

## Care-educational technologies used in primary health care in women's health care: scope review

*Tecnologias cuidado-educacionais utilizadas na atenção primária à saúde na assistência à saúde da mulher: revisão de escopo*

*Tecnologías cuidado-educativas utilizadas en la atención primaria de la salud en los cuidados a la salud de la mujer: revisión de alcance*

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### Abstract

**Objective:** To map and identify the care and educational technologies used in Primary Health Care (PHC) in women's health care. **Methods:** A scoping review was carried out based on the Joanna Briggs Institute manual and guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) Extension for Scoping Reviews. A three-stage comprehensive systematic search was conducted from February to April 2023 in multidisciplinary health sciences databases and gray literature. Data extraction and eligibility were carried out by two authors independently and interpreted using thematic analysis. **Results:** included 15 studies and identified two thematic groups: Types of care-educational technologies and Themes addressed in the technologies. **Conclusion:** highlighted the types of care-educational technologies that are used in PHC as fundamental tools for teaching and assisting women's health, making them protagonists in the construction of the health-disease process.

**Descriptors:** Women's Health. Educational Technology. Primary Health Care.

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### Whats is already known on this?

As a result of this work, important research has been carried out that contributes to the consolidation of educational care, with the aim of developing women's health education.

### What this study adds?

The identification and mapping of which care-educational technologies are being used in Primary Health Care in relation to women's well-being, as well as the difficulties and limitations of the subjects addressed by the technologies.



### Resumo

**Objetivo:** Mapear e identificar as tecnologias cuidado-educacionais utilizadas na Atenção Primária à Saúde (APS) na assistência à saúde da mulher. **Métodos:** Revisão de literatura do tipo scoping review com base no manual do Joanna Briggs Institute e guiada pela PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) Extension for Scoping Reviews. Uma busca sistemática e abrangente em três etapas foi realizada de fevereiro a abril de 2023 em bancos de dados multidisciplinares de ciências da saúde e na literatura cinza. A extração de dados e a elegibilidade foram realizadas por dois autores de forma independente e interpretadas por meio de análise temática. **Resultados:** Incluíram 15 estudos e identificados dois grupos temáticos: Tipos de tecnologias cuidado-educacionais e Temáticas abordadas nas tecnologias. **Conclusão:** Evidenciaram-se os tipos de tecnologias cuidado-educacionais que são utilizadas na APS como ferramentas fundamentais para o ensino e assistência à saúde feminina, tornando-as protagonistas na construção do processo saúde-doença.

**Descritores:** Saúde da Mulher. Tecnologia Educacional. Atenção Primária à Saúde.

### Resumen

**Objetivo:** Mapear e identificar las tecnologías cuidado-educativas utilizadas en la Atención Primaria de Salud (APS) en los cuidados a la salud de la mujer. **Métodos:** Se llevó a cabo una revisión de la literatura de tipo scoping review basada en el manual del Instituto Joanna Briggs y guiada por PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) Extension for Scoping Reviews. Se realizó una búsqueda sistemática e integral en tres etapas de febrero a abril de 2023 en bases de datos multidisciplinares de ciencias de la salud y literatura gris. Dos autores realizaron la extracción de datos y la elegibilidad de forma independiente y los mismos se interpretaron mediante análisis temático. **Resultados:** incluyeron 15 estudios y se identificaron dos grupos temáticos: Tipos de tecnologías cuidado-educativas y Temas abordados en las tecnologías. **Conclusión:** Los tipos de tecnologías cuidado-educativas que se utilizan en la APS fueron resaltados como herramientas fundamentales para enseñar y asistir la salud de las mujeres, convirtiéndolas en protagonistas en la construcción del proceso salud-enfermedad

