ARTIGO ORIGINAL

AMAMENTAÇÃO E CUIDADOS AO BEBÊ DURANTE A PANDEMIA DA COVID-19: como recursos multimídias podem ajudar

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RESUMO

Com a pandemia da COVID-19, o desenvolvimento de estratégias de enfrentamento para enfrentar o estresse gerado pela crise mundial do coronavírus se tornou mandatório. Baseado nisso, o objetivo deste artigo é analisar recursos multimídia em formato de vídeo para a plataforma digital Instagram como estratégia de educação em saúde durante a pandemia da COVID-19 para ajudar puérperas e suas redes de apoio. Trata-se de um estudo metodológico descritivo baseado na avaliação de critérios de validade de conteúdo por 21 juízes puérperas, com média de idade de 29,38 anos. A maioria residia na região sudeste do Brasil (n=20) e possuía ensino superior (52,38%), seguido do ensino médio (38,09%). Coeficientes de Validade de Conteúdo (CVC) ≥ 0,80 foram adotados para validar a clareza da linguagem, relevância, pertinência e apresentação dos vídeos. Todos os CVC dos vídeos da Série "Amamentação" foram satisfatórios entre ≥ 0,85 e 1. Com exceção do 4º vídeo (CVC ≥ 0,73), os vídeos da Série "Cuidado Neonatal" obtiveram CVC entre ≥ 0,86 e 1. Esses resultados indicam que a população-alvo considerou os vídeos relevantes, adequados, de fácil compreensão e esteticamente agradáveis. De acordo com isso, os recursos multimídia em formato de vídeo podem ser considerados uma ferramenta válida para a proposta educacional em saúde. Assim, os vídeos podem ajudar mulheres durante o pós-parto e suas famílias a lidar com o estresse da pandemia COVID-19.

Palavras-chave: Puerpério; Educação em Saúde; Estudos de Validação; Psicologia Positiva.

BREASTFEEDING AND BABY CARE DURING THE COVID-19 PANDEMIC: how multimedia resources can help

ABSTRACT

With the COVID-19 pandemic, the development of coping strategies to face the stress generated by the worldwide crisis of the new coronavirus became mandatory. Based on this, the purpose of this

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article is to analyze multimedia resources on video format for the digital platform Instagram as health education strategies to help puerperal women and their support networks during the COVID-19 pandemic. This is a descriptive methodological study based on the evaluation of content validity criterion by 21 postnatal judges, with an average age of 29.38 years. Most of them lived in the southeastern region of Brazil (n = 20) and had higher education (52.38%), followed by high school (38.09%). Content Validity Coefficients (CVC) \geq 0.80 were adopted to validate language clarity, relevance, pertinence, and presentation of the videos. All CVC of the from the Series "Breastfeeding" were satisfactory between \geq 0.85 and 1. With the exception of the 4th video (CVC \geq 0.73) the videos from the Series "Neonatal Care" obtained CVC between \geq 0,86 and 1. These results indicate that the target population considered the videos relevant, adequate, easy to understand and aesthetically pleasing. Accordingly, multimedia resources in video format can be considered a valid tool for the educational health proposal. Thus, the videos could help women during the postpartum period and their families to cope with the stress from the COVID-19 pandemic.

Keywords: Postpartum Period; Health Education; Validation Study; Positive Psychology.

LACTANCIA MATERNA Y CUIDADO DEL BEBÉ DURANTE LA PANDEMIA DEL COVID-19: cómo pueden ayudar los recursos multimedia

RESUMEN

Con la pandemia de COVID-19, el desarrollo de estrategias de afrontamiento para afrontar el estrés generado por la crisis mundial del coronavirus se volvió obligatorio. En este contexto, el propósito de este artículo es analizar recursos multimedia en formato de video para la plataforma digital Instagram como estrategia de educación en salud durante la pandemia COVID-19 para ayudar a las mujeres puerperales y sus redes de apoyo. Se trata de un estudio metodológico descriptivo basado en la evaluación de criterios de validez de contenido por 21 jueces de posparto, con una edad promedio de 29,38 años. La mayoría vivía en la región sureste de Brasil (n = 20) y tenía educación superior (52,38%), seguida de secundaria (38,09%). Se adoptaron Coeficientes de Validez de Contenido (CVC) ≥ 0,80 para validar la claridad de lenguaje, relevancia, importancia y presentación de los videos. Todos los CVC de los videos de la serie "Lactancia materna" fueron satisfactorios entre ≥ 0,85 y 1. Con la excepción del 4º video (CVC ≥ 0,73), los videos de la serie "Neonatal Care" obtuviero CVC entre ≥ 0,86 y 1. Estos resultados indican que la población objetivo considera los videos relevantes, adecuados, fáciles de entender y estéticamente agradables. A partir de esto, los recursos multimedia en formato de video pueden ser considerado una herramienta válida para la propuesta educativa en salud. Por lo tanto, los videos pueden ayudar a las mujeres en posparto y a sus familias a enfrentar el estrés de la pandemia de COVID-19.

