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Lactation physiology video clip: health professionals` assessment in hospital care

Videoclipe de fisiologia da lactação: avaliação por profissionais da saúde na atenção hospitalar

Videoclip de la fisiología de la lactancia: evaluación por profesionales de la salud en la atención hospitalaria

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ABSTRACT

Objective: To evaluate the usability of a lactation physiology video clips by healthcare professionals and to identify barriers and facilitators for this usage in hospitals.

Method: Cross-sectional study juxtaposed with the Knowledge Translation Model. The video clip was evaluated with the System Usability Scale self-applied to 63 health professionals from a university hospital in southern Brazil, from April to September 2022. Spearman's correlation test was used.

Results: The usability of the video clip obtained the best imaginable classification with a positive association with longer training time (p=0.038) and motivation for using it (p=0.035). The facilitators went to have institutional capacity building; physical space and moments of guidance for breastfeeding; brevity of the video clip with easy and playful information. Barriers were overcrowding and turnover, limited audiovisual equipment and internet equipment.

Conclusion: The excellence of the usability of the video clip in the hospital highlights the potential for its application in continuing education with professionals and in health education with users. It is concluded that the longer the training time and the motivation for using technologies in daily care, the better professionals evaluate usability.

Descriptors: Breastfeeding. Educational technology. Technology assessment biomedical.

RESUMO

Objetivo: Avaliar a usabilidade de um videoclipe da fisiologia da lactação por profissionais da saúde, identificando barreiras e facilitadores para o seu uso no hospital.

Método: Estudo transversal justaposto ao Modelo de Tradução do Conhecimento. O videoclipe foi avaliado com a *System Usability Scale* autoaplicada em 63 profissionais de saúde de um hospital universitário, no sul do Brasil, de abril a setembro de 2022. Foi utilizado o teste de correlação de *Spearman.*

Resultados: A usabilidade do videoclipe obteve classificação melhor imaginável com associação positiva ao maior tempo de formação (p=0,038) e motivação para o uso (p=0,035). Os facilitadores foram ter capacitação institucional; espaço físico e momentos de orientação para amamentação; brevidade do videoclipe com informações fáceis e lúdicas. As barreiras foram superlotação e rotatividade, limitação de equipamentos audiovisuais e de internet.

Conclusão: Quanto maior o tempo de formação e a motivação para o uso de tecnologias no cotidiano assistencial melhor os profissionais avaliam a usabilidade. A usabilidade do videoclipe no hospital aponta o potencial de sua aplicação na educação permanente com profissionais e na educação em saúde com usuários.

Descritores: Aleitamento Materno. Tecnologia Educacional. Avaliação da Tecnologia Biomédica.

RESUMEN

Objetivo: Evaluar la usabilidad de un videoclip sobre fisiología de la lactancia por parte de profesionales de la salud e identificar barreras y facilitadores para su uso en el hospital.

Método: Estudio transversal yuxtapuesto al Modelo de Traducción del Conocimiento. El videoclip fue evaluado mediante la Escala de Usabilidad del Sistema autoadministrada en 63 profesionales de la salud de un hospital universitario, en el sur de Brasil, de abril a septiembre de 2022. Se utilizó la prueba de correlación de Spearman.

Resultados: La usabilidad del videoclip obtuvo la mejor calificación imaginable con una asociación positiva con mayor tiempo de entrenamiento (p=0,038) y motivación para su uso (p=0,035). Los facilitadores debían tener formación institucional; espacio físico y momentos de orientación para la lactancia materna; brevedad del videoclip con informaciones fáciles y divertidas. Las barreras fueron la superpoblación y la rotación, y el limitado equipamiento audiovisual y de internet.

Conclusión: La excelencia de la usabilidad de videoclips en el hospital resalta el potencial de su aplicación en la educación continua con los profesionales y en la educación sanitaria con los usuarios. Se concluye que cuanto mayor es el tiempo de formación y la motivación por el uso de las tecnologías en el cuidado diario, mejor evalúan los profesionales la usabilidad.