**Descritores:** Salud de la Mujer. Tecnología Educativa. Atención Primaria de la Salud.

## INTRODUCTION

The historical context of women's health care has been marked by constant feminist struggles for equality in the laws and public policies that guarantee the right to health. The National Women's Health Care Policy (*Política Nacional de Atención à Saúde da Mulher*, PNAISM) is a reflection of these movements.<sup>(1)</sup> This policy was implemented in the 20th century with the aim of improving living conditions, reducing morbidity and mortality and expanding women's health care in all areas of health in a humanized and qualified manner. However, the difficulty in active search, access to health and gender discrimination are challenges faced in the effectiveness of the PNAISM.<sup>(2)</sup>

It is worth pointing out that Primary Health Care (PHC) is the gateway to all services, acting in the individual or collective domain, in the promotion, protection, diagnosis, treatment, rehabilitation, reduction and prevention of health and illnesses. It also aims to establish comprehensive care that acts positively in all situations.<sup>(3)</sup>

In addition, PHC dialogues directly with the guidelines and protocols in the PNAISM, with advances in policies aimed at women's health, rights to reproductive planning, prenatal care, breastfeeding, protection against domestic and sexual violence and women in the climacteric. It is worth highlighting the problems and complaints surrounding the prevention of cancers that affect women. In addition, the female population needs to understand the PHC health demands that guarantee access and space for the individual as an active participant in their own health process. Access to information through technology is a facilitator, but it is not enough. It is therefore up to the multi-professional team to use educational methods to pass on knowledge in the service of the user and their problems.<sup>(4,5)</sup>

Thus, it is necessary to interconnect the care sector and encourage the active participation of the community and users, making health education a way of solidifying educational actions aimed at health promotion, prevention, and rehabilitation. In the women's context, health education is considered an important factor that contributes to self-care and the demystification of false information and pertinent doubts.<sup>(6,7)</sup>

However, it is possible to see high rates of women who do not seek health services, due to factors such as a lack of reception, attention, and resolution of complaints. This makes it necessary to consolidate effective care for women's health, contributing to a better quality of life for this group.<sup>(8)</sup>

In this context, embracing the gender perspective and taking health determinants into account are key factors in providing comprehensive care and assistance to women's health in PHC. As well as the development of actions that include quality in comprehensive care and humanization, so that the problems identified can be remedied by the health team.<sup>(9)</sup>

In addition, in order to support women's health care, it is appropriate to develop health education actions through direct communication between professionals and users, with the help of technology, which makes it possible to change attitudes through the construction of collective knowledge. Educational Care Technologies (ECTs) contribute effectively to the education process and are defined as grouped evidence that favors the development, construction and reconstruction of knowledge (booklets, videos, leaflets, among others) through the planning and execution of the educational process.<sup>(10)</sup>

The teaching-learning process is built through strategies using educational technologies. Therefore, it is an instrument that encourages changes in lifestyle, favoring active search and adherence to health services. With this, it promotes greater knowledge, autonomy, and self-care for the female public, as well as helping health professionals to develop health actions in a confident and skillful way, becoming active in providing quality services. It is therefore necessary to build, develop and validate these technologies.<sup>(11, 12)</sup>

It was therefore decided that the aim of this study was to map the educational care technologies used in women's health care in Primary Health Care.

## METHODS

This is a scoping review, guided by the JBI Institute Reviewer's Manual recommendations, oriented by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR), and following the theoretical framework based on nine stages: 1) definition and alignment with the objective and research question; 2) inclusion criteria development and alignment; 3) description of the planned approach to searching for evidence, selection, data extraction and evidence presentation; 4) search for evidence; 5) evidence selection; 6) evidence extraction; 7) evidence analysis; 8) results presentation; and 9) summary of the evidence in relation to the purpose of the review.<sup>(13)</sup> The protocol for this research was previously published and registered in the Open Science Framework (<http://osf.io/p26zh>).<sup>(14)</sup>

Following the stages, the research question was defined: What care-educational technologies are used in Primary Health Care for women's health? After formulating the question, using the PCC strategy, as described in the table below:

**Chart 1.** Description of the chosen mnemonic. Cajazeiras, PB, Brazil, 2023.

<b>P (Population)</b>	<b>Women</b>
<b>C (Concept)</b>	<b>Care-educational technologies</b>
<b>C (Context)</b>	<b>Primary Health Care</b>

Source: Prepared by the authors (2023).