Palabras clave: Periodo Posparto; Educación en Salud; Estudio de Validación; Psicología Positiva.

1 INTRODUCTION

The context of the COVID-19 pandemic (Ornell, Schuch, Sordi & Kessler, 2020) represents a potential stressor for the population, with important impact on vulnerable groups such as postnatal women (Zandifar & Badrfam, 2020; Brazilian Health Ministry, 2020). During the puerperium, the woman's sensibility, and vulnerability increases, making her more susceptible to stressful events, like the current pandemic. Moreover, maternal mental health care during the postpartum period is

crucial, especially during critical periods when the chances of developing mental disorders, such as stress and depression, increases.

Although in the postpartum period a certain level of stress is expected (Rollè et al., 2017) due to the demands of the newborn, a high level of stress can have an impact on the caregiving for the baby (Fernandes, Canavarro & Moreira, 2020). As a woman becomes a mother, she needs to develop new abilities (Missler, Beijers, Denissen, & van Straten, 2018) to deal with a different routine, composed of new tasks and challenges, such as Instrumental Activities of Daily Living (IADL). In other words, the woman now must learn tasks related to the basic needs of the baby, such as hygiene, sleep, and feeding. In this sense, the new routine can be aggravated due to the pandemic stressors, affecting the development of the maternal tasks.

Studies have confirmed that stress and breastfeeding are related (Beth, Joy, Shirley & Nancy, 2020; Primo & Brandão, 2017). Also, successful breastfeeding has been related with the sense of maternal self-efficacy (Hankel, Kunseler & Oosterman, 2019). The psychophysiological process of breastfeeding is directly associated with stress, with impacts on the production of neurohormones such as oxytocin (Mendes & Lazzari, 2020). Oxytocin is responsible for the breast milk production (Russo & Nucci, 2020) and the formation of the emotional bond between mother and baby (Esselmont, Moreau, Aglipay & Pound, 2018), which is important for the child's development (Gualdrón & Villalobos, 2019).

During the pandemic, the typical postnatal stressors, like difficulties in breastfeeding, are enhanced by the maternal concerns about contamination, that can be interpreted by the mother as a threat to her maternal function. To deal with this situation, the mother will adopt coping strategies that can minimize the impact of the stress and its outcomes. According to the coping cognitivist perspective, coping is a process based on "(...) constantly changing cognitive and behavioral efforts to manage specific external and internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141). Carver and collaborators claim that there are typical ways to deal with stress, called coping styles that are based on the individual personality characteristics and self-regulatory capacities (Carver, Scheier & Weintraub, 1989; Carver & Connor-Smith, 2010).

According to the stressor interpretations, the person will adopt engaged or disengaged strategies, the former being positive interpretations of the pandemic, such as an opportune time to use creativity in new plans, the latter being interpretations that trigger psychological efforts to ignore the stressor, using strategies such as avoidance, denial, and delusion. In this perspective, the pandemic and its stressors can be interpreted as threats, challenges, or damage to the self. Taking that into account, the coping strategies used to deal with the pandemic context are chosen or learned according to the coping styles that are commonly adopted by the person in stressful situations.

Therefore, actions that help breastfeeding mothers to recognize their resources or to learn new strategies to cope with the pandemic are necessary. These actions can prevent the impact of



stress on the psychophysiological process of breastfeeding. To that end, Positive Psychology principles are promising for planning interventions for the management of pandemic stress (Zanon, Dellazzana-Zanon, Wechsler, Fabretti & da Rocha, 2020). Based on the concept of mental health as a human potential that develops according to the person's ability to self-regulate in the face of negative events using positive affections, such as optimism, positive psychological interventions can promote health, wellbeing, and quality of life.

Besides this, multimedia resources, such as videos, have been shown to be efficient tools for promoting health education actions (Schmidt, Crepaldi, Bolze, Neiva-Silva & Demenech, 2020). The COVID-19 containment and protection measures of social isolation (Zanon et al., 2020) demand new ways to approach different publics for the dissemination of health educational materials. Digital platforms, such as Instagram, facilitate a creative communication with different publics through informational resources based on different formats, such as images and videos, that simultaneously stimulate different types of perceptions and sense, enabling new forms of learning (Agama et al., 2017). Furthermore, psychoeducative interventions that meet emotional and informational demands of pregnant women have been shown to have an important role in filling gaps on the health service, besides weaknesses in the family support network (Gonçalves & Piccinini, 2015).

