Social representation of the induction of labor by pregnant women in a maternity in Espírito Santo

RESUMO
Objetivo: Avaliar as representações sociais de puérperas acerca da indução do parto. Método: Trata-se de um estudo com abordagem qualitativa realizado com puérperas assistidas em um hospital maternidade de referência no Espírito Santo, no período de junho a novembro de 2021. Para análise dos resultados, as entrevistas gravadas foram transcritas para análises semânticas das informações e extraídas as evocações, elucidadas por meio do software openEVEC 0.92 que permite a formação do núcleo central e o sistema periférico das representações sociais acerca da indução do parto.O estudo foi submetido ao Comitê de Ética em Pesquisa com Seres Humanos do Centro Universitário do Espírito Santo – UNESC. Resultado: As representações sociais referente à indução do parto foram positivas para as puérperas, corroborando com outras pesquisas. Conclusão: É importante que mais pesquisas sejam realizadas a fim de proporcionar a aprimoramento das condutas obstétricas, o que beneficiará o binômio materno-fetal.

DESCRITORES: Trabalho de parto induzido; Parto normal; Misoprostol; Índice de apgar.

ABSTRACT
Objective: To evaluate the social representations of postpartum women about labor induction. Method: This is a study with a qualitative approach carried out with puerperal women assisted at a reference maternity hospital in Espírito Santo, from June to November 2021. To analyze the results, the recorded interviews were transcribed for semantic analysis of the information and the evocations were extracted, elucidated through the openEVEC 0.92 software that allows the formation of the central nucleus and the peripheral system of the social representations about the induction of childbirth. The study was submitted to the Ethics Committee in Research with Human Subjects at the Centro Universitário do Espírito Santo – UNESC. Result: The social representations regarding the induction of labor were positive for the puerperal women, corroborating other studies. Conclusion: It is important that more research is carried out in order to provide the improvement of obstetric procedures, which will benefit the maternal-fetal binomial.

DESCRIPTORS: Labor, Induced; Natural Childbirth; Misoprostol; Apgar Score

RESUMEN
Objetivo: Evaluar las representaciones sociales de puérperas sobre la inducción del parto. Método: Este es un estudio con abordaje cualitativo realizado con puérperas atendidas en una maternidad de referencia en Espírito Santo, de junio a noviembre de 2021. Para analizar los resultados, las entrevistas grabadas fueron transcritas para el análisis semántico de las informaciones y las evocaciones, fueron extraídas, dilucidadas a través del software openEVEC 0.92 que permite la formación del núcleo central y el sistema periférico de las representaciones sociales sobre la inducción del parto. El estudio fue sometido al Comité de Ética en Investigación con Seres Humanos del Centro Universitário do Espírito Santo – UNESC. Resultado: Las representaciones sociales sobre la inducción del parto fueron positivas para las puérperas, corroborando otros estudios. Conclusión: Es importante que se realicen más investigaciones con el fin de brindar la mejora de los procedimientos obstétricos, lo que beneficiará al binomio materno-fetal.

DESCRIPTORES: Trabajo inducido; Parto normal; Misoprostol; Índice de apgar.

RECEIVED: 06/11/2021 APPROVED: 17/01/2022

Greice Kelly Palmeira Campos
Espírito Santo University Center – UNESC. Medical Student/Scientific Initiation Student.
ORCID: 0000-0002-5169-5282

Thalita Cossuol de Souza
Espírito Santo University Center – UNESC. Obstetric Nursing Resident.
ORCID: 0000-0003-0143-4428
Induction of labor is a relatively common procedure in obstetric practice and consists of artificially triggering effective uterine contractions before the spontaneous onset of labor in pregnant women with a gestational age greater than 22 weeks. It is indicated when the maternal and/or fetal risks are greater than the maintenance of the pregnancy.

Induced labor is associated with hemorrhagic, infectious and thromboembolic phenomena. 5,6

Among the most commonly used methods to promote cervical maturation are the administration of prostaglandins, the most common being Misoprostol, oxytocin and the Foley tube, which, alone or in a combination, help in the process of cervical maturation and encourage childbirth. The traditional method for assessing cervical maturation prior to induction of labor is the cervical scoring system described by Bishop, known as the Bishop score. 4,6,7

In this sense, health promotion is incorporated as a guiding principle, with special emphasis on improving obstetric care, as suggested by the Ministry of Health in Brazil, in 2004, through Law number 10,745/03. Among the various points contemplated by the Law, the Policy of Integral Attention to Women's Health is included. One of the points observed by the Program is the monitoring of pacts to reduce the rate of cesarean sections in SUS hospitals and the implementation of the Prenatal and Birth Humanization Program, with the objective of rescuing the culture of the normal birth process as a natural birth. 8,9

Considering the process of gestating and giving birth as a peculiar moment that refers to several meanings in a woman's life, it is expected to identify whether the use of labor induction methods influences maternal and fetal outcomes, as well as the social representations presented by postpartum women undergoing the induction process.