### *Inclusion and exclusion criteria*

Primary studies were included, with quantitative or qualitative methodological designs that addressed the use of care-educational technologies in women's health care in PHC. Exclusion criteria were, as follows: literature reviews (of various types), theoretical essays, editorials and expert opinions; publications dealing with educational technologies for purposes other than health education, i.e. those aimed at the training and continuing education of professionals, and studies outside the context of Primary Health Care. No year or language filters were applied to the selection criteria.

### *Data collection*

An initial search was carried out in the controlled vocabulary sources in the health area: Health Science Descriptors (DeCS) and Medical Subject Headings (MeSH), as well as in the MEDLINE/PubMed databases (via the National Library of Medicine) and the Virtual Health Library (VHL) for an exploratory search with the aim of identifying the main descriptors and keywords used in the studies dealing with the subject. The following results were found:

**Chart 2.** Controlled descriptors and related terms identified. Cajazeiras, PB, Brazil, 2023.

Mnemonic	DECS	Keywords	MESH	Keywords
P	Saúde da Mulher	Saúde feminina Assistência Integral à Saúde da Mulher	Women's Health	Women's Health Comprehensive Health Care
C	Technology Tecnologia educacional	Tecnologia em saúde Tecnologia Aplicada aos Cuidados de Saúde- Tecnologia Aplicada à Assistência à Saúde Tecnologia Aplicada à educação em saúde	Technology Educational Technology	Teaching materials Biomedical Technology
C	Atenção Primária à Saúde	Atenção Básica Atenção Primária	Primary Health Care	Primary Healthcare Primary Care

Source: Prepared by the authors (2023)

After choosing the descriptors and keywords, the search strategy was defined using the Boolean operators “AND and OR” in Portuguese: [(“Saúde da mulher” OR “Assistência Integral à Saúde da Mulher” OR “Saúde feminina”) AND (“Tecnologia Educacional” OR “Tecnologia Aplicada à educação em saúde” OR “Tecnologia em Saúde” OR “Tecnologia Aplicada aos Cuidados de Saúde” OR “Tecnologia Aplicada à Assistência à Saúde”) AND (“Atenção Primária à Saúde” OR “Atenção Básica” OR “Atenção Primária”)] and in English: [(“Women's Health” OR “Comprehensive Health Care” OR “Women's Health”) AND (“Educational Technology” OR “Biomedical Technology” OR “Teaching materials”) AND (“Primary Health Care” OR “Primary Healthcare” OR “Primary Care”)].

