

EDUCATIONAL TECHNOLOGIES AS GUIDANCE STRATEGIES FOR WOMEN TO COPE WITH THE PUERPERIUM

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Abstract: Introduction: The postpartum period is a phase of changes in a woman's body and mind, which is often not understood. Technologies have been planned and implemented taking into consideration, the need to translate technical-scientific knowledge into tools and, thus, improve the quality of care. Objective: To understand the scientific evidence which technologies are being developed as an educational and guidance strategy for women to face the postpartum period. Method: This is an integrative literature review study with a descriptive design. The search took place in May 2023. Results: Seven articles were included in the corpus of this study. In these it is possible to see that: Health education, as a health promotion strategy, constitutes a strategy that enhances nursing care for women. Educational action is a guiding axis for nursing practice in the various areas of activity, especially in primary health care services. Conclusion: The use of educational technologies has motivated couples to self-care and care for the baby, increasing the level of knowledge and confidence during the postpartum period. The use of these technologies contributes to the communication process between parents and nurses, with a view to encouraging healthy practices and discouraging those that are not appropriate at the moment.

Keywords: Postpartum; Multidisciplinary health team; Nursing.

INTRODUCTION

Pregnancy and childbirth are unique processes, special experiences in the lives of women and their partners, also involving their families and the community, significant experiences for those who participate. In this context, the postpartum period, also known as the puerperium, stands out as the active phase of the pregnancy-puerperal cycle, a period in

which multiple phenomena of a hormonal nature occur, reflected by involutive actions, related to synthesis and anabolism. (CABRAL, 2010).

The profound and definitive transformations experienced by women in the postpartum period deserve to be highlighted, since in most cases women's health care is ignored, and their child receives full assistance, and early actions are not yet a reality in our country. health service networks, as the newborn is treated as a priority over the mother. (STRAPASSON, 2010).

Technologies have been planned and implemented taking into consideration, the need to translate technical-scientific knowledge into tools, processes and materials created or used to disseminate such knowledge and, thus, improve the quality of care. They cannot be understood in a simplistic way, without considering the knowledge conveyed by culture, or its association in solving everyday problems

Considering the above, we can highlight that educational materials make teaching-learning effective, with interactions mediated by those who create the material (nurse), user (woman) and the family (FARIAS, 2018). However, it must be attractive, accessible and clear, meaningful and responsive to the reader's reality, not only transmitting information, but also stimulating reflection and facilitating the provision of care (DALMOLIN et al., 2016).

GOAL

To know the scientific evidence which technologies are being developed as an educational and guidance strategy for women to face the puerperal period.

METHODOLOGY

This is an integrative review of the literature, which is characterized by a method in which it gathers, orders and synthesizes existing data in the literature. Review studies consist of organizing, clarifying and summarizing the main existing works, and providing complete citations covering the spectrum of relevant literature in an area. An analysis of publications often contributes to the historical reformulation of academic dialogue by presenting new updates (RAMOS & ROMANOWSKI, 2014). The review carried out in May 2023, enabled understanding and knowledge about the topic based on published scientific evidence, that is, it was structured based on the analysis and interpretation of scientific studies already available in the databases, thus forming new conceptions through a holistic understanding of the topic of interest (MENDES, SILVEIRA, GALVÃO, 2019).

For the review modality, six steps were developed: 1) Identification of the topic and selection of the hypothesis or research question; 2) Sampling and establishing criteria for inclusion and exclusion of studies/sampling or literature search; 3) Definition of information to be extracted from selected studies/categorization of studies; 4) Assessment of studies included in the integrative review; 5) Interpretation of results and 6) Presentation of the review/synthesis of knowledge (MENDES, SILVEIRA, GALVÃO, 2019).

In the first stage, the following question was prepared for this investigation: what technologies are being developed as an educational and guidance strategy for women to face the puerperal period? Subsequently, the inclusion criteria were defined, these being the articles that covered the theme proposed in the national literature; published in full, online, free of charge and in Portuguese.

