

Original Article

Occupational therapy practice in a high-risk obstetric center

Atuação terapêutica ocupacional em um centro obstétrico de alto risco

Renata Maria da Conceição^a , Jamylle Silva de Brito^a , Eline Vieira da Silva^a , Juliana Fonsêca de Queiroz Marcelino^b 

^aHospital das Clínicas – HC, Universidade Federal de Pernambuco – UFPE, Recife, PE, Brasil.

^bDepartamento de Terapia Ocupacional, Universidade Federal de Pernambuco – UFPE, Recife, PE, Brasil.

How to cite: Conceição, R. M., Brito, J. S., Silva, E. V., & Marcelino, J. F. Q. (2020). Occupational therapy practice in a high-risk obstetric center. *Cadernos Brasileiros de Terapia Ocupacional*. 28(1), 111-126. <https://doi.org/10.4322/2526-8910.ctoAO1927>

Abstract

Introduction: When the woman is in labor, childbirth and puerperium, they need to be accompanied by a medical team and a reliable companion. In this context, the occupational therapist promotes actions to occupational performance. **Objective:** To describe the possibilities of occupational therapist's interventions in a high-risk obstetric center. **Method:** A descriptive, documentary, retrospective, quantitative study carried out in a multiprofessional integrated residency health program at a reference hospital in Recife-PE, from April to June 2018. Sample composed of records of 10 occupational therapists residents from 2010 to 2017. The analysis was performed using Microsoft Excel, SPSS and Chi-squared test. **Results:** A total of 351 records and 45 reports were evaluated, it was possible to observe more frequency of the interventions by R1 in labor and puerperium. While, among R2, the prevalence was in prenatal and other gynecological/obstetric situations. The interventions found in prenatal care were: activities of daily life -ADL (29.1%), psychosocial approach (27.4%) and health education (21.2%). In the labor were: assistance in labor and childbirth (71.8%), health education (11.3%) and psychosocial approach (10.3%). In puerperium were the ADL (43.1%), psychosocial approach (14.5%) and instrumental activity of daily living (12.4%). The occupational therapist elaborates actions to favor the functional and occupational performance of the woman, encompassing the different dimensions of the pregnancy-puerperal period in the hospital context. **Conclusion:** The practice of the occupational therapist in the HOC promotes paradigm changes, making the woman protagonist in their performance areas and favoring actions of health promotion.

Keywords: Woman's Health, Prenatal Care, Labor Obstetric, Postpartum Period, Gynecology, Occupational Therapy.

Received on Apr. 11, 2019; 1st Revision on July 31, 2019; 2nd Revision on Aug. 20, 2019; Accepted on Oct. 8, 2019.

 This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Resumo

Introdução: Quando a mulher se encontra no trabalho de parto, parto e no puerpério ou em outras situações ginecológicas e obstétricas, faz-se necessário acompanhamento pela equipe. Neste contexto, o terapeuta ocupacional promove ações ao desempenho ocupacional. **Objetivo:** Descrever as possibilidades de intervenção terapêutica ocupacional em um centro obstétrico de alto risco. **Método:** Estudo descritivo do tipo documental, retrospectivo, quantitativo, realizado no Programa de Residência Multiprofissional Integrada em Saúde, de um hospital de referência em Recife-PE, no período de abril a junho de 2018. Amostra composta por registros de 10 terapeutas ocupacionais residentes entre 2010 a 2017. Para análise, foram utilizados softwares Microsoft Excel, SPSS e teste Qui-quadrado. **Resultados:** Foram avaliados 351 registros e 45 relatórios, sendo verificado maior frequência das intervenções pelos R1 no trabalho de parto e puerpério, enquanto, entre os R2, a prevalência foi no pré-natal e outras situações ginecológicas/obstétricas. As ações encontradas no pré-natal foram: atividades de vida diária – AVDs (29,1%), abordagem psicossocial (27,4%) e educação em saúde (21,2%). No trabalho de parto foram: assistência no trabalho de parto e parto (71,8%), educação em saúde (11,3%) e abordagem psicossocial (10,3%). No puerpério foram AVDs (43,1%), abordagem psicossocial (14,5%) e atividade instrumental de vida diária (12,4%). O terapeuta ocupacional desenvolve ações para favorecer o desempenho funcional e ocupacional da mulher, englobando as diferentes dimensões do período gravídico-puerperal no contexto hospitalar. **Conclusão:** A prática do terapeuta ocupacional no COB promove mudanças de paradigmas, tornando a mulher protagonista nas áreas de desempenho e facilitando ações de promoção da saúde.

Palavras-chave: Saúde da Mulher, Cuidado Pré-natal, Trabalho de Parto, Período Pós-parto, Ginecologia, Terapia Ocupacional.

1 Introduction

Pregnancy is characterized by a set of physiological phenomena that enable women to generate a life in their body. It is a phase of physiological, psychological and socioeconomic changes, which require an adaptive response of women, family and community. It is clear that the gestational period demands new forms of physical and mental balance, caused by metabolic and hormonal alterations associated with the construction of a new body and occupational image, and these perceptions are related to meanings attributed to childbirth and postpartum experiences (Costa, 2010; Brasil, 2013).

Considering this context and aiming at qualifying women's care, the Ministry of Health (MH) elaborated the *Política Nacional de Atenção Integral à Saúde da Mulher* (PNAISM), with the objective of favoring better living and health conditions for Brazilian women. All this to ensure the rights and access to health promotion, prevention, care and recovery services, contributing to the reduction of morbimortality and offering comprehensive care to this population in the *Sistema Único de Saúde* (SUS) at all levels of complexity (Brasil, 2004).