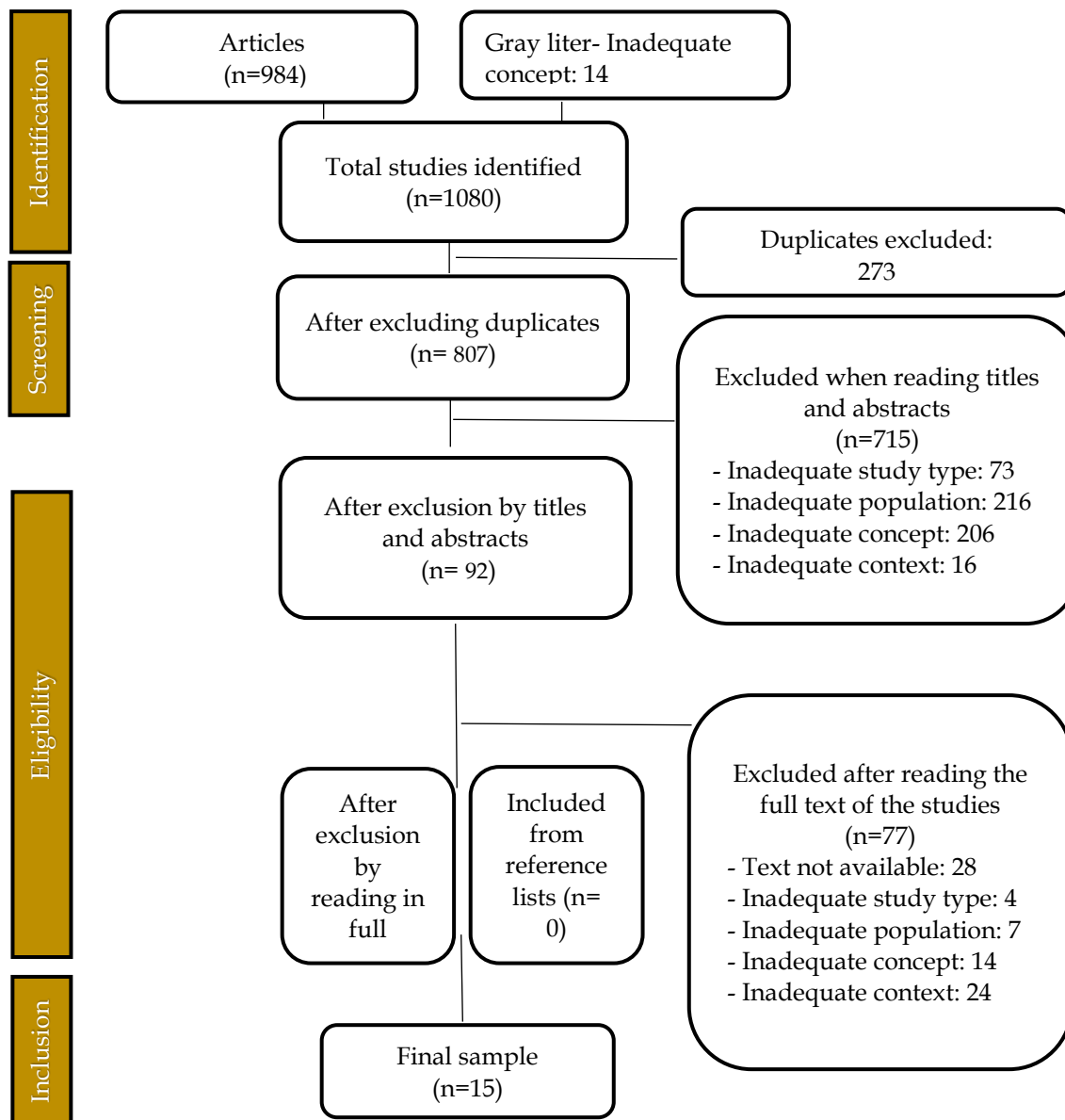
The following databases were used to identify relevant studies: MEDLINE/PubMed, Web Of Science (WOS), EMBASE, CINAHL, LILACS/BVS. We also used the grey literature search: Google Scholar; the Theses and Dissertations Catalog of the Coordination for the Improvement of Higher Education Personnel (*Coordenação de Aperfeiçoamento de Pessoal de Nível Superior*, CAPES), the Digital Library of Theses and Dissertations (DLTD); Open Access Theses and Dissertations (OATD); ProQuest Dissertations & Theses Global (PQDT) and the National Institute of Industrial Property (*Instituto Nacional da Propriedade Industrial*, INPI).

Rayyan software was then used to help blind reviewers and screen the studies' titles and abstracts. The titles and abstracts of all the studies were assessed by two independent reviewers and one to resolve doubts and conflicts, based on the inclusion and exclusion criteria. Subsequently, the publications were selected to be read in full, and those that were not within the research scope were excluded. A table was then drawn up in which the variables extracted from the studies found were grouped, such as: title, year, country, objective, usefulness, types of technology, validation of the studies and topics covered.