The temporal delimitation was productions in the last ten years, to expand the search. Articles repeatedly indexed in databases were excluded; articles that do not meet the guiding question; publications in abstract format; case report, brief reports, narrative and integrative bibliographic research, editorials, guidelines, consensuses, paid articles, dissertations, theses, reflective studies, editorials, letters to the editor.

Searches for scientific articles were carried out in the Scielo and BVS study bases. A search was carried out in the Health Sciences Descriptors (Decs) to outline the terms, using the following descriptors: "Attention to women in the postpartum period"; "Care Strategy in the postpartum period"; "Educational technology for women in the postpartum period". From this stage onwards, the following search strategy was chosen for all databases listed: "a" OR "" AND "" AND "" . The Boolean operators AND / OR will be used between the exact descriptors searched.

The search resulted in the creation of a descriptor flowchart obtained through the search strategy according to the PRISMA flowchart (MOHER, 2015). Therefore, figure 1 shows how articles were selected at each stage of the integrative review analysis process.

With the aim of systematizing the data from the selected articles, a collection instrument called a synoptic table was used, adapted and prepared by other researchers (GARUZI et al., 2014), covering: title of the study, name of the authors, year of publication, journal, objectives, method used and the main results and conclusions regarding the study themes and level of evidence. According to Melnyk and Fineout-Overholt (2011), we have seven levels of classification of evidence, which provide better support that assists nurses in the careful evaluation of findings resulting from research and, in possible decision-making about the implementation of evidence

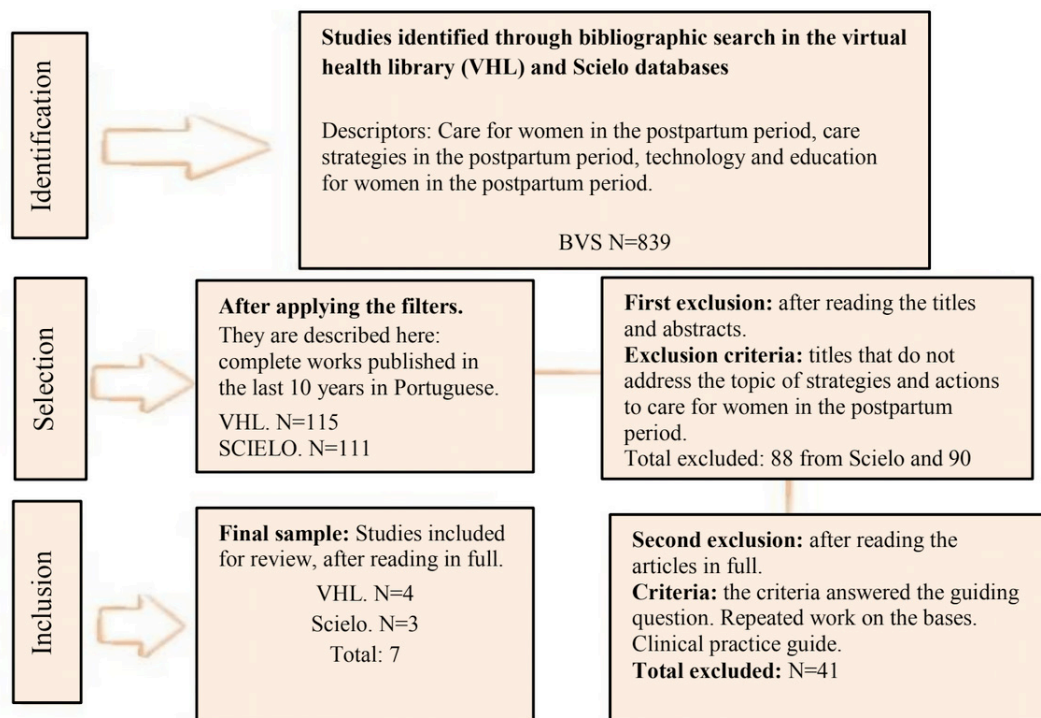


Figure 1: Prism flowchart of study selection

Source: Adapted from PRISMA

Article	Title
A1	Educational Technologist on postpartum care, construction and validation.
A2	The educational practice carried out by nursing in the postpartum period, social representations.
A3	Health education for pregnant women, the search for maternal empowerment during the pregnancy-puerperal cycle.
A4	Perceptions of postpartum women about the nursing care received postpartum.
A5	Development and validation of a health application in the postpartum period.
A6	Construction of an educational technology for women in the postpartum period on self-care and care for the newborn.
A7	Construction of an educational technology on depression during pregnancy and puerperal period, an experience report