Based on this premise, qualified care for women in their various stages of life becomes indispensable. This care should be offered through the performance of a multidisciplinary team, including an occupational therapist. These professionals' objective, among others, is maintaining the functional capacity and performing the psychosocial skills of the subjects in their different contexts (Marques et al., 2016).

The intervention of the occupational therapist can be based on the theoretical framework of the Occupational Therapy Practice Framework: Domain and Process. The document describes the concepts that support actions and guides practice through knowledge and for occupational performance, which involves the way the patient performs their occupations related to Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL), work, education, leisure and social participation. Thus, these professionals are able to evaluate and intervene in all aspects of the domains (occupations, customer factors, skills and performance standards), as well as in the relationship between context-client-environment, recognizing the importance of global well-being to promote the participation of the individual in daily activities (Associação Americana de Terapia Ocupacional, 2015).

With regard to the performance in the hospital, the *Conselho Federal de Fisioterapia e Terapia Ocupacional* (COFFITO), through Resolution No. 429 of July 8, 2013, recognizes the specialty of occupational therapy in hospital contexts, defining its areas of professional practice and competencies in the various organizational structures of SUS (Conselho Federal de Fisioterapia e Terapia Ocupacional, 2013). This area of activity includes planning and execution of occupational therapy intervention with patients, family members and companions and/or caregivers, even in inpatient or outpatient care basis, as well as to workers and managers in different contexts, being: hospitalization units, outpatient clinic, emergency room, operating room, intensive and/or semi-intensive care units, day-to-day hospital and specialized units (Conselho Federal de Fisioterapia e Terapia Ocupacional, 2013).

The occupational therapist should consider, in their practice, the principles of the *Política Nacional de Humanização*, elaborated in 2003 by the Ministry of Health, which proposes to adapt services to the environment, respecting privacy and promoting a welcoming and comfortable ambience to patients and their family members (Brasil, 2003; Martins & Camargo, 2014). In view of this, Martins & Camargo (2014) affirm that occupational therapy activities should be directed to maternity performance, autonomy and independence in ADL and IADL, as well as approximation and bonds strengthening between mother-baby-family.

Thus, occupational therapists have developed their work in the area of women's health, especially in the pregnancy-puerperal period, with patients and their families, in health promotion, prevention of diseases and biopsychosocial rehabilitation, with a view to favoring the autonomy and participation of women before, during and after the experience of delivery. However, their performance in this context is still incipient and little widespread in the technical-scientific environment. Thus, this study aims to describe the possibilities of occupational therapy intervention in a high-risk obstetric center.

2 Method

This is a descriptive, retrospective, quantitative study conducted with women assisted in a high-risk Obstetric Center. It was carried out from professional records of occupational therapy residents, filed in the Secretariat of the *Programa de Residência Multiprofissional Integrada em Saúde* (PRMIS), in a public university hospital that is a reference in high complexity care in the state of Pernambuco.

The Obstetric Center (OBC) offers multiprofessional care for high-risk pregnant women with comorbidities from before or during the gestational period. In this sector, care is also provided to patients in the gynecological clinic and some obstetric cases of pregnancy development problems, such as ectopic pregnancy, gestational trophoblastic disease and abortion, and so it is an emergency service for Gynecology and Obstetrics cases.

Annually, PRMIS offers two vacancies for occupational therapy residents in the area of women's health. According to the established routine, first and second year residents must fill out forms containing the description of the practical activities they develop daily during weekly shifts, as well as monthly reports of individual and multidisciplinary practice and theoretical-practical activities.

Data collection was performed from April to June 2018 by means of documentary records of first and second year occupational therapy residents (R1 and R2) of PRMIS, in the women's Health concentration area, during practice at the High Risk Obstetric Center, as provided for in the annual schedule program of PRMIS.

Inclusion criteria were the records of resident occupational therapists who performed practical activities in the OBC between 2010 (beginning of the program) and 2017. We excluded records of residents who did not complete the program until the date of the research data collection.

For data collection, we elaborated a semi-structured questionnaire, completed manually for further quantification. It specified the period in which the assisted women were (prepartum, childbirth, immediate puerperium and other gynecological/obstetric situations) during admission in the OBC, the occupational therapy interventions performed, the resident year of exercise and the residents' leveling identification (R1 or R2).

Data analysis was performed elaborating a Microsoft Excel spreadsheet, version 2013, in which all interventions were grouped according to their respective functions in prepartum, childbirth, puerperium and other gynecological/obstetric situations. They include occupational therapy reception, evaluation, ADL, IADL, assistance in labor and delivery, family care; psychosocial approach, actions directed to the team, health education, neuromusculoskeletal, sensory and mental functions, Assistive Technology, reduction and prevention of injuries, and labor, educational and leisure orientations.

After tabulation, the data were exported and quantified in the SPSS software, version 18. To compare the proportion of the interventions performed by R1 and R2, we applied the Chi-square test. To analyze the interventions we performed frequency distribution. The conclusions were obtained considering the significance level of 5%.

All ethical recommendations were followed based on resolution No. 466/2012 of the National Health Council, after signing the letter of consent and the term of authorization to use the data. In addition, the Research Ethics Committee involving human beings of the *Universidade Federal de Pernambuco* approved the study with the embodied opinion CAAE number 80483217.5.0000.5208.

3 Results

We analyzed 351 shifts records and 45 monthly reports of 10 occupational therapists (R1 and R2) during practices in high-risk OBC, identifying the interventions performed with women who were in prepartum, labor, puerperium phases and other gynecological/obstetric situations. The number of R1 and R2 (n=10) considered for inclusion in the research resulted from the following situations: in 2011, only one resident entered, in 2012, there was no selection for the category, and three residents did not complete the residence.