## RESULTS

The search strategy identified a total of 984 articles in the databases and 96 in the gray literature. Next, in the screening phase, around 273 publications were excluded for having duplicates, leaving 807 articles to read the titles and abstracts. Then, using the established inclusion and exclusion criteria, 715 articles were eliminated. This left 92 publications to read in full. After reading the full article, 77 studies were excluded because they did not meet the inclusion criteria, leaving 15 as the final sample (Figure 1).

**Figure 1.** Process flowchart for selecting studies for the scoping review adapted from the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA). Cajazeiras, PB, Brazil, 2023.



Source: Prepared by the authors (2023)

Table 3 describes the general characteristics of the selected study, namely: title, authors, year, country, study type and objective.

**Chart 3.** Final result containing the publications found from the review. Cajazeiras, PB, Brazil, 2023.

Identification	Title	The authors	YYear	Country	Type of study	Objective
A1 <sup>(15)</sup>	<i>Quando ir para a maternidade? Tecnologia educacional para primigestas sobre os sinais de trabalho de parto e de risco obstétrico</i>	Cassiano AN.	2022	Brazil	Methodological study	To develop an educational technology for primiparous women on the signs of labor and obstetric risk.
A2 <sup>(16)</sup>	<i>Efeitos de uma tecnologia educativa na autoeficácia para amamentar e na prática do aleitamento materno exclusivo.</i>	Javorski M, Rodrigues AJ, Dodt RCM, Almeida PC, Leal LP, Ximenes LB.	2017	Brazil	Intervention study, controlled and randomized.	To evaluate the effects of using a serialized album in prenatal care on maternal self-efficacy for breastfeeding and the repercussions of this educational intervention on exclusive breastfeeding in the first 2 months of the child's life.
A3 <sup>(17)</sup>	<i>Contribuição de gestantes na construção e avaliação de uma tecnologia educacional: o "Almanaque da Gestante"</i>	Silva BC, Primo CC, Almeida MVS, Cabral IE, SantAnna HC, Lima EFA	2020	Brazil	Participatory study with a qualitative approach.	To describe the pregnant women's contribution to the construction and evaluation of an educational technology.
A4 <sup>(18)</sup>	<i>Vídeo educativo como tecnologia de apoio à prevenção do Câncer de colo uterino</i>	Anjos SJB.	2011	Brazil	A cross-sectional, quantitative study.	To evaluate the results of using an educational video to raise awareness of the purpose, frequency, pre-examination care and appropriate attitude to cervical cancer prevention.
A5 <sup>(19)</sup>	<i>Validação de um vídeo educativo para o conhecimento, a Atitude e prática de gestantes na preparação para o partoAtivo</i>	Andrade IS.	2016	Brazil	Quasi-experimental study with non-equivalent control group.	Validate an educational video for active childbirth with the target audience.
A6 <sup>(20)</sup>	<i>Elaboração e validação semântica de tecnologia Educacional sobre sífilis para mulheres ribeirinhas da Amazônia.</i>	Fernandes TAO.	2022	Brazil	Methodological, descriptive research with a quantitative approach.	Elaborate and semantically validate a booklet on syphilis based on the knowledge of riverine women.
A7 <sup>(21)</sup>	<i>Tecnologia de saúde móvel para melhorar a saúde materna conscientização em populações tribais: celular para mães</i>	Choudhury A, Asan O, Choudhury MM.	2021	India	Controlled cross-sectional analysis.	This study implements a mobile health technology (mobile for mothers, MFM) as a support tool to improve maternal health awareness among tribal communities using a controlled what-if-intervention study.