Table 1: Selected articles

into clinical practice. and in integrative review studies. Finally, it is worth noting that all ethical aspects of this review project respect Law 12,853, in order to preserve the ideas, concepts and definitions of the authors of the articles analyzed (BRAZIL, 2013).

RESULTS AND DISCUSSIONS

Seven articles were included in the corpus of this study, which are presented in table 1. They are characterized by bibliographic and integrative review articles published between the years 2016 and 2022; 1 published in each year 2016 and 2017; and two publications in 2019 and two in 2020; and one publication in 2022. Of the selected studies, the seven publications are national and in Portuguese. According to the classification of levels of evidence, two articles were classified as level 6, four articles as level 5 and one study characterized as Level 1.

In turn, 5 articles were published in the ``*Revista de Enfermagem*`` BDENF - nursing identified in the VHL Base; one article in the Scielo Base and 1 study in the UFN repository. Table 2 presents a general summary of the studies analyzed.

The analysis of the data found in primary studies was carried out qualitatively through categories, configuring itself as content analysis. Bardin (2016) advises that the domain of content analysis is based on initiatives from a set of partial and complementary techniques, which consist of explaining and systematizing the content of messages and the expression of the theme, with the contribution of indices that may or may not be quantified., through partial and complementary techniques. Through the articles found in the integrative review, three categories can be chosen for literary understanding on the topic: "Women's health care and attention policies"; "Nursing care for mothers in the postpartum period"; "Main concepts and educational technologies

about the puerperal period".

POLICIES FOR ATTENTION AND CARE FOR WOMEN'S HEALTH

Primary care must provide a foundation for patient care, it addresses the most common problems in the community by providing prevention, cure and rehabilitation services to maximize health and well-being, it adds assistance in the occurrence of other complications of health and deals with the set in which the disease exists and affects the evolution of patients, their health difficulties (RODRIGUES, 2014). APS works with the entire family, including women, with the aim of helping and working directly with the person regarding their needs.

Studies indicate that many programs and policies have been created over the years for prenatal care for pregnant women. However, many flaws in humanized treatment and monitoring with visits to families leave something to be desired, due to the sufficient lack of professionals, as well as the lack of further guidance in order to reduce the number of deaths of pregnant and postpartum women in Brazil.

An example of a program is the Humanization in prenatal and birth instituted by the Ministry of Health through ordinance /GM number: 569, of 1/6/2000, which establishes specific attention needs for pregnant and postpartum women, for the newborn, considering as priorities: concentrate efforts to reduce the high rates of maternal, peri- and neonatal morbidity and mortality recorded in the country (ARAUJO et al., 2017).

NURSING CARE FOR MOTHERS IN THE POSTPARTUM PERIOD

Pregnancy and postpartum are phases in women's lives that require coping with important life events such as physical and role