Descriptores: Lactancia Materna. Tecnología Educacional. Evaluación de la Tecnología Biomédica.

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INTRODUCTION

The theme of Food and Nutritional Security (FNS) is part of the goals chosen to achieve the Sustainable Development Goals (SDGs) of the 2030 Agenda, especially in objective 3, which deals with Health and Well-Being. The need for global actions to combat hunger and improve nutrition for the population stands out, especially for vulnerable people such as children[1]. When the issue is the FNS of children, there is a consensus that for infants under six months of age, the ideal food is breast milk. It is understood that breastfeeding (BF) must be promoted, protected and supported in the hospital environment to guarantee the right of younger children to adequate nutrition[2].

In Latin America and the Caribbean, only four in ten children under 6 months of age (43%) are exclusively breastfed in their first six months of life, which is even below the global average of 48%[3]. Therefore, it is necessary to increase these rates to reach 70% of exclusive BF in the first six months of life by 2030, as a target chosen in the SDGs.

In order for professionals to support BF in a hospital environment, it is necessary for them to qualify their actions in daily care[4]. Care-educational technologies can contribute to health education actions[5]. These technologies are available in the form of videos, booklets and websites. And it is important that the information is succinct, pertinent and easy to understand, translated for the target population that is intended to engage in the use of knowledge[6].

On the topic of BF, the use of these technologies in educational interventions can promote women's confidence. These interventions, when started early, represent a unique opportunity to share knowledge[7]. The articulation of technologies enhances learning, as it involves different aspects, including the physiology of lactation. For professionals to have the skills to carry out health education, it is important that they understand this physiological process of human lactation to offer care in a manner that is consistent with the functioning of milk production[8]. Considering that the content of lactation physiology is complex and abstract, the use of technology that provides resources to clarify and visualize the organs and hormones involved in this physiological process can translate this knowledge. And, thus, the transposition of this scientific and abstract knowledge will enhance the use of technology for the intended learning in educational interventions. It is important to reiterate that, in addition to breastfeeding being necessary and natural, women need to be supported to protect themselves and promote effective breastfeeding[7].

Professionals need to be engaged and trained, which is provided by Permanent Health Education (PHE), which acts as a pedagogical facet, considering the subject and their interaction capabilities. The possibilities of sharing experiences and knowledge can give new meaning to your practices, learning from adversities and challenges. PHE is marked by an assumption in which there are participatory, non-hierarchical discussions, not only observing reality, but transforming it[3].

It is essential that technologies are evaluated for use by the target audience. Health technology assessment (HTA) is a process that applies methods to determine indicators, from the creation of the technology to its evaluation and monitoring of use[9]. Among the indicators, usability determines whether a product can be enjoyed by users in a specific scenario[10]. Therefore, the objective of this study is to evaluate the usability of a video clip on lactation physiology by healthcare professionals, identifying barriers and facilitators for its use in the hospital.

METHOD

During the development of the study, the (larger) Knowledge Translation Matrix Project was applied, anchored in a Canadian Model (Knowledge Translation – KT) that has been disseminated in Brazil by the Evidence-Informed Policy Network (EVIPNet Network – Evidence- Informed Policy Network). KT aims to minimize the gap between what is known and what is done, exploring evidence in practice. It is a participatory, systematic proposal, adaptable to different care scenarios, whether in primary health care (PHC), hospital care or other contexts[6].

KT integrates the creation and application cycle, the latter consisting of six phases: adapting knowledge to the local context; evaluate barriers/facilitators for the use of knowledge; select, adapt, implement interventions; monitor the use of knowledge; assess the impact; and maintain the use of knowledge. This study addressed one of the phases of the Model's application cycle: assessment of barriers and facilitators of the use of knowledge, regarding the evaluation of the video clip called "Lactashow: the Lactation Cycle". The video clip lasts 2:33 minutes, available for free access at: https://www.youtube.com/watch?v=dhiUfNXu7AE.