A8 <sup>(22)</sup>	<i>Tecnologia educacional para a prevenção da infecção urinária na gravidez: estudo descritivo.</i>	Fioravante FFS, Queluci GC	2017	Brazil	A descriptive study with a qualitative approach.	To apply an educational booklet on the prevention of urinary tract infection to a group of pregnant women and analyze the nursing problems related to the occurrence of this infection during pregnancy.
A9 <sup>(23)</sup>	<i>Construção e validação de cartilha educativa para alimentação saudável durante a gravidez</i>	Oliveira, SC, Lopes MVO, Fernandes AFC	2014	Brazil	Study with a methodological approach.	To describe the process of validating an educational booklet on healthy eating with regional foods during pregnancy.
A10 <sup>(24)</sup>	<i>O processo de construção de material educativo para a promoção da Saúde da gestante</i>	Rebert ELM.	2012	Brazil	Action research method.	To describe the process involved in producing the booklet for pregnant women.
A11 <sup>(25)</sup>	<i>Instrumento educativo de intervenção no estilo de vida para gestantes com sobrepeso</i>	Manochio-Pina MG, Crivellenti LC, Sartonelli DS, Diez-Garcia RW.	2022	Brazil	A qualitative, descriptive, and analytical cross-sectional study.	To validate educational material on diet and lifestyle for different pregnancy stages of overweight women.
A12 <sup>(26)</sup>	<i>Avaliação de objeto virtual de aprendizagem sobre pré-natal para adolescentes grávidas na atenção básica</i>	Santiago RF, Andrade EMLR, Mendes IA, Viana MC, Nery IS	2020	Brazil	Methodological, technological study with a quantitative approach.	To describe the process of building and evaluating a Virtual Learning Object on prenatal care for pregnant adolescents in the context of primary care.
A13 <sup>(27)</sup>	<i>m-Health no controle do câncer de colo do útero: pré-requisitos para o desenvolvimento de um aplicativo para smartphones.</i>	Bilotti CC, Nepomuceno LD, Macuch RS, Lucena TFR, Bortolozzi F, Bernuci MP	2017	Brazil	A descriptive cross-sectional study.	To characterize the target population profile of an application to be designed to strengthen the cervical cancer prevention program.
A14 <sup>(28)</sup>	<i>Desenvolvimento, implementação e avaliação do impacto de uma tecnologia educativa para prevenção de dst/hiv/aids em mulheres em união estável.</i>	Sousa BL.	2010	Brazil	Development study, defined as a type of research.	To develop an educational video as a technology for the prevention of STD/HIV/AIDS in women in stable unions.
A15 <sup>(29)</sup>	<i>CADERNETA DA GESTANTE – Tecnologia educativa na prevenção e/ou controle da síndrome hipertensiva.</i>	Jereissati NCC.	2017	Brazil	Participant research.	To analyze the repercussions of the pregnant woman's booklet as an educational technology in preventing and/or controlling the hypertensive syndrome risk during pregnancy in women receiving prenatal care.

Source: Prepared by the authors (2023).

A predominance of studies from Brazil was noted, with around fourteen studies (93.34%). In relation to the publication year, 2017 stood out with four (26.66%) publications, followed by 2022 with only three (20%). However, the years 2010, 2011, 2012, 2014, 2016 and 2021 had only one article each, representing 40% of the sample, while 2020 had only two, representing 13.34% of the publications.

### Types of educational-care technologies

The research presented the following technologies in different categories: videos, booklets, educational guides, mobile applications, and analysis of pregnant women's booklets. The most cited of these were educational materials, which were divided into "Booklets"<sup>(19, 22, 23, 24, 25)</sup>, "Pregnant Women's Booklet"<sup>(29)</sup> and "Almanac".<sup>(17)</sup> In this context, the importance of producing printed materials is to ensure that the target audience can visualize the reality, as well as easy handling and access.<sup>(19)</sup> In this study, the printed form was only available for evaluation by the judges and pregnant women, and the online version was made available at the end of the research validation.

In some of the publications, experts and specialists suggested that the language should be clearer and more objective, in order to improve understanding, and that technical terms should be reduced, as well as the use of illustrations related to the texts, in order to improve retention.<sup>(24, 25)</sup> However, during the evaluation by the target audience<sup>(17, 23, 24)</sup>, some pregnant women found it difficult to understand technical terms in the text, so some were replaced with popular terms and others were put in brackets to help them understand and learn new words. It is therefore extremely important to evaluate and validate the text with the participation of the target audience, since they will be the main users of these health education technologies.