During the pandemic, Instagram has been shown to be a versatile tool for the access of information and materials, also facilitating the democratization of scientific knowledge. Given the above and the necessity of accessible psychoeducative materials in digital formats for vulnerable populations during the pandemic, this article aims to analyze the content validation of a health educational proposal in the format of videos for Instagram, to help mothers to cope with the stress from the pandemic, from breastfeeding and from taking care of a newborn.

2 MATERIALS AND METHODS

Study Design

This is a descriptive methodological study approved by a Research Ethics Committee (CAEE N. 31525720.0.0000.5275) with the proposal to develop health educational videos with a psychoeducative focus to help postnatal women. The videos present different information about COVID-19, breastfeeding, and neonatal care, besides other themes concerning the pandemic, always focused on the target public.

The proposal was developed with an interdisciplinary approach based on Perinatal Psychology and Maternal and Child Health knowledge. Since the beginning of the pandemic, the Task Force LEPIDS COnVIDa has been developing different psychoeducative products for pregnant

and postnatal women and their support network. The aim was to promote health, wellbeing, and resilient coping with stress for this population during difficult times.

Theoretical assumptions of the health education proposal

Psychological approaches, particularly the Dispositional Coping Theory (Carver et al., 1989; Carver & Connor-Smith, 2010), the Perinatal Psychology concepts of Affectional Bond and Parenthood (Bowlby, 2002), and the Positive Psychology concepts like Self-Compassion, Optimism and Resilience (Zanon et al., 2020), were the theoretical assumptions of the proposal. Based on this, the videos were planned to encourage the postnatal woman's self-care and caring for her baby, reinterpreting the stressful events related to the puerperium and the postpartum period during the pandemic. Affectional Bond and Parenthood concepts were transmitted through phrases like: "Despite the initial difficulties of breastfeeding, with calmness, information, a lot of interaction, bonding and affection between mother and baby, they are overcome and all that passes!" (Video 2). The goal was to encourage the maternal capacity of forming emotional and positive bonds with the baby as well as to comprehend the pandemic as a challenge instead of a threat to the parenting practice.

Furthermore, engaged coping styles, such as Positive Reinterpretation and Growth, which is the personal growth through the evaluation of a negative event in positive terms (Carver et al., 1989) were the center of the videos. Thus, information about puerperium changes after the COVID-19 pandemic were passed on to help postnatal women to interpret the new virus as a challenge, promoting a resilient way of coping with stress.

Positive Psychological principles were adopted during the planning of the interventions to promote wellbeing and mental health. Considering the association between optimism and high levels of engaged coping (Carver, Scheier & Segerstrom, 2010), the videos focused on an optimistic perspective of the pandemic. There were also positive psychological interventions to promote self-compassion, with phrases such as: "Don't be too hard on yourself! Practice self-compassion: assume a self-care position, being kind and understanding with yourself" (Video 3). These types of interventions were included to help develop the women's mental health potential and a resilient capacity to deal with the stressors that could affect self-care, mental health, and the practice of breastfeeding.

Development of the videos for Instagram

The digital platform Instagram was chosen for the dissemination of the videos since it allows us to interpret the reach of the publications and to identify the target public through specific hashtags. The hashtags #maternidade (#maternity), #puerpério (#puerperium), #amamentação *Rev. Psicol Saúde e Debate. Fev., 2021:7(1): 107-127.*

(#breastfeeding), #puerpérioecovid19 (#puerperiumandcovid19), #coronavirus etc. were used in the posts to reach pregnant and postnatal women and their support networks.

Based on the theoretical approaches, two types of videos were made: (a) videos with expert professionals; and (b) animated videos with subtitles. Two thematic series of videos were developed: 1) Breastfeeding; and 2) Neonatal care for the newborn. In the "Breastfeeding" series the following topics were covered: a) Transmission of the virus through breast milk; b) Breastfeeding difficulties; and c) Psychological aspects of breastfeeding. In the "Neonatal care for the newborn" series, the topics covered were: a) Neonatal care routine; b) What should I do if my baby gets sick? and c) The importance of affective care. Table 1 represents the specific content of each series.