According to the year of exercise, it was found that the highest frequency of interventions was performed by R1 during the phases of labor and puerperium (53.1% and 50.9%, respectively), while, among R2, the prevalence occurred during the prepartum period and other gynecological/obstetric situations (53.1% and 61.5%, respectively). Although a higher number of interventions performed by these types of residents was found, the comparison test of proportion between the interventions of residents (R1 and R2) was not significant in any of the phases evaluated ($p > 0.05$), indicating that the distribution of interventions is similar between the levels of activity of the residents (Table 1).

Among the phases and gynecological/obstetric situations assisted in the OBC, the puerperium was the period with the highest average of interventions (43.4 interventions), followed by labor (21.3 interventions) and prepartum (17.9 interventions) (Table 1)

Table 1. Distribution of the number of interventions carried out according to the type of residents.

Rated factor	Prepartum		Labor		Puerperium		Other Gynecological/Obs tetric situations	
	n*	%	n	%	n	%	n	%
R1**	84	46.9	113	53.1	221	50.9	25	38.5
R2***	95	53.1	100	46.9	213	49.1	40	61.5
p-value ¹	0.411		0.373		0.701		0.063	
Average ± Standard Deviation	17.9 ± 7.6		21.3 ± 13.5		43.4 ± 12.0		6.5 ± 5.2	

¹p-value of the Chi-square test for proportion comparison. *frequency of interventions by assistance period. **first year resident occupational therapist. ***second year resident occupational therapist. Source: Author's data.

It was possible to observe that puerperium was the phase in which there was a higher frequency of interventions among residents (48.7%), followed by labor (23.9%) and prepartum (20.1%) (Table 2).

We also found that in the prepartum phase, the most performed interventions were aimed at the performance of ADL (29.1%), psychosocial approach related to interests, interpersonal skills, self-expression and self-control and motivation (27.4%) and health education (21.2%). In the labor phase, the actions found were related to care in labor and delivery (71.8%), health education (11.3%) and psychosocial approach (10.3%), while, in the puerperium phase, the practices were focused on ADL (43.1%),

psychosocial approach (14.5%) and IADL (12.4%). However, the most performed actions in other gynecological/obstetric situations were in ADL (33.8%), health education (30.8%), psychosocial approach (7.7%) and occupational therapy reception (7.7%) (Table 2).

Table 2. Distribution of interventions according to the phase.

Intervention	Prepartum		Labor		Puerperium		Other Gynecological/Obstetric situations	
	n*	%	n	%	n	%	n	%
ADL**	52	29.1	1	0.5	186	43.1	22	33.8
Psychosocial approach	49	27.4	22	10.3	62	14.5	5	7.7
Healthy education	38	21.2	24	11.3	30	7.1	20	30.8
IADL***	10	5.6	-	-	56	12.4	3	4.6
Family care	13	7.3	7	3.3	15	3.5	3	4.6
Occupational therapy reception	8	4.5	4	1.9	9	2.1	5	7.7
Team	2	1.2	2	0.9	1	0.2	3	4.6
Assessment	3	1.7	-	-	2	0.5	-	-
Assistive Technology	1	0.5	-	-	3	0.7	-	-
Neuromusculoskeletal function	-	-	-	-	34	7.4	-	-
Sensory function	1	0.5	-	-	2	0.7	-	-
Mental function	1	0.5	-	-	3	0.7	-	-
Assistance in labor and delivery	-	-	153	71.8	-	-	-	-
Hospital discharge	-	-	-	-	16	3.7	2	3.1
Health events reduction	-	-	-	-	10	2.3	2	3.1
Work	-	-	-	-	3	0.7	-	-
Health events prevention	1	0.5	-	-	-	-	-	-
Education area	-	-	-	-	1	0.2	-	-
Leisure	-	-	-	-	1	0.2	-	-
TOTAL	179	20.1	213	23.9	434	48.7	65	7.3

*Quantitative of occupational therapeutic intervention referring to the area of performance, components and body structure in each phase of action. **Daily Life Activity. ***Instrumental Activity of Daily Living. Source: Author's data.

During the study, the most common therapeutic strategies found in the prepartum phase were actions focused on performance in ADL, such as: guidance regarding physiological energy conservation techniques (33%), orientation of functional mobility (25%), bathing (12%) and dressing up (12%). Regarding the psychosocial approach, support for psychosocial components (25%), approaches related to the hospitalization process (24%) and stimulation of mother-baby bond (18%), as well as

health education strategy involving the main themes: delivery routes (21%), phases of labor (16%), as well as guidance and importance of breastfeeding (16%).

It was also possible to identify that during care in labor and delivery, non-pharmacological measures were offered to women to relieve pain and stimulation of labor through: encouraging ambulation (13%), breathing technique (12%), verticalization (11%), lumbosacral massage (10%), pelvic mobility in the Swiss ball (8%), relaxing bath (8%) and music (5%). With regard to the psychosocial approach performed during occupational therapy interventions, they are: women's empowerment and autonomy (33%) and support to psychosocial components (values, interests, self-concept, interpersonal skills, self-expression and self-control), present in 29% of the records; stimulation of mother-baby bond (19%), and use of strategies through health education based on guidance on labor (81%), delivery routes (15%) and pregnant adolescents group (4%).

In the immediate puerperium phase, there were actions aimed at ADL, such as orientation of functional mobility (13%), bed positioning (13%), ambulation stimulation (10%), and bath orientation (9%). However, in relation to IADL, records related to care during breastfeeding (48%) and other care actions with the newborn (32%) and routine organization (5%). Regarding the psychosocial approach, occupational therapy interventions were related to mother-baby bond stimulation (47%), hospitalization process (13%) and support for psychosocial components (11%).