Another modality highlighted by the selection of studies were educational videos<sup>(15, 18, 19, 28)</sup>, serial albums<sup>(16)</sup>, mobile devices, apps and websites<sup>(21, 26, 27)</sup>, but the use of cartoons or animation is still restricted as an educational form. However, it is a category that is easy to disseminate and access, and it is convenient to watch it several times, if necessary, and it can also be used individually or in groups, facilitating consultations with pregnant women and conversation circles.

Educational videos are considered an important tool because the images or moments used can resemble the reality of the population, making the viewer feel close to the scenario. The study discusses the impact of using images and animations for the prevention of sexually transmitted infections (STIs).<sup>(28)</sup>

Of the studies discussed under these themes, four were not validated by expert judges, but only evaluated by the target audience.<sup>(16, 17, 20, 23)</sup> The others<sup>(15, 17, 18, 22, 24, 25, 28, 29)</sup> were validated by experts, designers, judges and evaluated by the study population. Finally, mobile applications were portrayed in the studies<sup>(21, 26, 27)</sup>, only one of which was validated by the study population and experts<sup>(26)</sup>, the others were only evaluated by the target audience.

### Themes covered in the technologies

It is clear that the publications' themes vary between specific subjects related to technologies for the pregnancy period: safe childbirth, obstetric risk, hypertension, prenatal care with adolescents, urinary infection and the importance of healthy eating<sup>(15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 27, 29)</sup>, and the other themes: cervical cancer, syphilis and STD/HIV/AIDS prevention.<sup>(19, 26, 28)</sup> In this way, it was clear that most of the topics are focused on the pregnancy period, with other important phases in a woman's life cycle being forgotten.

## DISCUSSION

The growing use of ECTs facilitates the teaching-learning process, enabling interaction between professionals, patients and families. In this way, it can be seen that this tool enables closer ties between professionals and the population, facilitating the care process and the dissemination of relevant information.<sup>(10)</sup> However, there are numerous categories of ECTs and each type of material has its challenges and needs a clear approach. The printed form of this material is an instrument capable of contributing to the information dissemination and directly reaching the target audience.<sup>(23)</sup>

Health education is an important factor in the processes of care, linked to ECTs which favor the understanding and information dissemination. These technologies can range from printed materials to digital media and games.<sup>(30)</sup> Although they are different studies, booklets and almanacs have similar purposes, definitions and structures, and are important factors for learning and retaining information. It is understood that this type of technology is easy to access and understand, as in the "Pregnant Woman's Almanac", which portrays the main subjects covered in prenatal care with the use of informal narrative



dialogues, with the aim of making the material playful and bringing scientific knowledge closer to popular knowledge, as well as using games interspersed with the subjects, making it a better fixation.<sup>(17, 29)</sup> In this way, they are resources capable of contributing to effective care, associated with health education, strengthening the improvement in quality of life and autonomy of care for the individual.<sup>(31)</sup>

Another modality present in the results is educational videos. One of the studies deals with the construction of a video as a playful and practical alternative to be used by nurses in PHC, which covers pregnancy from conception to simulated childbirth.<sup>(19)</sup> The wide dissemination and accessibility of educational videos means that they can reach a greater number of people and are considered an important educational tool.<sup>(35)</sup> As a result, this modality is of great value to the PHC team, as it can optimize studies, information, obtain greater user attention and a high level of outreach.<sup>(20)</sup>

With this in mind, mobile devices, apps and websites as a form of health education, such as Virtual Learning Objects (VLOs), which are defined as digital resources that support the teaching-learning process, as well as technology in the form of apps on mobile devices, are extremely important for the construction and development of strategies for active search and female empowerment, as well as for ensuring the consolidation of existing health programs with greater dissemination.<sup>(21, 27)</sup> However, the weaknesses in the mobile application development are evident, even with the easy dissemination and handling of smartphones.<sup>(32)</sup>