A cross-sectional research was developed, taking as its setting a University Hospital in Southern Brazil, specifically in the maternal and neonatal health service units of this hospital. In hospital environments such as the Obstetric Center, Rooming-In and Neonatal Intensive Care Unit (NICU), potential participants were full: 89 nursing technicians, 55 nurses, 40 doctors and 6 physiotherapists.

For the sample calculation, starting from a population of 190 professionals, considering a margin of error of 10%, a confidence of 95%, a sample with at least 63 participants was necessary to estimate the percentage of 58% of participants

who assessed the technology as adequate for use[11]. This calculation was carried out using the WINPEPI 11.65 program. Health professionals who worked in maternal and neonatal health service units were included, regardless of their length of care practice. Those who were on vacation or leave of any nature during the data collection period were excluded. The professional category of doctors did not join the research.

Data collection was carried out using a form via Google Forms. The invitation in the card format (miniature poster) was sent to potential participants in the units' WhatsApp groups and posters with a QR Code and a link to access the form were posted on the units' bulletin boards. Coordinators (sector heads) were involved, which shows a characteristic of the Model that provides for management engagement in research to enhance the use of knowledge produced and expand the transfer of information to all professional categories. The coordinators of the three data collection units were contacted to present the research and send the invitation card and access to the form. Afterwards, each coordinator announced it in their unit's WhatsApp group.

During data collection, the need to make the invitation in person was realized, including the distribution of printed cards in the units, carried out in different shifts, during the change of shift of the units' teams, during the shift break in assistance, as well as individually, presenting the research and its objectives. A tablet with internet access was made available to fill out the form while the collector waited to answer any questions regarding the research. Access was restricted only in the NICU, due to the implications of the pandemic, so these professionals only received a virtual invitation.

Using the link (or QR Code), the professional first accessed the research proposal and the Free and Informed Consent Form (FICF) for data collection. When registering the acceptance, it was directed to filling in the sociodemographic data: age, area of training, employment relationship, unit of activity, time spent developing activities in the area of maternal and neonatal health, refresher course and postgraduate studies. Next, the video clip was available to view. Afterwards, access to the instrument composed of the System Usability Scale (SUS)[12] and open questions on barriers and facilitators of use.

The SUS is structured with 10 questions, 2 of which are usability and 8 are learning questions. With a Likert-type scale, the values assigned range from 1 to 5, with 1 being "strongly disagree"; 2 "disagree"; 3 "I neither agree nor disagree"; 4 "agree" and 5 "strongly agree". As indicated by the authors of the instrument itself, questions were created focusing on the topic of technology. There were 4 questions (expectation, motivation, knowledge and ability) with dichotomous answer options (yes and no) and 4 open questions: 1) Who would you recommend the music video to? 2) In which situations in your work routine would you recommend accessing the video clip? 3) Think about situations in the work environment (routine, time, service structure, among others) and indicate how the use of video clips in your daily work can help (facilitators). 4) Think about situations in the work environment (routine, time, service structure, among others) and indicate what might hinder (barriers) the use of video clips in your daily work routine. Additionally, there was a field to record suggestions. These questions were submitted to a pilot with professionals in the field linked to the research group with the aim of qualifying the understanding of the questions and minimizing collection errors. The time to respond varied between fifteen and twenty minutes. Once the data collection stage was completed, Cronbach's Alpha (0.78) was calculated to verify the internal consistency of the scale items.

Data collection was carried out from April to September 2022. There were difficulties due to the participants' work overload and the implications and demands on assistance during and after the COVID-19 pandemic. Institutional regulations for preventing COVID-19 were respected. The collection period was extended until the expected sample was completed, with no dropouts or losses.