In other gynecological/obstetric situations, there were actions related to ADL, such as self-care orientations (14%), bathing (14%) and personal hygiene (14%). Psychosocial approach also revealed actions to support psychosocial components (60%) and hospitalization process (40%), as well as the use of health education strategy, with themes focused on ectopic pregnancy (55%), family planning (20%) and abortion (10%).

4 Discussion

During data collection, there was a prevalence of occupational therapy interventions to women in the puerperium phase, followed by labor, prepartum and other gynecological/obstetric situations. Marques et al. (2016) affirm that the occupational therapist performance together with the multidisciplinary team proposes interventions directed to women with regard to: occupational performance, active participation during labor, measures to relieve pain, humanization of the birth process and to stimulate mother-baby-family bond.

Occupational therapy care is configured as a space that allows women and their companion to understand questions related to pregnancy, labor, childbirth, puerperium, breastfeeding, care of the newborn and mother-baby-family bond (Carvalho & Scatolini, 2013). It is understood that the participation of the companion is necessary at all times, since it can transmit safety and contribute effectively during labor and postpartum, and therefore their presence during hospitalization is ensured by law no. 11,108, of April 7, 2005 (Brasil, 2005), and the occupational therapist should also take care of them.

In the prepartum phase, the woman is admitted to the OBC to stabilize their clinical condition, since it is a moment of physiological alterations aimed at favoring

the adequate development of pregnancy. However, there are cases in which pregnant women are affected by morbidities previous and/or during the gestational period. Therefore, they have higher probabilities of an unfavorable evolution, both for the fetus and for the mother, being characterized as high-risk pregnancy, which implies the need for multiprofessional care to provide the satisfactory pregnancy-puerperal period (Brasil, 2010).

Regarding the therapeutic strategies to facilitate the performance of women in ADL in prepartum phase, a similar result was found in the study by Nascimento et al. (2017), which evaluated adolescent pregnant women, who had difficulties in performing dressing lower limbs, personal hygiene and functional mobility ADL. These facts were due to common physiological and biomechanical alterations in pregnancy, such as uterine growth, distension of the abdominal musculature and increased width of the pelvis (Aguiar et al., 2013). These factors contribute to changing occupations performance, since they are tasks that require balance, disposition, physical effort and mobility (Nascimento et al., 2017).

Marques et al. (2016) point out that all proposals of therapeutic interventions should be elaborated through anamnesis, evaluation, treatment plan and execution of strategies, in which the professional takes into account the uniqueness of women, acting through structured resources and orientations, aiming at functional/occupational performance during and after the gestational period. In this process, the occupational therapist graduates the use of their techniques according to the development of the person, their commitments, the potential for recovery and/or the need for approaches to adapt the activity to make them functionally independent (Crepeau et al., 2011).

In this sense, the occupational therapist intervenes in a group and/or individual way to promote humanized care, stimulate active participation in the process of preparation for maternity and independence in the performance of ADL, IADL, leisure, education, work, rest and sleep and social participation. Such interventions are carried out through therapeutic strategies, such as: the insertion of pregnant women in significant activities; training and physiological energy conservation techniques during ADL execution; stimulation of neuromusculoskeletal functions, related to movement and sensory functions; construction and strengthening of mother-baby bond; health education strategy, among others (Associação Americana de Terapia Ocupacional, 2015; Martins, 2019).

With regard to the psychosocial approach found in the records of this research, according to Crepeau et al. (2011), occupational therapists, through this approach, facilitate coping and adequacy to hospitalization in all phases in which the woman is assisted. These authors consider, for the psychosocial approach, values, interests, self-concept, function performance, social conduct, beliefs, interpersonal skills and self-expression of the subjects during their functional performance, and the occupational therapist is qualified to evaluate, welcome and guide such aspects.

On the hospitalization process, an emphasized factor in this study, Cruz & Guarany (2015) indicate that occupational roles can be broken when pregnancy is at risk and often need a long period of hospitalization, leaving women exposed to stressful factors. It is configured as a moment of awareness about the clinical situation, which sometimes mean to move away from family support and in experience conflicts

between functional dependence and loss of autonomy. Thus, the hospitalization process can influence the integrity of emotional, social, physical, cultural and even spiritual aspects imposed by pregnancy, causing varying levels of individual and family stress and anxiety.

Therefore, the professional considers the pregnant woman as a holistic being, and aims to assist them fully, which implies saying that the occupational therapist should not only intervene on the performance of ADL and IADL, but also in the establishment of the therapist-patient bond, understanding the social context, desires, expectations, fears, skills and culture. All these seek to restore pregnant women as a biopsychosocial and spiritual being in order to achieve satisfactory occupational performance (Carvalho & Scatolini, 2013).

Another intervention frequently mentioned in the present study was the health education strategy, evident in all phases in the OBC, especially in prepartum phase and other gynecological/obstetric situations. This approach is relevant in this context, in view of the various situations experienced by women, promoting practical learning, since it prepares them to deal with events related to their health condition (Santos & Penna, 2009). D'Avila et al. (2018) corroborate this finding, because the authors developed a study with pregnant women and health professionals in which they construct and validate a viable educational game for the guidance and preparation of pregnant women on good care practices in the delivery process. Thus, prenatal care is a favorable moment for the development of educational approaches, with self-care guidance, prevention of health problems, baby care, promotion of autonomy and maternal empowerment, knowledge on reproductive and human rights, preparation for the delivery process, interpersonal communication and active participation of the health team in this scenario (Quadros et al., 2016; Quental et al., 2017).

