage lacerations may occur that require recognition of their extent, degree of laceration, requiring perineal repair by a competent professional.

> *(...) the perineum suffered minimal lacerations. I took two or three internal and external stitches to reinforce. My recovery was pretty quick (...). (P 3)*

(...) I tore a lot inside and out, I took a lot of stitches. I usually say that it cost me more to be sewn than to have my son born. on the stretcher, they gave me an oxytocin injection, I didn't happen to have put anything about it in the birth plan, and they started to sew and that took a long time, and they put the baby to the breast (...). (P 9)

Discussion

Fear of not experiencing water birth interfered with self-care and was strengthened due to physicians' non-authorization for woman immersion, indication of her leaving after two hours in the bathtub, according to established protocol, lack of self-control related to pain, and the possibility of deep perineal trauma.[16]

Fear reverberates difficulty in self-control and can be configured in imprisonment and impossibility to live the expected. In this case, nurses can bring parturient women back to the focus of birth. When evolution is physiological, the main obstacles to fully controlling the situation are historically pain, fear of maternal or neonatal death, fear of losing genital integrity and mutilation.[17]

Fear of pain justifies the most varied pharmacological measures for relief; however, water birth allows natural birth with freedom of choice, respect in decisions, and, at the same time, nurses' support and timely intervention in the imminence of risks that parturient women sometimes ignore when putting themselves to test, but under the professionals' calm and safe care.

Another factor that unbuckled interferences in the development of self-care was shoulder dystocia, and a professional was needed to diagnose it and act on correction. In the present study, the woman was perceived exhausted due to prolonged labor. A deep understanding of the event enables developing strategies and innovative care for a positive birth experience, with restructuring of a comprehensive and holistic care plan.[18]

Dystocia, when characterized by a transition process through which women go from normal birth to medical birth, is a "loss of choice".[17] In the present study, An interesting fact was found in the report of a participant who describes that a nurse intervened in a positive way in the correction of dystocia, evidencing the need for care from a competent professional, as described in Orem's Self-Care Deficit Theory.

A study with a group of parturient women where one used water and the other did not conclude that there was no difference in relation to perineal lacerations for the group that had water birth, but there was a higher incidence of PPH and shoulder dystocia,[19] which reinforces that even a physiological birth can have complications, requiring a trained obstetric nurse/nurse-midwife to perform births in all environments, as guided by the Self-Care Deficit Theory.

A study with 306 water births and 306 conventional births found that labor duration was significantly shorter in water birth and dystocia rate was inversely higher in conventional birth, in addition to interventions such as oxytocin and amniotomy.[20]

The 3rd period of birth is a moment that requires self-care by puerperal women, since they are susceptible to hemorrhage, but nurses are essential for early identification and management for rapid reversal and maternal death prevention. A competent obstetric nurse will safely conduct the situation and act in hemorrhage prevention.[21,22]

The care in the 3rd period for the postpartum women participating in the study was with physiological management, delayed umbilical cord clamping and placenta expulsion by maternal effort, with an obstetric nurse's surveillance to guarantee maternal and neonatal well-being. Currently, there is consensus regarding active management for hemorrhage prevention with the use of uterotonics, with oxytocin being the main component for PPH prevention, added to controlled cord traction, timely cord clamping, uterine massage after discharge and skin-to-skin contact.[21,22] Self-care implies that puerperal women are oriented towards identifying deviations from normality, and the need for professionals with a clinical and evaluative perspective for timely decision-making.

A UK study of 46,088 low- and medium-risk spontaneous low-term births carried out in ma-

ternity hospitals consisted of 6,264 water births (13.6%), a significant association in water birth and reduction of PPH (adjusted OR 0.68; 0.51-0.90) and hospitalization in a neonatal unit (adjusted OR 0.65; 0.65-0.78).[23]

Research with 397 water births and 2025 conventional ones found no difference for Agar score and neonatal transfer to intensive care, as well as hemorrhage rates, but women in water births were less prone to first and second degree lacerations, demanding sutures.[24]

Practitioners should assess the placenta to rule out hemorrhage due to placental debris. In water birth, attention by nurses and continuous monitoring of maternal well-being is essential, through vital sign checking, and water coloring, which may indicate the need for rapid, accurate and resolute intervention, as well as possible hemorrhage perineal ruptures, which require repair and evidence the need for care, interfering with postpartum women's self-care.

In this study, participants reported that they had suffered a perineal laceration, which repair took place with newborns placed on the maternal abdomen in skin-to-skin contact.

Research comparing outcomes of water births and conventional births with 26,684 women found favorable data in the water birth group regarding the reduction of prolonged first or second stage births, shoulder dystocia, perineal lacerations, episiotomies and hemorrhages.[25]

Regarding the incidence of perineal trauma at birth, in an investigation with 1,007 women who had water birth and 36,924 of the general obstetric population, no significant difference was found in the incidence of major perineal trauma. They concluded that having water birth reduced the chance of having an intact perineum.[26]

A study of 1,665 women with moderate obstetric risk factors investigated maternal and fetal outcomes after water immersion and/or water birth, compared to conventional, concluding that despite moderate obstetric risk factors, such as administration of oxytocin and induction of labor, maternal and neonatal outcomes were similar between groups.[27]

Water birth, the present study's focus, most of the time, allows experiencing self-care, however, it does not dispense with the need for nurses to be vigilant and careful for a safe birth.[23-27]

Considering the findings, the need for care determined the role of professionals in birth care only when women found themselves unable to perform self-care. It can be seen that professionals' actions promote and encourage self-knowledge, self-control and self-care, with a comprehensive/holistic approach to obstetric practice actions.

This investigation inaugurates a line of knowledge about self-care deficit in the field of obstetric care, especially in the water birth modality. The limitations of this study refer to the data collection strategy, since the "snowball" technique tends to overlap the interviewees' characteristics. Studies with other strategies and design are necessary to corroborate and/or deepen the findings of this research.

Conclusion

Participants identified that the presence of obstetric nurses/nurse-midwives brought security for them to continue confident in the water birth model. Women's needs were met with permanent respect by professionals, which favored mothers' autonomy, harmony between parties and support by nurses.

Collaborations

Camargo JCS, Albuquerque RS, Osawa RH, Correa EECS, Lavieri EC, Néné M and Grande MCLR contributed to the study design, data analysis and interpretation, article writing, relevant critical review of the intellectual content and approval of the final version to be published.

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