Table 1 - Content Covered in the Videos from the Series: "Breastfeeding" and "Neonatal care"

Video	Specific Content		
Transmission of the virus through breast milk	 What is vertical transmission and scientific evidence on breastfeeding transmission; Orientations for breastfeeding, extraction of the milk, storage, and correct supply of extracted milk during the pandemic. 		
2. Breastfeeding difficulties	 Breastfeeding myths and difficulties; Techniques on "handle" and correct positioning for breastfeeding; Affective strategies to ensure pleasant breastfeeding. 		
 Psychological aspects of breastfeeding 	 Maternal concerns about breastfeeding, especially during the pandemic; Mother-baby bond; Breastfeeding as a learning process and not an innate ability of women. 		
4. Neonatal care routine	 Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) of the baby up to 6 months; Baby routine planning according to his developmental age group. 		

- Competences of the baby and the mother in the care relationship
- Recommendations on how to proceed if the baby gets ill during the pandemic;
- Consultations and vaccination during the pandemic.
- 6. Importance of affective care
- Affective care and its importance for early child development;
- Parenting strategies and mother-baby affective relationships.

The videos were developed between March/2020 and June/2020 in three phases: pre-production, production, and post-production. In the first one, the specific stressors of the pandemic for the target public were identified in national and international literature, and by searching websites and blogs. Information about COVID-19 was collected from public policy health guidelines related to the pandemic, the postnatal period and to breastfeeding (Brazilian Health Ministry, 2020, Fiocruz Brazilian Human Milk Bank Network, 2020; Royal College of Obstetricians & Gynecologists, 2020; Brazilian Immunization Society, 2020). Based on the analysis of the gathered information, the video themes, and the format option, as an animated or expert video, were chosen and the scripts for preparing the videos were constructed. During this phase, the Task Force also conducted tests in different editing programs, electing "PowerPoint" and "Movie Maker", both from Microsoft, as the most suitable for the proposal.

During the production of the animated videos, firstly the scripts were recorded in an audio format to then compose the narrative of the theme. Afterwards, animated images were included to produce the videos and all of them were reviewed by the Task Force coordinators. For the videos with the experts' participation, an invitation was also sent for his/her participation according to his/her expertise on the theme. Furthermore, the script, and the orientations about how to record a video (with professional audio and quality image) were sent by email or WhatsApp. Finally, when the video was recorded and sent back to the Task Force it was edited by including textual elements (subtitles and keywords) to improve the presentation, making the video more dynamic and accessible.

Post-production phase: content validity assessment

In the post-production phase, 21 postnatal women were invited to participate as judges of the target-population. Part of them were recruited in person during the postpartum hospitalization by a psychologist from the team. All of the judges were contacted via WhatsApp when the objectives of the study and the evaluation procedures were clarified. The videos and the judges were chosen



randomly to minimize analysis bias and to guarantee that all videos were evaluated equally. Therefore, 12 postnatal women evaluated the "Breastfeeding" series while 9 evaluated the "Neonatal care for the newborn" series. The videos were sent by WhatsApp with a Google Form, that included: 1) the Informed Consent Form; 2) the General data protocol, to collect socio demographic data; and 3) Video rating Questionnaire, with questions based on the following content validation criteria: a) language clarity; b) pertinence of the content for the postnatal population; c) relevance of the videos for the coping of the stress caused by the pandemic; and d) presentation, to assess the layout, color and organization of the videos. Each judge was requested to assign a grade to each criteria, based on a 5-point Likert scale (1 = very little, 2 = little, 3 = average, 4 = great, 5 = very great).

The video evaluations were made based on the Cassepp-Borges et al. (2010) and Hernández-Nieto (2002) proposal. Content Validity Coefficients (CVC) were calculated adopting as a cut-off point $CVC \ge 0.80$ to estimate the content validity of the videos for the proposed objective (Hernández, 2002).

3 RESULTS

Considering that Instagram uses logic and systematic algorithms, gathering data into *Big Data sets* that generates useful results for the interpretation of the posts (Angung & Darma, 2019), the target public profile was analyzed. From the 534 followers of the Instagram profile, 92% were women, mostly from Rio de Janeiro (60.8%), followed by Espírito Santo (7.9%) and São Paulo (1%). Most of them were between 18 and 34 years old (66%), besides other age groups (21% between 35 and 44 years old and 11.5% between 45 and 64 years old).

Regarding the reach of the videos, the video about "Transmission of the virus through breast milk" reached 38.20% (n=204), while 25.84% (n=138) and 28.27% (n=151) got access to the video 2 (Breastfeeding difficulties) and 3 (Psychological aspects of breastfeeding), respectively. For the "Neonatal Care for the Newborn" series, 24.90% (n=133) got access to the video "Neonatal care routine" on their Instagram profile, while 23.03% (n=123) and 20,59% (n=110) saw the videos "What should I do if my baby gets sick?" and "Importance of affective care", respectively, on their Instagram feeds.