The data were organized in a database in the Excel program and exported to the SPSS v program. 20.0 for statistical analysis. Qualitative variables were described by frequencies and percentages. Quantitative variables were assessed for normality using the Kolmogorov Smirnov test. Those with normal distribution were described by the mean and standard deviation and those with asymmetric distribution by the median and interquartile range.

The SUS average is 68 points[12]. The usability rating is: worst possible ≤ 20.5, poor 21-38.5, average 39-52.5, good 53-73.5, excellent 74-85.5 and best imaginable above 86-100[11]. The scale was correlated with the quantitative variables using Spearman's correlation coefficient. This value was compared between two categories using the Mann Whitney test and between three or more categories using the Kruskal-Wallis test.

A pre-analysis of the participants' qualitative descriptive responses was carried out with the first reading of the report generated by Google Forms, after which the exploration of this material was carried out and with the in-depth reading, an organization was established into two sets per subject – barriers and facilitators. Based on a new reading, subsets were organized with the relevant structures of the empirical material, defining three axes: services, professionals and users. The classification movement contains a synthesis of the barriers and facilitators for the use of video clips in the hospital[13].

A significance level of 5% was considered. The project was approved by the Human Research Ethics Committee (HREC) under no.4,975,638, according to CAAE: 50771621.70000.5346. The Guidelines and Regulatory Standards for Research involving human beings were met (CNS Resolution 466/12) and (Resolution 510/2016).

RESULTS

During the usability evaluation carried out in the application of the questionnaire to 63 health professionals in maternal and child care sectors, all participants were female with an average age of 41.5 years, mostly with an employment relationship with the Brazilian Hospital Services Company. (EBSERH) or Single Legal Regime (SLR). Among the participants, the most represented unit of activity was rooming-in (50.8%), the area of training was nursing and nursing technician (92.1%), with an average time of 16 years developing activities in the area and the majority of professionals with a postgraduate degree (Table 1).

As for usability, all professionals assessed that the video clip reached the cutoff point and would classify it as at least

Table 1 – Characterization of research participants. Rio Grande do Sul, Brazil, 2022

Sample characterization (n = 63)	n (%)
Age	41,5±9,0*
Time spent developing activities in the area of maternal-neonatal health in years	16±8*
Employment bond	
Temporary contract**	2 (3,2)
Professore	1 (1,6)
Brazilian Hospital Services Company or Statutory Regime	60 (95,2)
Unit ofactivity	
Obstetric Center	17 (27)
Neonatal Intensive Care Unit	14 (22,2)
Rooming-in	32 (50,8)
Training area	
Nursing	27 (42,9)
Nursing technician	31 (49,2)
Physiotherapy	5 (7,9)
Has an update course in maternal and neonatal health: n (%)	53 (84,1)
Has a post-graduate degree: n (%)	39 (61,9)

Source: Research data, 2022.
Caption: *Mean ±SD, SD; standard deviation.
**Servers who worked on a temporary contract during the pandemic.

good. The average obtained was 89.76, classifying the usability of this video clip in the maternal and neonatal hospital context as the best imaginable. The health professionals' responses indicated: expectations (92.1%); motivation (88.9%); knowledge (95.2%) and ability (92.1%) to use the video clip.

For correlation, the median resulting from SUS 95.00 (IIQ 80-100) was used. There was no significant correlation between age and the usability score. Participants with longer training scored higher on the usability score. This correlation, despite being statistically significant, was weak in magnitude ($rs = 0.26$, $p = 0.038$). There was no significant difference in usability scores according to training, postgraduate studies and refresher course. Regarding issues such as expectation, knowledge and ability to use the video clip, there was no statistical difference. People with greater motivation to use the video clip scored higher in the usability assessment compared to those less motivated (97.5 versus 77.5, $p = 0.035$) (Table 2).

Regarding the target audience of the video clip, the participants responded that they would recommend the video clip to pregnant women, postpartum women and women's support networks. They would also recommend it to their peers: other professionals, residents and academics in the health field.