Given this assumption, the study aims to evaluate the social representations of postpartum women about labor induction.
METHODS

This is a cross-sectional descriptive study, with a qualitative approach, carried out between June and November 2021, with 114 puerperal women assisted in a reference maternity hospital in Espírito Santo, which has delivery rooms previously structured to offer induction of labor.

The following inclusion criteria were adopted: pregnant women undergoing labor induction methods, regardless of gestational age and maternal age; with obstetric indications such as post-datism, gestational diabetes, hypertensive syndromes of pregnancy, premature rupture of ovular membranes (PRMO), fetal compromise (e.g., intrauterine growth restriction [IUGR] and isoimmunization); that used induction methods related to the maturation of the cervix, such as: misoprostol, oxytocin and foley tube.

All research participants were invited to join the research voluntarily, signed the Free and Informed Consent Term (FICF), as determined by CNS Resolution n° 466/12 and 510/2016. In the case of underage participants (12 to 17 years old) or legally incapable, those responsible were advised and if they were in agreement with the research, they signed the FICF, the research participant was also invited to sign the Free and Informed Assent Term (TALE - Termo de Assentimento Livre e Esclarecido), in accordance with the aforementioned resolutions. In both documents, the study participants were clarified about the nature of the research, its objectives, methods, expected benefits, potential risks and the discomfort that it may cause them, to the extent of their understanding and respect for their singularities. Starting the interview after formal authorization through the signature of the FICF and TALE (if necessary).

In order to maintain privacy, the participants were named "Puerpera (01), Puerpe- ra (02)", and so on, according to the number of women who agreed to participate in the research. And in order to preserve the spontaneous character of the speeches, the texts did not undergo linguistic/grammatical corrections.

Pregnant women submitted to the induction process who did not want to participate in the research or whose legal guardian, for minors, did not authorize their participation, were excluded. In addition to women undergoing induction of labor due to fetal death.

The interviews were carried out by one of the researchers, in the rooming-in of the Hospital e Maternidade São José, during the patients’ immediate postpartum period. For the analysis of the results, the qualitative data were treated after the application of the recorded interviews with the aid of a cell phone, which were digitized, transcribed in full, for semantic analysis of the information and the evocations were extracted, which were elucidated through the openEVOC 0.92 software, which allows the performance of statistical calculations, establishing matrices of co-occurrences, which serve as a basis for the construction of the four-box chart and based on this processing we arrive at the probable central nucleus and peripheral system of the social representation of labor induction.

The social representations theory (SRT) is a construction that the subject makes to understand the world and to communicate. The study of social representations brings in its scope some important concerns, it makes it possible to understand how knowledge and values about the other infer in daily practices. 10

The Central Nucleus Theory (CNT) is one of the three ways of approaching the SRT, supported by the hypothesis that all social representation is organized around a central nucleus and a peripheral system. The central core is related to collective memory, giving meaning, consistency and permanence to the representation, being, therefore, stable and resistant to changes, while the peripheral system is responsible for updating and contextualizing the representation. 11,12

This research was submitted to the Research Ethics Committee of the Centro Universitário do Espírito Santo (UNESC), obtaining the certificate of presentation for ethical appraisal (CAAE) number 46570921.9.0000.5062, and opinion approved under the number 4.719.770, meeting the criteria designed by the National Research Ethics Commission (CO- NEP).

RESULTS

Regarding the induction method used,
of the 114 interviewed participants, 99% of the participants used misoprostol as the main method and only 1% used Krause’s method. The number of misoprostol pills used ranged from 1 to 8 pills, distributed as follows: 1 pill (18%), 2 pills (18%), 3 pills (27%), 4 pills (13%), 5 pills (11%), 6 pills (10%), 8 pills (2%). Oxytocin was used concomitantly with misoprostol in 72% of patients.

The reasons that led to the indication of induction were diverse, as shown in Table 01, among them: postnatalism (6%), Gestational Diabetes Mellitus (GDM) (40%), Preecclampsia (2%), Chronic Arterial Hypertension (CAH) (10%), Latent Labor (LL) (4%), Premature Membrane Rupture (PMR) (15%), Intrauterine Growth Restricted (IUGR) (3%), oligohydramnios (5%), DM (2%), pressure peak (6%) and 4% represented by thrombocytopenia, Small for Gestational Age (SGA) fetus, polyhydramnios and toxoplasmosis.