Through the General data protocol, the sociodemographic profile of the judges revealed that their average age was 29.38 years (DP=8.99). Amongst them, 19 lived in the city of Rio de Janeiro, 1 in Maranhão and 1 in Espírito Santo. Most of them declared themselves brown (n=9), while four of them declared themselves black and eight white. Regarding schooling, most of them had higher education (52.38%), followed by high school (38.09%) and two of them were postgraduate. The majority was married (57.14%), being 38.09% single and 4.7% were in a stable union.

The Content Validity Coefficients (CVC) from the videos of the "Breastfeeding" series and the "Neonatal Care for the Newborn" series, obtained by the evaluation of the judges, can be seen in Table 2 and 3, respectively.

Table 2 - Content Validity Coefficients (CVC) for the "Breastfeeding" Series

Video 1	Language clarity	Pertinence	Relevance	Presentation
Transmission of the virus through breast milk	4	4	4	4
	5	5	5	3
	5	5	5	5
	5	5	5	5
cvc	0.95	0.95	0.95	0.85

Video 2	Language clarity	Pertinence	Relevance	Presentation
	4	5	5	5
Breastfeeding difficulties	5	3	4	4
	5	5	5	5
	5	5	3	5
cvc	0.95	0.9	0.85	0.95

Table 3 - Content Validity Coefficients (CVC) for the "Neonatal Care for the Newborn" Series

Video 4	Language clarity	Pertinence	Relevance	Presentation
Neonatal care routine	5	1	3	4
	5	5	5	5
	5	5	5	5
cvc	1	0.73	0.86	0.93

Video 5	Language clarity	Pertinence	Relevance	Presentation
	5	5	5	5
What should I do if my baby gets sick?	5	5	5	5
	5	5	5	5
cvc	1	1	1	1



Video 6	Language clarity	Pertinence	Relevance	Presentation
	5	5	5	5
Importance of affective care	5	4	4	5
	5	5	5	5
cvc	1	0.93	0.93	1

4 DISCUSSION

In the current pandemic situation, studies highlight that the impact of COVID-19 on mental health has been neglected by health professionals, since combating the pathogen has been the main focus (Zanon et al., 2020). Thus, actions focused on the management of the population's psychological and emotional well-being to reduce the negative outcomes associated with COVID-19 and its impacts after the pandemic (Faro et al., 2020; Zanon et al., 2020) are crucial, especially for vulnerable groups such as postnatal women.

Due to social isolation during the pandemic, virtual platforms, like Instagram, have gained momentum for knowledge dissemination. Considered an innovative way of sharing information and to overcome physical and social barriers (Wong, Liu & Sebaratnam, 2019), Instagram has great potential to share knowledge about mental health among specialists and the general population (Carlyle, Guidry, Dougherty & Burton, 2019). Moreover, it is an accessible and easy to use platform, where different people are able to get in touch with different learning opportunities (Ko, Rana & Burgin, 2017), besides other advantages, such as access by cell phones and computers. Based on this, Instagram was chosen to publicize the health education proposal to help postnatal women to cope with the stress of the pandemic and to promote their well-being.

The videos posted and shared in real time by Instagram, can also be watched as many times as the puerperal woman wishes, she can also comment, like, and share them. Therefore, when posting videos on a page designed for a specific profile and by using the hashtags to reach the target public (Douglas et al., 2019), Instagram enables interaction between people who have experienced similar situations during the pandemic. It is also noteworthy that the page published on Instagram

and the videos posted on it facilitated reducing social isolation among the puerperal women that identified with the posted content.

Furthermore, studies have shown that visual products are more efficient in capturing the publics attention (Arceneaux & Dinu, 2018). Thus, incorporating technologies and finding innovative ways to share knowledge, like the videos analyzed here, are essential for strengthening the learning process (Agama et al., 2017). In this context, the data obtained about the reach of the videos reaffirm that both the Instagram digital platform and the media format were effective for the purpose of the proposal, since a high number of puerperal women was reached by the resource.

When pregnant, the woman begins a new occupational role in her life at the same time she starts a new learning process to develop her parenting and motherhood. New activities will start to be part of her daily life, demanding that she learns to perform her maternal role and incorporate new tasks and features into her identity as a woman. Furthermore, during the postpartum period, mothers experience ambivalent feelings, ranging from self-confidence, resulting from the experience of the child's birth, to uncertainties, typical of this adaptive period (Medeiros & Marcelino, 2018). In this context, breastfeeding is a maternal experience that can result in this ambivalence since it is an important Instrumental Activity of Daily Living (IADL) of this new phase that can also lead to stress due to the difficulties it may present (Conceição, Brito, Silva & Marcelino, 2020). Therefore, the videos from the "Breastfeeding" series were planned to attend these maternal demands. They covered information about the practice of breastfeeding as well as COVID-19 prevention recommendations, refuting myths related to breastfeeding with phrases like: "There's no such thing as weak milk (...) all breast milks are strong, and so is yours!" (Video 2).