Regarding the facilitators of the use of video clips in the hospital context, the professionals indicated in the service category the need for an institutional training agenda, physical space in the unit for teaching and learning activities; as for professionals, having moments of guidance for breastfeeding and in the user category, the brevity of the video clip and information passed on in an easy and fun way are facilitators (Figure 1).

The professionals highlighted that having an institutional training agenda is a facilitator for the use of video clips, including raising awareness among the team, discussing the content covered by educational technology and clarifying doubts about its use. They recognize that having a physical space in the unit for teaching and learning activities with infrastructure for the use of audiovisual technologies, for example, is also a facilitator for the use of video clips. Another facilitator for using the video clip is moments of guidance on breastfeeding, for example, the waiting room at the Obstetric Center with audiovisual resources (television) to make the video clip available and a group of mothers and families at the NEO ICU and guidance on manual milking in a unit where shared accommodation is provided. The brevity of the video clip (2:33 minutes) and the information provided in an easy and fun way were also cited as facilitating use.

The barriers identified by the participants were organized into three pre-established categories: service, professionals and users (Figure 2).

As for the service, they recognized the following as difficulties in using the video clip: overcrowding and patient turnover in the service; absence of audiovisual equipment such as tablets to present the video clip at the bed and screens for common spaces in the units, highlighting that this equipment needs to be compatible with the demand for audiovisual reproduction; in addition to limited internet access for patients. Regarding professionals, they indicated the need to increase human resources in the teams and lack of time due to the high demand in the units. Regarding users, they cited the difficulty of bringing together mothers and/or family members and the use in group activities considering that newborns, especially premature ones, have a different time to start BF.

Figure 1 – Facilitators of the use of video clips in the hospital context.

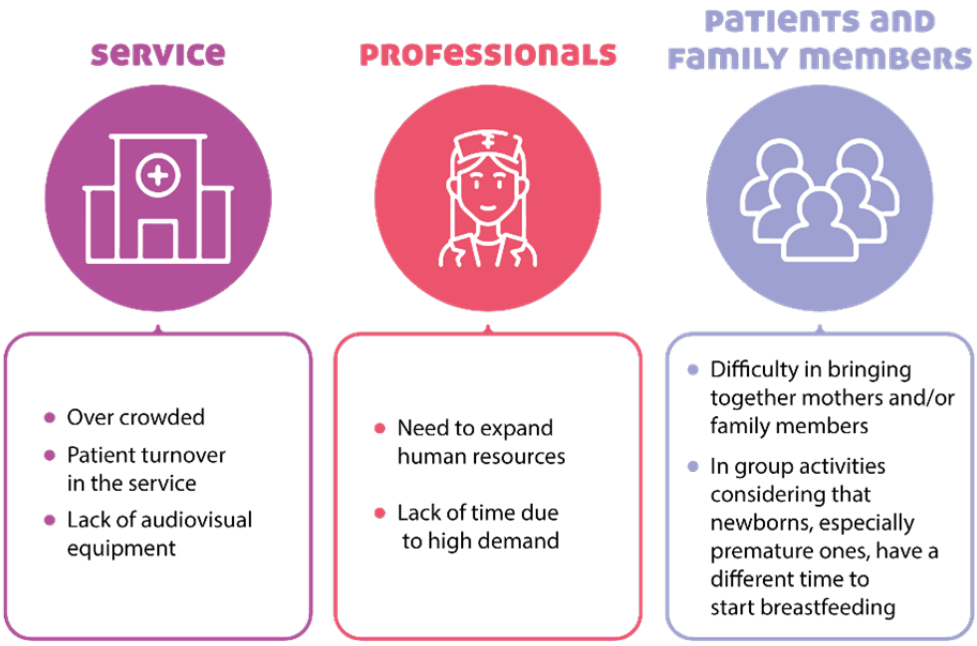
Source: Research data, 2022

Table 2 – Associations between the characteristics and perceptions of health professionals in the hospital context and the usability score of the video clip. Rio Grande do Sul, Brazil, 2022