The result of free association was a list with 199 words, of which 32 (16.08%) were different. It was observed that the word “pill” appeared with the highest number of evocations (43), while 16 words were evoked only once.

After organizing the evocations by the open EVOC software, a frame of four houses was created, formed by the elements that make up the central core and the periphery of a representation, as shown in Table 01:
DISCUSSION

During the design of the central nucleus and the peripheral system of social representations about the induction of labor by puerperal women, through the free association of words, the puerperal women were asked to report five words that immediately came to their mind when hearing the expression “induction of childbirth”. Then, they were asked to choose among the evoked words the one they considered to be the most important.

The distribution of occurrence data in four quadrants allows us to visualize the central core, the intermediate, contrast and peripheral elements of the representation. Thus, to interpret the picture, we proceed as follows: in the upper left quadrant are located the words that constitute, most likely, the central nucleus of the representation, in the upper right quadrant the first periphery, in the lower left quadrant, the contrast elements and, finally, in the lower right quadrant, the second periphery of social representation. 13

In the first quadrant are located the probable central elements: “pill”, “advance delivery”, “pain”, “fear”, “vaginal touch”, “doesn’t know” and “delay”. The peripheral elements of the social representation of labor induction are distributed in the other three quadrants: in the upper right, the words “contraction” and “dilation” are the most evoked elements belonging to the first periphery; in the lower left quadrant are the words “pill”, “pain”, “walk”, “scare”, “being natural”, “softening the uterus”, “initiating labor”, “artificial”, “distress”, “strength ” and “help”, constitute the contrast zone, and, in the lower right quadrant, second periphery, are located the words: “paroxy”, “hot bath”, “acupuncture”, “ball”, “intercourse”, “time ” and “birth”. We can say that these elements indicate the range of meanings attributed by postpartum women to induction of childbirth.

In the possible central nucleus, the word “pill” occupies this quadrant, certainly due to the fact that obstetric practice in Brazil in numerous maternity hospitals is basically restricted to the use of two drugs, oxytocin and prostaglandins, especially type E1 prostaglandin, also known as misoprostol, a popularly manifest pill. 7

This perception shows that despite not stated by one of the participants:

“That’s what I said, advance for the birth to happen. With a pill, right?”
(Puerpera 03)

“It’s to dilate, birth, it seems. Placing the pills to dilate.”
(Puerpera 16)

The word “advance childbirth”, the second element of the central nucleus, is similar to the study carried out by Amando et al. (2020), in which the participants understand by induction the procedure that aims to promote early birth by vaginal delivery, given its indications. 14

Such findings corroborate the data found in the literature, in which, in a more technical way, they define labor induction as a method that artificially promotes the emergence of uterine contractions, leading to labor. 15 Also evidenced by the speech of the participants:

“Accelerate delivery, feel pain for delivery to happen.”
(Puerpera 08)

“Contract to dilate, advance the process of what would be more natural.”
(Puerpera 23)

In the same reasoning as the previous interpretation, the words “pain” and “fear” can be explained by the fact that there are studies that demonstrate that induced labor has a longer and often painful latent phase. For researchers, this perception may be linked to several reasons, such as lack of knowledge of the process and limited choices of methods for pain relief in labor, for example. 16

Regarding the word “vaginal touch”, it is known that the performance of the vaginal touch is a routinely used practice to evaluate the pregnant woman during labor. The exam allows you to explore the cervix, water bag and presentation, as well as other important information. Thus, for the in-
duction of labor, it is necessary to analyze the conditions mentioned in the triggering of the process, since the design and permanence of a certain inducing method is done at the expense of this information. 17

The peripheral elements of the social representation regarding the induction of childbirth are distributed in the other three quadrants and they make it possible to perceive the broad meanings attributed by the puerperal women to this form of the birth process.

As for the peripheral system, it is important to emphasize that it is an indispensable complement to the central one, since it safeguards this core, updates and firmly contextualizes its normative deliberations, enabling a diversification to the detriment of the daily experiences among which individuals are submerged. Briefly, the elements of the peripheral system make the interconnection between the tangible reality and the central system. Thus, it is intended to emphasize its value in the configuration of social representations about labor induction.