In this perspective, the "Breastfeeding" series was also designed to help postpartum women to develop their self-confidence. Sentences based on positive reinterpretation strategies (Carver et al., 1989) such as "It is especially important that you accept your difficulties, giving them space and understanding them as a challenge and not a disability. Everyone knows that you will do everything to take care of your baby in the best way" (Video 3), aimed to encourage self-compassion and thus promote women's mental health in the postpartum period (Pedro, Branquinho, Canavarro & Fonseca, 2019).

For the three videos in the "Breastfeeding" series, the Content Validity Coefficients (CVC) were all higher than CVC ≥0.85, being above the established cut-off point (Hernández, 2002). The high CVCs obtained, varying between ≥0.85 and 1.0, confirm the validity of the videos in this series that were considered adequate, easy to understand, relevant, and aesthetically pleasing by the mothers. In general, for the "Breastfeeding" series, the criteria "language clarity" obtained a highly satisfactory CVC (≥0.95), emphasizing that the language of the videos allowed the puerperal women to assimilate the content in a clear and simplified way. Thus, through the videos, postnatal women could benefit from complex knowledge, such as the psychophysiological aspects involved in



breastfeeding and the constitution of breast milk (Whitley et al., 2020; Cardoso, Silva & Marín, 2017), presented in Videos 3 and 2, respectively.

Likewise, both the relevance and pertinence criteria were well evaluated, showing that the videos were considered adequate to help puerperal women to cope with the stress resulting from the pandemic, especially those related to breastfeeding. This content, particularly on the important aspects of the breastfeeding process, such as the correct way to position the breast, the difficulties involved, and how to prevent COVID-19 contamination while breastfeeding, were presented by an expert nurse who is head of a public maternity reference hospital in the city of Rio de Janeiro. In the first video of the series, the nurse highlighted the importance of maintaining breastfeeding even during the pandemic: "Breastfeeding is not only an act of feeding the child, but also involves bonds, affection, closeness, touch... So, for that to happen, if you have had contact with COVID or are contaminated, breastfeeding is not contraindicated however you need to be careful (...) That breastfeeding keeps being pleasurable even at this time that we are living. (Video 1)"

The positive impact of the videos in this series was also highlighted by the mothers, as seen in these reports written in the evaluation questionnaires: "I would like to praise the video about breastfeeding, it was beautiful and portrays exactly what we feel at this stage" and "I only breastfed my son for a small amount of time because of postpartum depression (certainly aggravated by the pandemic). The video made me feel a lot better. Thank you!" (Video 3).

Thus, the scripts for the "Breastfeeding" series were designed to provide evidence-based information about the pandemic. The aim was to assist the target population by adopting as a coping strategy the Seeking social support for instrumental reasons (Carver et al., 1989). By clarifying possible doubts, the videos could contribute to reduce the perception of a chaotic and impossible environment. This strategy helps in the emotional self-regulation of the target audience, which is extremely important considering that self-regulation is a mediator among coping styles.

The high CVCs obtained for this series indicates that it is an adequate health education resource to assist postpartum women, with special emphasis on videos with specialized professionals on the topic. Studies show that during the postnatal period it is important to have professional help to assist in the practice of breastfeeding (Burns & Schmied, 2017; Shariat & Abedinia, 2020). Based on this, the support for dealing with breastfeeding difficulties was highlighted in Video 2 (Breastfeeding Difficulties), in which an Occupational Therapist, specialized in breastfeeding, emphasized the importance of seeking help: "If you have difficulty making the baby take to the breast correctly, it is recommended to look for the human milk bank for evaluation and guidance".

Likewise, for the three videos in the "Neonatal Care for the Newborn" series, most CVCs were ≥0.86, except for Video 4 (Neonatal care routine) whose CVC was ≥0.73. This video addresses the routine disruption after birth as regards sleep routine, feeding and playing with babies of up to 6 months. Therefore, it does not cover specific content of the pandemic, which may have interfered in

the assessment of its relevance, that is, how much it would help in coping with this period we are going through. When asked to evaluate videos related to the pandemic, a puerperal woman (of the 9 judges who evaluated this series) expected the material to address issues related to COVID-19, as her comment illustrates: "It doesn't talk about the pandemic, only brings information about baby care". However, considering that the other judges rated the content of this video with high marks (5), it seems to fulfill the role of helping new mothers at this time, mainly because most of them face the postpartum period alone owing to the fact that, due to social isolation, they do not have the help of their support network. Thus, based on the coping theory, the video "Neonatal care routine" provides practical information that could allow the puerperal woman to feel a greater mastery of this new situation and encourages her to cope with the stressors through *planning* strategies (Carver et al., 1989).