Characteristics and perceptions of health professionals	Score Median (IQR)	p-value
Age (in years)	rs=0,11	0,392*
Training time (in years)	rs=0,26	0,038*
Training		
Nursing	92,5 (80,0-97,5)	0,464**
Nursing technician	95,0(85,0-100,0)	
Physiotherapy	97,5 (85,0-100,0)	
Unit ofactivity		
Obstetric Center	90,0 (78,7-98,7)	0,187***
Neonatal Intensive Care Unit	87,5 (77,5-100,0)	
Rooming-in	97,5 (90,0-100,0)	
Has a postgraduate degree		
Yes	97,5 (80,0-100,0)	0,371***
No	91,3(85,0-100,0)	
Has a child health refresher course		
Yes	92,5 (80-100,0)	0,137**
No	98,8 (92,5-100,0)	
Expectation of use of the music video		
Yes	96,3 (81,9-100,0)	0,313**
No	80,0 (70,0-98,8)	
Motivation for using the music video		
Yes	97,5 (85,6-100,0)	0,035**
No	77,5 (62,5-97,5)	
Knowledge of the theme/content to use the music video		
Yes	95,0 (80,0-100,0)	0,772**
No	97,5 (80,0-97,5)	
Ability to use the video clip		
Yes	97,5 (81,9-100,0)	0,188**
No	80,0 (63,8-96,3)	

Source: Research data, 2022
Caption: IQR: interquartile range; *rs= Spearman correlation coefficient; **Mann-Whitney; ***Kruskal-Wallis.

Figure 2 – Barriers to using video clips in the hospital context.



Source: Research data, 2022.

DISCUSSION

Regarding the characteristics of the participants, the results converge with other studies[11,14,15] evaluating educational health technologies that were developed in maternal and neonatal health care services, which points to the potential usability of the video clip for learning the physiology in similar hospital contexts. Furthermore, the Knowledge to Action Translation Model provides for the possibility of adapting the tool to the local context.

This convergence is reflected in a study that evaluated a booklet as an educational technology for patient safety in the maternity ward with professionals aged between 30 and 39[14]. In another study, which evaluated professionals' satisfaction regarding the usability of a neonatal health information system, the average age was 52.8 years[11], a result similar to the average of 41.5 years found in this study. Another characteristic of the population that evaluated the video clip was that the majority of professionals had a postgraduate degree, which converges with a study that evaluated the neonatal health information system, in which 98% of professionals had a postgraduate degree[11].

The length of service was another result that converges with the literature on the evaluation of educational technologies in health in studies developed in the hospital area of maternal and neonatal care units, as evidenced in research in the setting of a reference hospital with medium obstetric and pediatric complexity, as well as in neonatal intensive and semi-intensive care and gynecological surgeries in a Brazilian state (Rio Grande do Norte), which evaluated the serious game Aleita Game as an educational resource in teaching about nipple injuries with professionals in Maternal and Child Health, in which the average time of action ranged from 0 to 25 years[15]. Therefore, the average experience of 16 years of professionals who made up the sample of this study converges with the literature.

The usability of the video clip was rated as best imaginable. It is important to invest in evaluating educational technologies to promote BF that include content that complements each other with regard to the introduction and maintenance of lactation. Thus, educational technologies can be mediating teaching-learning tools, such as breastfeeding management applications[16], among others that include other content related to the topic of BF.

This diversity of educational technologies meets the complexity of the topic and can complement each other for use in health education actions, depending on the demand of the target audience. The integrative review that identified health technologies and their contributions to promoting BF concluded that there are favorable results for its maintenance when there is an association between technologies. However, there is a lack of studies that prove

the effects of these associations on increasing the prevalence and duration of breastfeeding[17]. This result highlights the potential contribution of the video clip to health education actions on the topic.