About the labor phase, Silva et al. (2011) and Ferreira et al. (2017) affirm that the goal of the entire multidisciplinary team in this period is to promote comfort and satisfaction for women and their companion. Practices with these objectives are part of a context that values natural delivery, also known as transpelvian delivery, as well as adequate care supply during labor and birth, ranging from environmental modifications to non-pharmacological practices of pain relief during labor and childbirth. The above authors also indicate that such practices cause fewer side effects for the mother and baby and may give women a greater role in this phase, favoring a good quality of birth.

Childbirth is experienced in several ways, according to the historical, cultural, and socioeconomic aspects of each region of the world, and birth occurred in the family context, as a natural part of the reproductive cycle, without the interference of external factors, however, with the women adopting varied positions during labor. Over the years, the intrinsic doing gave way to the technology acquired in the academic environment, excluding midwives and with the participation of specialist professionals, including the occupational therapist (Jornal Ventre, 1994 apud Carvalho & Scatolini, 2013).

Although it is understood that the woman and her family are protagonists of the moment of delivery, over the years and with scientific deepening, childbirth is no longer a natural event and began to have a manipulated approach, centered in hospitals, with several interventions, such as episiotomy, oxytocin and an increase in the number of cesarean sectional deliveries (Brasil, 2017). Therefore, to implement the

Política Nacional de Atenção Integral à Saúde da Mulher, Programa Rede Cegonha and *Programa de Humanização do Parto e Nascimento*, which assure women the right to humanized care for pregnancy, childbirth and puerperium and reduce the maternal and neonatal mortality, the MH elaborated good practices in childbirth. They recommend qualified care to women in prenatal care, labor, childbirth and puerperium, and through a multidisciplinary team (Brasil, 2002, 2017).

In the labor phase, pain is the main complaint of the parturient, which can lead to loss of emotional control, constituting a stressor and traumatic factor capable of leading to mental disorders. Thus, the multidisciplinary team manages this symptom through non-pharmacological practices for its control, which have been effectively introduced in women's care in this phase. Such actions include relaxation techniques through breathing, immersion bath or shower, Swiss ball, aromatherapy, music therapy¹, body massage, continuous emotional support, women's verticalization and variety of positions, among others (Lehugeur et al., 2017).

Regarding the relaxation by breathing techniques, Almeida et al. (2005) conducted an experimental study with women in prepartum, labor and postpartum phases, and found that breathing and relaxation techniques adapted from the psychoprophylactic methods and Fernand Lamaze did not reduce pain intensity, but promoted low anxiety maintenance for longer during delivery.

In this study, the use of measures to relieve pain through breathing technique, lumbosacral massage, relaxing bath stimulation and Swiss ball, were identified during the assistance of labor and delivery. The interventions described by occupational therapists corroborate the recommendations of the MH, which indicate that all professionals should offer the parturient techniques of analgesia and relaxation before the application of pharmacological methods to favor a positive experience in the face of birth, reducing suffering and trauma (Brasil, 2017).

In the data collection, occupational therapists recorded, during their interventions aimed at stimulating labor progress, strategies such as postural changes, verticalization, ambulation and mobility in the Swiss ball. Such procedures are indicated by the MH, which states that women should be encouraged to move and adopt positions that are more comfortable during labor, in order to favor pain relief, as well as the fetus descent and fitting into the birth canal (Brasil, 2017). Ambulation is also a method capable of accelerating labor, facilitated by the vertical position and the favorable effect of gravity, which, associated with pelvic mobility, increases cervical dilation and fetal descent, promoting greater tolerance to pain in the face of more effective contractions. Such resources act on the senseperceptual system of the parturient, which can improve the experience of childbirth, with a resignification of the moment and management of self-control (Silva et al., 2017; Araújo et al., 2018).

Among the facilitating resources of labor the literature mentions, for example, the obstetric ball also called the ball of birth or Swiss. Studies have shown that the Swiss

¹Music therapy can only be applied by professionals specialized in this area. However, other professionals can use music as a resource. In this sense, the occupational therapist takes music as a therapeutic strategy to favor better occupational performance of individuals, because it was proved that the use of music provides greater participation of patients, favors the link between patient, companion and team, also increasing their self-esteem and decreasing pain complaint (Barja & Barja, 2013). This contributes to a positive evolution during delivery, because music works as a relaxing and encouraging resource for women's free movement, taking into account their uniqueness.

ball is a resource that favors the adoption of the vertical posture by the parturient comfortably, being a strategy available to the team to promote free movement of women during labor (Silva et al., 2011; Henrique et al., 2016; Araújo et al., 2018). The ball is also characterized as a playful resource, which contributes to the distraction of the parturient, making labor quiet and pleasurable. This resource, when associated with other techniques, such as massage and shower, decreases pain perception, promotes physical and mental relaxation, women's their and companion's active participation, lower use of epidural anesthesia, shorter labors and lower cesarean birth index (Henrique et al., 2016; Lehugeur et al., 2017).

However, the scientific literature shows no consensus regarding the most appropriate cervical dilation moment to indicate the use of the Swiss ball. Silva et al. (2011) evaluated the use of the resource by obstetric nurses in the assistance to women in labor, revealing that the effective time for the use of the Swiss ball in labor occurred during cervical dilation between 4 and 7 cm., being more prevalent when the parturient reaches 4 cm. However, Oliveira & Cruz (2014) point out that more research is needed to serve as a basis to enable the elaboration of protocols for the use of the Swiss ball by the multidisciplinary team. However, in all the studies analyzed, we perceive that the indication should be performed when the woman reaches the active phase of labor, because it brings pain relief and facilitate the progress of childbirth, since in this period contractions become effective and painful (Oliveira et al., 2012).