Protecting mothers from stress during the puerperium is crucial since parents are central to the child's development. Therefore, promoting the mental health of postpartum women allows them to maintain a good interaction with their children, contributing to a healthy and adaptive development of the newborn. In this context, measures that maintain stability in the child's environment are essential to avoid a chaotic and stressful environment. Thus, by providing tips on the routine of sleep, food and activities, Video 4 can help postpartum women to organize their home environment, making this a safe space for their new child (Linhares & Enumo, 2020).

Aside from pertinence, the CVC of the "Neonatal Care for the Newborn" series ranged from ≥ 0.86 to 1. This highlights its content validity and appropriateness of the videos to the proposed objectives. In the judges' opinion, the content was clear enough to help them learn how to deal with the baby's illness during the pandemic and understand the importance of affective care for their newborn child. Thus, knowledge of early attention to child development was transmitted and could be assimilated by mothers, both particularly important for the exercise of parenting (Yue et al., 2017; Zhong, He, Gao, Wang & Luo, 2020) and for the formation of the emotional bond between mother and child (Gualdrón & Villalobos, 2019).

Criteria such as relevance and pertinence of the content of this series, that is, how far the puerperal women considered the videos adequate to help them deal with the stress caused by the pandemic in the postpartum period, were also positively evaluated. In this context, content related to bonding and the formation of silent communication as important components for the baby's development (Shariat & Abedinia, 2020; Saur, Bruck, Antoniuk & Riechi, 2018) were central to the videos and drew the attention of puerperal women, as this report illustrates: "Important content, especially for young first-time mothers. And it's easy to understand" (Video 6).

All the good CVC indexes obtained for the videos in the "Neonatal Care for the Newborn" series reaffirm that they have the potential to assist puerperal women in coping with the difficulties of the care for newborns imposed by the pandemic. In this series, the Video "What should I do if my baby gets sick?" stands out, dealing specifically with the pandemic, it was well evaluated in all

criterias. In it, guidelines on what to do in cases of illness of the baby are presented alongside positive psychological interventions that promote the puerperal woman's maternal capacity and self-confidence to take care of their child through engaged strategies such as *active coping* (Carver et al., 1989). Thus, the video content aim to contribute to the planning of actions with subsequent active execution in the decreasing of the effects of stressors (Carver & Connor-Smith, 2010; Lafarge, Mitchell & Fox, 2017; Goletzke et al., 2017). In addition, strengthening the sense of competence and independence of puerperal women is a fundamental strategy to assist them in facing adversities during the pandemic (Linhares & Enumo, 2020).

Based on the above, the videos can be considered to be a health education proposal with content that is accessible to puerperal women, which facilitated their understanding and were thus of use for self-regulation of their emotions. It was possible to teach coping responses based on a new interpretation of the stressor event (Lazarus & Folkman, 1984), helping them to explore their intentional capacities to coordinate actions to manage physical, psychological, and emotional wellbeing. The results also seem to indicate that the videos fulfilled the function of calming the puerperal women concerning their doubts and difficulties about breastfeeding and care for the newborn with positive psychological interventions such as: "Everything will adjust over time, baby and mother will adjust and stay in perfect harmony. Always keep in mind that these difficulties are transient and manageable" (Video 2). Thus, by reducing the stress perceived by the mothers, the videos could help in the development of sensitive parenting, by which mothers interact and pay attention to their children's emotional and physical needs, responding to them appropriately (Goodman, Bakeman, McCallum, Rouse & Thompson, 2017).

In addition, the videos highlighted that breastfeeding and newborn care are processes that need to be learned. Therefore, they can contribute to demystify the idea that breastfeeding is innate, that is, born with any woman and awakened when she becomes a mother. In this context, the videos also adopted as a coping strategy the focusing on & venting of emotions (Carver et al., 1989), as a way of showing that negative feelings in this new moment are common and should be welcomed and reinterpreted (positive reinterpretation) (Carver et al., 1989). By doing this, it could contribute to a feeling of connection between the mothers and a more optimistic perspective for this early mother-baby relationship that is full of challenges and insecurities. Understanding that the suffering and anguish involved in breastfeeding are shared by different mothers can alleviate the feeling of loneliness and isolation (Zanon et al., 2020). Moreover, it also contributes to the development of a greater feeling of confidence on the part of the puerperal woman, which is positively associated with the sense of personal self-efficacy (Rodrigues et al., 2017). When difficulties and complications are shared, the puerperal women come to believe more in their ability to perform tasks, encouraging breastfeeding (Rodrigues et al., 2017) that has different benefits for the mother-baby binomial (Feltner et al., 2020; Ciampo & Ciampo, 2018).