Authors	Goal	Methodology	Results	Conclusion	Evidence level
TEIXEIRA,etal. (2016)	Build and validate an educational technology on postpartum care.	Exploratory- methodological study carried out in five phases: exploration of reality; literature review; technology construction; validation and review. 80 women and 13 expert judges participated.	The technology developed was of the serial album type entitled "Postpartum care", consisting of ten topics: what is postpartum; care that should be taken during this period; changes that occur in the body and sexual life; food; physical exercises; what is postpartum depression; hygiene and family planning.	The educational technology "Postpartum care" proved to be valid in terms of content, according to the expert judges.	6
DODOU, et al, 2017.	Understand the social representations of postpartum women about the contents of the educational practice carried out by nursing in the postpartum period.	Descriptive and qualitative study, carried out from June to September 2014, in Fortaleza/CE, with 19 postpartum women, using semi-structured interviews.	The contents of the representations regarding educational practice denote that it is associated with the guidelines of the nursing team, with emphasis mainly on breastfeeding and feeding the nursing mother. There was also a lack of educational actions regarding postpartum women's self-care.	It is necessary to reorient educational practices in the postpartum period, so that they can address the biopsychosocial needs of women in this period of life. Educational actions must be based on the problematizing model, encouraging the autonomy of the postpartum woman and valuing her social knowledge.	6
DA SILVA LIMA ET AL, 2019.	Describe the development of educational strategies used in an educational group for pregnant women.	Descriptive study, developed in Acarape/CE, in which eight weekly meetings were held from January to March 2015. At each meeting, presentation dynamics were carried out, exposition of the proposed topic in the form of dialogue and activities to consolidate knowledge.	The women were very receptive, showing interest and satisfaction with the activities. Some information was already known to the participants and others needed to be more detailed, in order to provide support so that they could take care of themselves and take care of their children more effectively.	The activity provided an opportunity for primiparous and multiparous women to come together, with this experience being recommended and considered very appropriate for sharing experiences, learning and promoting care during pregnancy and the postpartum period.	5
MESQUITAetal, 2019.	To understand the perceptions of postpartum women about nursing care during the immediate postpartum period.	Descriptive, qualitative study, carried out in the accommodation set of a public hospital in Fortaleza-CE from June to August 2013. 25 postpartum women participated through semi-structured interviews.	Nursing care had positive and negative connotations, the first being highlighted by postpartum women and translated into reinforcing autonomy in caring for oneself and the baby. As a negative point, the precarious structure of the shared accommodation was highlighted.	Although nursing care was considered satisfactory, there is a need for changes in assistance and structure/organization of the service, so that it is possible to provide comprehensive care to postpartum women and babies.	5
DE MEDEIROS, M. (2022)	Develop a health application with information, based on scientific evidence, about the puerperal period.	This is a methodological study involving 40 participants, including 10 professionals from the obstetrics area, 10 from the technology area and 20 postpartum women.	Content validation showed excellent acceptance (0.97). Regarding the appearance of the application, there were 0.86 positive responses, being favorable for approval. Usability was assessed using the SUS (Unified Health System) scale, where considered suitable for use (98.5).	It is concluded that the development of "Towards motherhood" presents itself as a valid mobile application to promote self-care.	5
MOREIRA,A.	Create an educational booklet to guide women in the postpartum period about caring for themselves and their baby.	This is a methodological study, which refers to investigations about methods, organization and data analysis, which aim to develop, validate and evaluate research instruments and techniques.	The booklet covers several concepts and among them main subjects presented are: Recovery from childbirth; Body changes and self-care;	The postpartum period is a time of major events and weaknesses for women, where several physical, biological and psychological changes occur in a short period, as well as changes in her social environment, as she becomes responsible for another individual.	5

DE SOUZA, Et al. 2020	Report the experience on production and application of technology in the form of an educational booklet to inform and guide pregnant and postpartum women about depression, addressing topics such as the origin of depression, baby blues, the age group with the highest incidence.	Experience report: A group of students from the first and second semester of the Centro Universitário Metropolitana da Amazônia of the nursing course built and applied an educational technology in the form of a booklet using the theme of depression in the pregnancy and puerperal period, addressing the main physiological changes in this period.	The importance of prenatal care was discussed, and total attention to the self-care of pregnant and postpartum women, the way in which hormonal changes influence women's feelings about the environment in which they live, as well as themselves, and the emotional difficulties they may experience during this period. And also, the health care resources for this group, such as psychologists, doctors, nurses and family health care units.	The development of this technology provided information sharing to better clarify the causes and treatments for depression during and after childbirth, in addition to strengthening the need for follow-up with a multidisciplinary team and the importance of family support.	1
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Table 2: Summary of selected articles.

changes. It is during the postpartum period that the most important changes occur in a woman's body, and these include: changes in the genital, cardiovascular, respiratory, skeletal muscle, gastrointestinal and urinary systems (MAZZO, 2013).