In the upper right quadrant are the words “contraction” and “dilation” as the most prominent elements belonging to the first periphery. It is noticed that there is knowledge on the part of the participants regarding the objectives of induction, since contraction and dilation are expected responses to an induction for the triggering of birth, as evidenced by the American College of Obstetricians and Gynecologists (2000), mentioning that induced labor consists of triggering effective uterine contractions before spontaneous triggering, with the aim of promoting cervical dilatation and descent of the fetal presentation in women with more than 22 weeks of gestational age. 18

The word “serum” received subsequent emphasis. Regarding the “serum”, the use of oxytocin is the most used method worldwide for inducing labor due to its rapid action, the lower occurrence of uterine hyperstimulation and the rapid elimination after its cessation, however, it is indicated for patients with a Bishop Index greater than 7. 19

Still in the peripheral nucleus, the words “waiting” and “anxiety” corroborate information presented by Amando et al. (2020), reporting that the duration of the induction procedure is complex and variable, as it depends on several aspects, individual to each patient, such as cervical maturation, choice of induction method, which can be a lengthy procedure. Another variable that must be questioned concerns the place where the study was carried out, a reference maternity hospital at high risk for the north-east of Espírito Santo, which, because it meets a large demand of patients, is sometimes in an overcrowded condition, which can influence the communication between professional and patient, since adequate clarification about the procedure requires time, as well as the requirement to carry out previous exams to start induction, and all the events involved in the process, can alleviate doubts, discomforts, anxiety and fear in relation to the intervention provided. 14

The words “pill” and “pain” positioned in the lower left quadrant, according to Oliveira, Marques and Tosoli (2005, p. 4), constitute the contrast zone, that is, it comprises elements that characterize variations of representation according to subgroups, above all, without modifying the central elements and the representation itself, that is, they denote changes or transition of a social representation, just as they received greater prominence as central elements, such words are reinforced in the contrast zone 13, and can be seen in the following statements:

“That’s right... the pill. The pain of contraction.”
(Puerpera 33)

“The girl said that she was going to put some pills to start feeling pain later.”
(Puerpera 44)

In the lower right quadrant, the second periphery of the social representation regarding labor induction, the words “childbirth”, “hot bath”, “acupuncture”, “ball”, “intercourse”, “time” and “birth” are located. For analysis, we grouped the words “childbirth” and “birth”, then “hot bath”, “acupuncture” and “ball”. The words “delivery” and “birth” show by the participants that the induction procedure aims at early birth by vaginal delivery, when the continuation of the pregnancy represents a greater risk for the
mother and/or fetus than its interruption. From this perspective, the induction process has the role of functioning as a respectable and safe strategy to reduce the rates of unnecessary and poorly indicated cesarean sections and, thus, reduce the possible maternal and neonatal complications arising from the surgical procedure. 20 Represented by the following statements:

“The birth of my son.”
(Puerpera 06)

“The birth of my daughter.”
(Puerpera 20)

The “hot bath,” “acupuncture” and “ball,” methods used in labor induction framed as natural stimuli, or just as adjuncts to the process, although there are no reports of known teratogenic effects, despite the effectiveness of these techniques being limited and do not present randomized studies that corroborate these induction methods. However, Vicente et al. (2021), report that of 100 participants who used non-pharmacological methods for pain relief, 79% progressed to normal delivery and 29% to cesarean section. 21 Such methods are widely used and known by the participants, as mentioned in the following statements:

“Oh, walking around... using the ball... hot bath. Helped me a lot.”
(Puerpera 37)

“These are methods that cause normal birth. Like acupuncture, oxytocin, pouch detachment, pouch rupture, the pills they gave me. These things...”
(Puerpera 68)

CONCLUSION
Initially, it is necessary to point out that the induction of labor is a current trend and an important strategy to reduce its high rates of cesarean sections. The most used method for labor induction was misoprostol, ensuring a higher rate of vaginal delivery, providing good vitality for the neonate. It is also worth mentioning that the social representations regarding the induction of childbirth were positive for the puerperal women, as well as the range of prior knowledge on the subject, identified in the participants’ speech.

It remains for us to admit that the results corroborate other studies, in addition, some of the data were compared with international data, since there are few studies on labor induction and its outcomes in the Brazilian reality. Thus, it is important that more research be carried out in order to provide the improvement of obstetric procedures, which will benefit the maternal-fetal binomial.

REFERENCES


13. Oliveira CD, Marques SC, Tosoli AM. Análise das evocações livres: uma técnica de análise estrutural das representações sociais. In: Moreira AP et al. (Org.), Perspectivas teórico-metodológicas em rep-