With this, the videos of the series "Breastfeeding" and "Neonatal Care for the Newborn" offer emotional support and promote well-being in puerperal women and enhance the potential for mental health through positive psychological interventions. This increases the independence of women in carrying out the Instrumental Activities of Daily Living (IADL) (Conceição et al., 2020). As health education resources with a psychoeducational nature, these videos could provide integration within the family, strengthening the mother-baby-family bond. The videos also can contribute to the reconfiguration of the support network in the postpartum period, since they can be watched by all the family members involved in the care of the puerperal woman and her newborn.

With the control and containment measures of COVID-19, the time of joint accommodation was reduced, causing mothers who have their children during the pandemic to be deprived of learning about breastfeeding management techniques in the immediate postpartum period still during hospitalization. Without being able to count on family members to help them with the demands of the newborn at home, the feeling of helplessness of this generation of women is something to be worried about and is deserving of attention. Encouraging and teaching mothers to breastfeed, by encouraging them to overcome the difficulties, increases their satisfaction during the practice as well as the chances of breastfeeding being exclusive and longer lasting (Wouk et al., 2019). Considering this, the videos focused on encouraging coping strategies for accepting difficulties as something natural, in addition to always stressing the importance of seeking help if necessary. The videos also contribute to helping them adopt Seeking for social support for emotional reasons as a coping strategy (Carver & Connor-Smith, 2010) instead of isolating themselves.

It is also important to discuss the limitations of the study. Although all CVCs were above the established cut-off point, the presentation of the videos can be considered a product limitation. Because it is a voluntary project and without any funding, the Movie Maker software used for editing the videos was free and had limited technological resources. Therefore, it was not possible for the videos to have a professional design, with more pleasing visual content, for example. Moreover, the people on the team did not have specialized training for video editing, and this task was learned during the pandemic with the effort to produce more creative and interactive material for Task Force LEPIDS COnVIDa. In addition, aspects such as the background of the video, its framing and the quality of the audio varied according to the recording of the invited expert. Despite these limitations, the videos for Instagram fulfilled the objective of contributing to the resilience of mothers of babies under six months through interventions that facilitate a positive experience of being a mother (Fredrickson & Joiner, 2018), which is essential for coping with the stress caused by the COVID-19 scenario and the lack of the fuller experience of a maternity hospital in the midst of a pandemic.



5 CONCLUSION

Besides the limitations, it is possible to notify that all the resources that were produced by the Task Force LEPIDS COnVIDa were considered valid, confirming the health education proposal as a favorable form of intervention, and contributing to coping with the stress caused by the pandemic. In this context, the psychoeducational videos analyzed contributed to provide stress coping strategies besides practical resources for the daily lives of mothers and their families.

Based on an interdisciplinary approach, the videos aim to clarify doubts and provide information about COVID-19 and the difficulties of the puerperium. By doing that they could help to expand the perception of the stressors of the pandemic, which are no longer interpreted as threats, but as challenges, such as proposed by the Coping Dispositional Theory (Carver & Connor-Smith, 2010). This certainly helps puerperal women to face this difficult and uncertain scenario in a more engaged and resilient way, especially given the impossibility of accessing certain resources that normally would assist in breastfeeding and care for newborns. The lack of formal and informal support due to social isolation are difficulties that the pandemic imposes, which have a negative impact on learning to "be the mother of that new baby" (emphasis added by authors).

Moreover, the digital platform Instagram met the expectations regarding the dissemination and reach of the target audience with different socioeconomic realities. Thus, the findings of this study support the psychoeducational health education proposal in video format for Instagram as a promising form of intervention. The videos can help with the coping of the stress of the pandemic, encourage breastfeeding and clarify aspects about newborn care. Therefore, the educational materials developed and analyzed here can contribute to the development of postnatal women's self-confidence to face problem situations of this time and other moments of stress as challenges instead of threats. Finally, considering our large number of followers, we suggest future studies to analyze the impact of the multimedia resources on the puerperal population who had access to them trough the Instagram platform. This is important for a better analysis of the psychoeducational resources effectiveness in order to help the puerperal women and their support network to cope with the stress resulted from the Covid-19 pandemic.

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