Therefore, in order to favor the satisfactory performance of women during delivery, which involves the execution of mental functions (affective, cognitive, perceptual), sensory (visual, auditory, tactile, proprioceptive, vestibular, pain, sensitivity temperature and pressure) and neuromusculoskeletal (joint and bone, muscular and movement), the American Association of Occupational Therapy (Associação Americana de Terapia Ocupacional, 2015) reports that the occupational therapist has technical-scientific skills to evaluate and intervene on the functions and structures of the body related to the reproductive and movement system. Thus, they promote quality at birth, expanding the meaning of the moment for women and their families.

Another phase of intervention highlighted in this study is the puerperium, which is understood to be the postpartum phase, which can be divided into three periods: immediate (from the 1st to the 10th day after delivery), late (from 11th to 45th day) and remote (from the 45th day on) (Vieira et al., 2010). It is a period marked by the performance of a new occupational role, motherhood, with repercussions on the daily life of the woman and the whole family.

In the current study, the identified interventions turned to the performance of ADL, psychosocial approach and IADL. Regarding ADL, the guidance provided related to functional mobility, bed positioning, training and energy conservation techniques. Because the service receives high-risk pregnant women, there are cesarean postpartum and normal postpartum women. Therefore, a similar result was found in the study by Medeiros & Marcelino (2018), in which they evaluated women in the cesarean section postpartum and reported difficulty of women in the independent performance of ADL, especially bathing, dressing, going to the toilet and mobility in the bed.

Medeiros & Marcelino (2018) state in their study, that difficulties in the performance of ADL are expected in the immediate puerperium, by several factors

consequent of the delivery process, such as pain complaint during functional mobility. The authors point out that such difficulties can be attributed to the delivery route. After cesarean surgery, women have greater negative repercussions on occupational performance when compared to women that had vaginal delivery. It is a phase in which the woman needs active movement to perform her daily activities and take care of the newborn (NB), being subject to greater perception of pain at the surgical incision site, directly interfering with the functional capacity and maternity performance.

Also on the delivery route, Santos et al. (2016) evaluated 106 puerperal women in the immediate postpartum period of cesarean and vaginal delivery and realized that, regardless of the delivery route, the woman shows functional limitation, however, they perceived a significant alteration in cesarean section postpartum. The main aspects related to the change in performance mentioned were the physical aspects (decreased joint range of motion and greater pain complaint) in the execution of trunk movement during daily activities, consequent to the presence of abdominal incision, which causes pain, hinders the mobility of the puerperal woman, interferes with self-care and NB care.

In this present study, most phases of intervention in the OBC worked with IADL, emphasizing the act of taking care of the other, through the guidelines on breastfeeding and newborn care. The American Association of Occupational Therapy classifies IADL as activities to support daily living at home and in the community that require more complex mental abilities of the individual than those used in ADL (Associação Americana de Terapia Ocupacional, 2015).

Regarding IADL in the aspect of taking care of others, the performance of the occupational therapist, in women and NB care, aims to enable the emotional development and promote the mental health of the binomial during the hospitalization period. Several therapeutic strategies are used in order to assist women and their family in obtaining confidence and independence in care, which can have a significant effect on the development of the baby, such as the guidelines on basic activities with the NB (diaper change, bathing, sleeping, occupational routine). Thus, the mother and their family members will become safer and more able to perform baby care after hospital discharge (Dittz et al., 2006).

The authors mentioned above also report that the actions stimulated and developed together with the family, encourage the participation of the mother and other members in baby care, highlighting the importance of this participation for strengthening the bond mother-baby-family. In this scenario, the mother may be encouraged to communicate with the baby and perform eye contact since such binding directly interferes with the child's neuropsychomotor development and the maintenance of maternal mental health. Thus, the psychosocial approach through supporting these components facilitates the process of hospitalization and linking with the NB.

With regard to breastfeeding, considered an IADL, the occupational therapist together with the multidisciplinary team, performs care with the objective of informing, clarifying the difficulties and benefits about breastfeeding for the mother and baby. They offer measures of comfort to the puerperal women, with guidance of positions and adaptable resources, preventing diseases and pain complaints, promoting

a satisfactory and pleasurable breastfeeding, as well as adequate nutrition for the NB (Dittz et al., 2006).

Finally, the study mentioned above identified occupational therapy intervention with women affected with gynecological or obstetric conditions. The actions developed were directed to the performance of ADL through guidance on self-care, bathing and personal hygiene. The approach of health education with topics related to ectopic pregnancy, family planning and abortion were also part of the professional records. This gynecological and obstetric situation present in the study causes some surgical procedures, drug treatment and clinical surveillance by the multidisciplinary team. Through occupational therapy reception, which favors attentive and sensitive listening to demands, it is possible to identify that surgical procedures cause stress and concern for women and their families, as well as a picture of dependence and functional alteration phases before and after operation. Therefore, the occupational therapist acts aiming at restoring functional capacity and adequacy to the hospitalization process, through the patient's education, preparing them for surgery, and after, through rehabilitation, especially in which refers to their occupational life, such as performance of ADL (De Carlo et al., 2004; Ferigato et al., 2018).

In this perspective, the occupational therapy professional contributes with this population in coping with the functional and psychosocial repercussions caused by hospitalization, diagnosis and treatment. They develop actions aimed at promotion of satisfactory performance, prevention of diseases and educational strategies, which when properly used, optimize self-care, facilitating decision-making and problem solving in the face of circumstances experienced by the assisted women (Marques et al., 2016; Nascimento et al., 2017).

5 Conclusion

The Women's Health field is vast about the possibilities of intervention, and the Obstetric Center is one of the spaces involved, where the occupational therapist intervenes with women in different phases of prepartum, labor, immediate puerperium, as well as in other gynecological and obstetric situations. In this scenario, it was possible to identify the therapeutic strategies used in order to favor the occupational performance of this population, as well as the relevance of multiprofessional and interdisciplinary work in comprehensive care to women. In this context, occupational therapy practice promotes a change of paradigm, making women protagonist in the development of their occupations in different contexts and facilitating expanded health promotion actions.