Even though the technologies are available for use, it is important that they are evaluated with the target population. A study[18] that applied the SUS with health professionals in the hospital context of care for women and newborns, also to evaluate educational technologies, found the best result imaginable in evaluating the usability of a safe pregnancy application with health professionals from a public maternity hospital in the south of Maranhão and obtained the best achievable rating (45%). Another study that evaluated the usability of ACRO educational hypermedia on reception and obstetric risk classification obtained a score of 91.9, demonstrating excellent usability[19].

It was possible to observe that there is scientific evidence that points to investment beyond the creation of educational technologies, including the evaluation of the usability of tools for maternal and neonatal care. This investment enhances implementation in daily care, as these technologies have achieved satisfactory rates from the perspective of those who will apply or mediate their use with breastfeeding women. It is noteworthy that the Knowledge Translation Model for Action, used in this study, advocates a participatory approach[6], enabling the engagement of video clip users in its evaluation. When considering the evaluation of the tool as the best imaginable, this result points to its potential for use in the hospital context.

Regarding the expectation of using the video clip, the health professionals in this research indicated the possibility of support in their health education actions to promote BF in the obstetric center, maternity ward and NICU. This possibility is in line with scientific evidence produced with the evaluation of educational technologies for use in hospital settings for maternal and neonatal care. Although professionals and users recognize that the tools are useful, they indicate the need for more adapted designs and accurate evidence-based information[20]. This information needs to be offered in a simple, interactive and dynamic way.

Professionals also highlighted motivation for using the video clip in educational activities with women to promote and support BF. In an integrative review of educational technologies in health and their contributions to the promotion of BF, it was pointed out that the application of these technologies is challenging and stimulating for a multidisciplinary team as it is capable of promoting significant effects on indicators of breastfeeding practice[17].

The professionals who participated in this study believe that they have knowledge of the topic and the ability to use the video clip. Breastfeeding is a challenge and requires professionals to be permanently trained to promote BF in institutions that care for postpartum women and newborns[21]. The health sector requires a permanent commitment to updating and engagement to align knowledge with practice, to provide quality care[4]. The use of digital technologies favors this updating and the perception of the professional's ability to use new resources in their practice.

Regarding facilitators for the use of the video clip, the professionals highlighted that having an institutional training agenda is a facilitator for the use of the video clip. Adequate training is essential to provide effective dialogue, in a timely manner and with continuity. A qualitative systematic review recommended the need to improve breastfeeding support interventions, as although many are evidence-based, a sequential increase in breastfeeding rates is not evident[22].

The professionals also recognized that having a physical space in the unit for teaching activities facilitates the use of video clips, especially if this space offers infrastructure for the use of audiovisual technologies; which converges with evidence about the need for investment in technology infrastructure, including in the literature internet problems in the hospital and the lack of technical support for the use of technology are listed as barriers[23].

Another facilitator for using the video clip is the moments of breastfeeding guidance. The adoption of innovative strategies and technical resources for health education can facilitate women's learning, enhancing the promotion of BF, including in the face of obstacles related to milk production, which can lead to the discontinuation of breastfeeding. Technologies are strategies for health education such as: use of educational games, electronic media, educational manuals, flipcharts, video conferencing and digital instant messaging, which have proven to be positive for promoting BF when based on greater interaction. The use of these tools can assist with guidance, such as when handling teaching materials from the AM educational kit, which clarifies doubts through illustrative items and information[16].

The technical aspects of the video clip, such as access, brevity and information conveyed in an easy and fun way, were also cited as facilitating use. The use of audiovisual resources in health represents an evolution in promoting learning and aims to improve the practice of care. The ease of access points to an advantage for its use, as the possibility of pausing and repeating allows for better retention of the content and the audiovisual message helps to reinforce

the information[24]. The video resource articulates visual and sound rhythms and moves the user to produce meanings. Video-based mHealth interventions should be used as a complement – not a substitute – for human involvement in infant feeding practices and other health behaviors[25].