In this sense, such modifications are in line with the care and attention that nursing must provide in the first hours after birth, in which, according to the literature, the postpartum woman may experience fever, chills, difficulty sitting, and elevated temperature. This woman's entire body goes through changes, including the breasts, an organ that evolves during the postpartum period and the woman must be guided about breastfeeding and care by the nursing team. (MAZZO, 2013).

It stands out in the research that among the negative points of the lack of guidance for postpartum women is precisely the issue of breastfeeding, which in turn causes early interruption and difficulty in breastfeeding, causing mothers fears and concerns regarding care. to your child (RODRIGUES et al., 2014). Highlighting the importance of nursing to provide guidance and assistance to mothers.

Studies show that the postpartum period is the period with the highest rate of maternal morbidity and mortality, therefore, primary health care is important to develop resources to meet women's health needs. And this is one "of the periods of the pregnancy cycle

in which local and systemic changes, caused by pregnancy and childbirth in the maternal organism, return to the situation of the pre-pregnancy state" (SANTOS, 2022).

In this sense, the authors Gomes and Santos (2017) also address that monitoring the postpartum woman by nurses in the first hours postpartum is essential, where greater emphasis must occur in the first two hours after birth, checking vital signs, possible bleeding. As actions and care on the part of nurses with the mother, exercises must be done in bed.

After discharge, the postpartum woman must return and have consultations with the multidisciplinary team, however, authors show that this stage of treatment is subject to hospital care, highlighting that hospital care is insufficient for postpartum women (MESQUITA, 2019).

MAIN CONCEPTS AND EDUCATIONAL TECHNOLOGIES ABOUT THE PUERPERAL PERIOD

The study by De Souza et al. (2020), brings to light one of the situations that affect many postpartum women, which is depression. It is understood in the author's view that the puerperium is also known as the postpartum period, this event begins after the first hour after placental delivery and lasts until the end of lactation and the return of the woman's

menstrual cycles. During pregnancy, women undergo many bodily changes which alter their aesthetics, as well as their psychological state. After giving birth, one of the most frequent occurrences is depression and sometimes rejection of the baby.

The study by Moreira and Da Silva (2020) shows the development of a booklet aimed at providing guidance to postpartum women. In turn, it illustrates concepts and tips about birth, baby care and the period. Women must understand what the postpartum period is, as well as the differences between a cesarean section and a normal birth. These guidelines for women are important, as they are now breastfeeding and must be well fed, but in a healthy way, in order to be able to produce milk and feed the baby. Therefore, this initial care and guidance during the period is essential. This process involves welcoming the woman by the nursing team where her quality of life must be observed, being able to look at her body after birth and accept her new identity and promote new self-esteem.

In this context, health education, as a promotion strategy, constitutes a strategy that enhances nursing care for women experiencing the postpartum period, as it is capable of promoting the adoption of important and beneficial measures for maternal and child health (MAZZO, 2014). Among the care guided by the nursing team involves the postpartum woman, knowing how to care for the newborn in these first days of life, one of the tips is on how to burp the

baby, how to deal with colic and how to put her to sleep.

The proposal by Teixeira et al. (2016) brings a serial album, entitled: "Postpartum care" containing illustrations and guidance for postpartum women to face this period. The first approach presents what postpartum is, so that women can understand what this period means, which in turn understands this stage as a reorganization of the systems of the woman's organism, in addition to being a new period, where the woman now assumes a new identity, that of mother.

FINAL CONSIDERATIONS

Educational technologies covered postpartum care related to both the child (breastfeeding and baby care) and the woman (mental state, weight loss, sex life, smoking, adaptation, physical activity and relaxation). And they also brought in the majority the importance of the multidisciplinary team, placing emphasis on nurses' care for mothers in the postpartum period.

During the research, it was also possible to observe the development of technologies aimed at students and professionals as a way of facilitating Nursing teaching and professional practice in caring for postpartum women, ensuring improvements in the care provided. The guidelines given by students to women at the time of discharge are extremely important so that they have a calmer postpartum period, making them feel more secure.

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