Given the scarcity of scientific publications on this theme, it is suggested the production of more studies in the area of women's health concentration, in order to expand occupational therapy practice with technical-scientific recognition of the academic population and society in general.

References

- Aguiar, R. S., Araújo, M. A. B., Costa, M. A., & Aguiar, N. (2013). Orientações de enfermagem nas adaptações fisiológicas da gestação. *Revista Cogitare Enfermagem*, 18(3), 527-531.

- Almeida, N. A. M., Sousa, J. T., Bachion, M. M., & Silveira, N. A. (2005). Utilização de técnicas de respiração e relaxamento para alívio de dor e ansiedade no processo de parturição. *Revista Latino-Americana de Enfermagem*, 13(1), 52-58.
- Araújo, A. S. C., Correia, A. M., Rodrigues, D. P., Lima, L. M., Gonçalves, S. S., & Viana, A. P. S. (2018). Métodos não farmacológicos no parto domiciliar. *Revista de Enfermagem UFPE*, 12(4), 1091-1096.
- Associação Americana de Terapia Ocupacional – AOTA. (2015). Estrutura da prática da terapia ocupacional: domínio e processo. *Revista de Terapia Ocupacional da Universidade de São Paulo*, 26, 1-49.
- Barja, P. M., & Barja, A. M. (2013). Prática musical conjunta como recurso terapêutico em saúde pública. In *Safety, Health and Environment World Congress (SHEWC'2013)* (pp. 1-4). Porto. Recuperado em 2 de abril de 2019, de http://www.ouvirativo.com.br/mp7/pdf/2013_SHEWC_Barja-Barja.pdf
- Brasil. (2002). *Humanização do parto: humanização no pré-natal e nascimento*. Brasília: Ministério da Saúde.
- Brasil. (2003). *HumanizaSUS: política nacional de humanização*. Brasília: Ministério da Saúde.
- Brasil. (2004). *Política nacional de atenção integral à saúde da mulher: princípios e diretrizes*. Brasília: Ministério da Saúde.
- Brasil. (2005, 7 de abril). Lei nº 11.108, de 7 de abril de 2005. Altera a Lei nº 8.080, de 19 de setembro de 1990, para garantir às parturientes o direito à presença de acompanhante durante o trabalho de parto, parto e pós-parto imediato, no âmbito do Sistema Único de Saúde – SUS. *Diário Oficial [da] República Federativa do Brasil*, Brasília.
- Brasil. (2010). *Gestação de alto risco: manual técnico*. Brasília: Ministério da Saúde.
- Brasil. (2013). *Gravidez, parto e nascimento com saúde, qualidade de vida e bem-estar*. Brasília: Ministério da Saúde.
- Brasil. (2017). *Diretrizes nacionais de assistência ao parto normal: versão resumida*. Brasília: Ministério da Saúde.
- Carvalho, A. F. C. T., & Scatolini, H. M. N. S. (2013). Intervenção da terapia ocupacional com gestantes. In A. F. C. T. Carvalho & H. M. N. S. Scatolini (Eds.), *Terapia ocupacional na complexidade do sujeito* (pp. 53-60). Rio de Janeiro: Rubio.
- Conselho Federal de Fisioterapia e Terapia Ocupacional – COFFITO. (2013, 8 de julho). Resolução nº 429, de 8 de julho de 2013. Reconhece e disciplina a especialidade de terapia ocupacional em contextos hospitalares, define as áreas de atuação e as competências do terapeuta ocupacional especialista em contextos hospitalares. *Diário Oficial [da] República Federativa do Brasil*, Brasília.
- Costa, E. S. (2010). Alterações fisiológicas na percepção de mulheres durante a gestação. *Revista da Rede de Enfermagem do Nordeste*, 11(2), 86-93.
- Crepeau, E. B., Cohn, E. S., & Schell, B. A. B. (2011). Visão geral dos fatores pessoais que afetam o desempenho. In E. B. Crepeau, E. S. Cohn & B. A. B. Schell (Eds.), *Willard & Spackman: terapia ocupacional* (pp. 890-897). Rio de Janeiro: Guanabara Koogan.
- Cruz, J. A., & Guarany, N. R. (2015). Desempenho ocupacional e estresse: aplicação de manual de orientações e cuidados a gestantes de risco. *Revista de Terapia Ocupacional da Universidade de São Paulo*, 26(2), 201-206.
- D'Avila, C. G., Puggina, A. C., & Fernandes, R. A. Q. (2018). Construção e validação de jogo educativo para gestantes. *Escola Anna Nery*, 22(3), 1-8.
- De Carlo, M. M. R. P., Bartalotti, C. C., & Palm, R. D. C. M. (2004). A terapia ocupacional em reabilitação física e contextos hospitalares: fundamentação para a prática. In M. M. R. P. De Carlo & M. C. M. Luzo (Eds.), *Terapia ocupacional em reabilitação física e contextos hospitalares* (pp. 3-28). São Paulo: Roca.