Based on the research results, it was observed that the validation process by judges and specialists is of the utmost importance to prove the veracity and effectiveness of the content presented and its suitability for the materials' target audience, with the aim of generating credibility and proving effectiveness, as well as making it available safely to health services, professionals and the population.<sup>(15)</sup>

The use of digital resources in primary care is seen as an important alternative for developing recreational activities with the target audience.<sup>(26)</sup> Therefore, these tools are of great value in building education and promoting women's health in various areas, enabling the search for dialog between users of health services and the multi-professional team in order to solve social, gynecological and mental needs, offering the female contingent active participation in women's health.<sup>(33)</sup>

The PNAISM has objectives and guidelines aimed at assisting women at all the life cycle stages. However, there are still difficulties in implementing it and it is still disassociated from the technical and biomedical model used in health institutions.<sup>(23)</sup> Therefore, in order to reduce the use of archaic care models, it is appropriate to use ECTs in healthcare environments, implementing health education as a more dynamic and attractive form of care.<sup>(34)</sup>

According to the literature, women's health care experiences difficulties in adherence and active search in basic health units, with consequences for the effectiveness of care. However, despite the advances in health policies, the services encounter numerous barriers to access, dialog, lack of bonds, high demands and few resources.<sup>(36)</sup> In the meantime, it is necessary for professionals to encourage the population to take part in educational activities, with a view to increasing the uptake of this contingent in health services.<sup>(21)</sup>

Health education plays an important role in PHC. Individuals who use health services need to understand the importance of being present at the unit, with the aim of becoming the protagonists of their own care.<sup>(17)</sup>

It is through PHC that professionals are able to meet or refer the demands of the population, so it is up to them to qualify care for everyone without distinction. Among the results were studies on Indian and riverine women, two distinct cultures that need attention in relation to their daily lives, reality and way of life.<sup>(21, 22)</sup> In Brazil, riverine women live on the margins of the Amazon River, often in situations of deprivation and lack of health services. It is therefore necessary to carry out studies and consolidate public policies that alleviate the problems and offer a better quality of life.<sup>(37)</sup>

In this way, it can be concluded that ECTs are important educational tools that can be used in the experiences and daily lives lived by the population and are similar to health themes, making them aware of the health-disease process, as well as providing greater accessibility, quality of life, inclusion, health and education.<sup>(29)</sup> It is therefore feasible for multi-professional teams working in PHC to use health education in conjunction with the reality of the population in order to promote healthy habits and well-being.<sup>(38)</sup>

Finally, although the development of the research was based on a broad and efficient methodological search with many stages, data sources and applications such as Rayyan, it is possible that relevant studies were not included in the construction of the study.

## CONCLUSION

Through this scoping review, it was possible to map the ECTs used in women's health care in PHC. Printed materials were also identified, such as booklets, digital/mobile applications, and educational videos. Technology is a fundamental factor in teaching and providing care for women's health, a tool that brings the subjects involved closer together and facilitates the process of change and empowerment.

The topic's relevance is evident, but the low number of studies on the health of older women, the climacteric period, menopause, and adolescents was analyzed, noting a relevant deficiency for the learning process and health education. Finally, it is feasible to develop and validate research covering various themes related to women's health, enabling qualified and effective assistance to the contingent in question.

## CONTRIBUTIONS

Conception or design: Januário RA, Vieira CRD, Nascimento MBG. Data collection: RA, Cavalcanti ACS, Almeida LRJ, Assis AEP, Vieira CRD, Nascimento MBG. Analysis and interpretation of data: RA, Cavalcanti ACS, Almeida LRJ, Assis AEP, Vieira CRD, Nascimento MBG. Writing of the article or critical review: Januário RA, Vieira CRD, Nascimento MBG. Final approval of the version to be published: Vieira CRD, Nascimento MBG.

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