However, there are barriers to the use of educational technologies depending on the local health context. A strategy guide to improve the implementation of tools, conceptualized barriers at three levels: service, professionals (care providers) and patient (user)[26].

Among the service's barriers to the use of video clips, overcrowding and patient turnover in the service were highlighted. The service barrier is also related to the barriers of the professionals themselves, which indicated the need to increase human resources in the units' teams. This even implies a lack of time due to the high demand for care to be provided in the units. Some situations interfere with the health education and care process, such as work overload and unsatisfactory control of BF support programs. The multiplicity of professional actions in maternity hospitals and obstetric centers not only makes care activities difficult, but also overloads them[27].

Another barrier related to the service was the lack of audiovisual equipment and limited internet access. A systematic review of Brazilian literature pointed out that the lack of infrastructure is a difficulty faced in services[28]. Regarding users' barriers, the difficulty of bringing together mothers and/or family members was indicated. Educational health activities in the hospital environment are necessary and viable in care[29].

We recognize the use of a scale translated and validated in European Portuguese as a limitation of the study, since the publication of the version validated for Brazilian Portuguese is subsequent to the planning of the research in question[30]. However, the result of Cronbach's Alpha revealed the reliability of the instrument's items in this population. Furthermore, considering the fact that the data were collected mostly from rooming professionals, if compared to the number of participants from the CO and NICU who made up the sample of this research, there was an absence of doctors and speech therapists as respondents, even these professionals potentially working in the BF support scenario in the hospital sector with women and family members.

The Knowledge Translation for Action Model[6] enabled the engagement of professionals and managers coordinating the units, disseminating the tool. This action concluded another phase of the application cycle of the Knowledge Translation of lactation physiology and involved knowledge users in evaluating its potential for use and possible barriers to application in the local context of a teaching hospital, knowing that the It is also a reference in maternal and neonatal health care in the interior of the southern state of Brazil. Such results can even contribute to the implementation of the Baby-Friendly Hospital Initiative (IHAC) with the possibility of maintaining the use of the video clip for PHE of professionals and for them to be mediators of actions to promote learning about the physiology of lactation with the objective support for AM.

CONCLUSION

It is concluded that the longer the training time and the motivation for using technologies in daily care, the better professionals evaluate usability. The video clip is suitable for use by health professionals in the hospital setting of maternal and neonatal health care, who can use it for the team's PHE and to develop health education for users, given the usability rating as the best imaginable. Professionals have expectations, motivation, knowledge and ability to use the video clip, with motivation and time working positively affecting usability.

The usability classification as the best imaginable indicates that the video clip is a tool with scientific evidence translated for the target population of healthcare professionals. Therefore, professionals have a care-educational technology available for use in the hospital that can contribute to the teaching area in the sense of offering a tool for the team's PHE. In addition to being able to contribute to the area of assistance, considering that the team will be able to mediate health education actions to learn about the physiology of lactation to promote BF. In addition to contributing to the area of management, by pointing out the importance of professionals feeling motivated in their workplace and having stability, as both variables were statistically related to the usability of the video clip.

The facilitators for using the video clip point to the culture of in-service training and the availability of physical space for PHE with professionals and health education actions with users. These results indicate the importance of the service offering conditions for actions to be developed. However, professionals recognize that the characteristics of health education tools are also important for their usability potential. They also recognize that the technical aspects of the music video facilitate use, such as open access, brevity and accessible and playful information. They mentioned the video format as a facilitator, allowing pause and repetition as the user perceives the need for learning the physiology of lactation.

However, there are barriers to use regarding the service, professionals and users. Mostly, they recognized human

resources as barriers regarding the need to expand teams to provide opportunities for the use of tools such as music videos. The fact that the service offered better infrastructure conditions for the use of technologies was noted. These barriers need strategies to be minimized, such as management engagement in the application of knowledge translation tools.

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