- Dittz, E. S., Melo, D. C. C., & Pinheiro, Z. M. M. (2006). A terapia ocupacional no contexto da assistência à mãe e à família de recém-nascidos internados em unidade de terapia intensiva. *Revista de Terapia Ocupacional da Universidade de São Paulo*, 17(1), 42-47.
- Ferigato, S. H., Silva, C. R., & Ambrosio, L. (2018). A corporeidade de mulheres gestantes e a terapia ocupacional: ações possíveis na Atenção Básica em Saúde. *Cadernos Brasileiros de Terapia Ocupacional*, 26(4), 768-783.
- Ferreira, L. M. S., Santos, A. D. F., Ramalho, R. C. F., Alves, D. A., Damasceno, S. S., Figueiredo, M. F. E. R., Kerntopf, M. R., Fernandes, G. P., & Lemos, I. C. S. (2017). Assistência de enfermagem durante o trabalho de parto e parto: a percepção da mulher. *Revista Cubana de Enfermería*, 33(2), 1-12.
- Henrique, A. J., Gabrielloni, M. C., Cavalcanti, A. C. V., Melo, P. S., & Barbieri, M. (2016). Hidroterapia e bola suíça no trabalho de parto: ensaio clínico randomizado. *Acta Paulista de Enfermagem*, 29(6), 686-692.
- Lehugeur, D., Strapasson, M. R., & Fronza, E. (2017). Manejo não farmacológico de alívio da dor em partos assistidos por enfermeira obstétrica. *Rev Enferm UFPE*, 11(12), 4929-4937.
- Marques, R. K., Chaves, S. M., & Gonzaga, M. G. (2016). A importância da terapia ocupacional no pré-parto, parto e puerpério. *Multitemas*, (26), 108-122.
- Martins, A. B. (2019). *O olhar da terapia ocupacional para gestantes e mães/puerperas: prática em contexto hospitalar*. Florianópolis. Recuperado em 20 de março de 2019, de [http://www.crefito10.org.br/cmslite/userfiles/file/O%20OLHAR%20DA%20TERAPIA%20OCUPACIONAL%20PARA%20GESTANTES%20E%20MAES%20PUERPERAS%20-%20PRATICA%20EM%20CONTEXTO%20HOSPITALAR%20-%20LAIS%20ABDALA%20MARTINS%20\(1\).pdf](http://www.crefito10.org.br/cmslite/userfiles/file/O%20OLHAR%20DA%20TERAPIA%20OCUPACIONAL%20PARA%20GESTANTES%20E%20MAES%20PUERPERAS%20-%20PRATICA%20EM%20CONTEXTO%20HOSPITALAR%20-%20LAIS%20ABDALA%20MARTINS%20(1).pdf)
- Martins, L. A., & Camargo, M. J. G. (2014). O significado das atividades de terapia ocupacional no contexto de internamento de gestantes de alto risco. *Cadernos de Terapia Ocupacional da UFSCar*, 22(2), 361-371.
- Medeiros, T. M. L., & Marcelino, J. F. Q. (2018). Percepção de puérperas sobre o seu desempenho ocupacional no pós-operatório da cesariana. *Cadernos Brasileiros de Terapia Ocupacional*, 26(1), 97-109.
- Nascimento, C. R. F., Marcelino, J. F. Q., Lousada, M. L. S., & Facundes, V. L. D. (2017). Ações de terapia ocupacional com gestantes na rotina diária. *Revista Interinstitucional Brasileira de Terapia Ocupacional*, 1(5), 556-573.
- Oliveira, L. L., Bonilha, A. L. L., & Telles, J. M. (2012). Indicações e repercussões do uso da bola obstétrica para mulheres e enfermeiras. *Ciência, Cuidado e Saúde*, 11(3), 573-580.
- Oliveira, L. M. N., & Cruz, A. G. C. (2014). A utilização da bola suíça na promoção do parto humanizado. *Revista Brasileira de Ciências da Saúde*, 18(2), 175-180.
- Quadros, J. S., Reis, T. L. R., & Colomé, J. S. (2016). Enfermagem obstétrica e educação em saúde: contribuições para vivência do processo de parturição. *Revista da Rede de Enfermagem do Nordeste*, 17(4), 451-458.
- Quental, L. L. C., Nascimento, L. C. C. C., Leal, L. C., Davim, R. M. B., & Cunha, I. C. B. C. (2017). Práticas educativas com gestantes na atenção primária à saúde. *Revista de Enfermagem UFPE*, 11(Supl. 12), 5370-5381.
- Santos, P. L., Rett, M. T., Lotti, R. C. B., Moccellin, A. S., & DeSantana, J. M. (2016). A via de parto interfere nas atividades cotidianas no puerpério imediato? *ConScientiae Saúde*, 15(4), 604-611.
- Santos, R. V., & Penna, C. M. M. (2009). A educação em saúde como estratégia para o cuidado à gestante, puérpera e ao recém-nascido. *Texto & Contexto - Enfermagem*, 18(4), 652-660.
- Silva, A. M., Silva, C. F. A., Barros, J. D. S., Lima, K. B. C., Lima, P. C., Maia, J. S., & Maia, L. F. S. (2017). Os benefícios da livre movimentação no parto para alívio da dor. *Revista Recien*, 7(20), 70-81.

- Silva, L. M., Oliveira, S. M. J. V., Silva, F. M. B., & Alvarenga, M. B. (2011). Uso da bola suíça no trabalho de parto. *Acta Paulista de Enfermagem*, 24(5), 656-662.
- Vieira, F., Bachion, M. M., Salge, A. K. M., & Munari, D. B. (2010). Diagnósticos de enfermagem da NANDA no período pós-parto imediato e tardio. *Escola Anna Nery*, 14(1), 83-89.

Author's Contributions

Renata Maria da Conceição carried out the research and writing of the article. Jamyllé Silva de Brito and Juliana Fonsêca de Queiroz Marcelino collaborated with the planning, discussion and review of the text. The author Eline Vieira da Silva participated in the review of the article. All authors approved the final version of the text.

Corresponding author

Renata Maria da Conceição
e-mail: renata_mariac@hotmail.com