

Real-world data from an online health education program for pregnancy and transition to parenthood: process indicators.

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Introduction:

The SARS-COV-2 pandemic emergency had a significant impact on the dynamics of health institutions, leading to the suspension of programs for preparation for childbirth and parenthood with couples and families deprived of this essential accompaniment for this transition period. The preparation courses for childbirth and parenthood acquire an added importance, providing women and men with improved knowledge and skills in the field of procreation, namely the exercise of informed consent during pregnancy, childbirth, and postpartum [1]. To fill the gap caused by the suspension of these health education activities, the School of Health Sciences of Aveiro - Portugal in collaboration with professionals from the area, developed a project UaCuida (Caring for families in a friendly university) using Internet based information and communication tools. The branch for accompanying pregnant women and their families was made through e-colloquia with the generic designation of ‘Barriguitas’ (‘little potbellies’).

The aim of this work is to describe process indicators of the participation of pregnant women/couples in health education sessions of ‘Barriguitas’ at UaCuida project.

Methods:

The development of the project was grounded on the theoretical foundations of an action research methodology [2], with public e-colloquia delivery weekly using the ZOOM Platform-Colibri V3-FCCN Videoconference, approaching over time thirteen different themes like ‘Preparing for delivery (birth)’, ‘Care for the baby at the hospital’ or ‘Pain management & relief during delivery (birth)’. A specialized team of health professionals (nurses, primary care physicians, therapists) were responsible for preparation and for conducting e-colloquia sessions which included slide presentation, videos and time for answers to questions from the audience. The participants include women or couples in pregnancy, or puerperium, which self-identified with needs of support in the process of preparation for parenthood.

The dissemination of the e-colloquia was carried out through the social networks (like Facebook), through the agenda section of the website uacuida.com and through Health Care Units of Aveiro Region. Data was retrieved from the Zoom Platform at the end of each session held from April 9, 2020, to April 15, 2021, and analyzed using descriptive and inferential statistics [3].

Results:

During the period under review, 52 e-colloquia were held with the participation of 138 different pregnant women / couples. The total participations were 1674 of which 1539 (91.9%) from women. On average, 33±10 pregnant women / couples participated per session, with a minimum of eight participants in the first session (open topic) and a maximum of 51 participants in sessions 47th (care for the new-born at home) and 52nd (non-pharmacological methods for pain management in the child-birth labour) - Figure 1. These data reveal that participants attended different e-colloquia with a minimum of 1 session and some of them 21 sessions, repeating themes (Figure 2). The average time of participation in the sessions was 101m36s ± 38m58s, ranging from a minimum of 10 minutes to a maximum of 186 minutes with a high dis-

Keywords:

Public participation, Digital Health; eHealth Strategy; Health Education; Nurse Midwives; Parenting Education.

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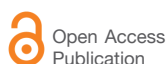
Conflict of interest:

The authors declare no conflict of interests.

Clinical study registration

number: This project was registered in CIDTFF

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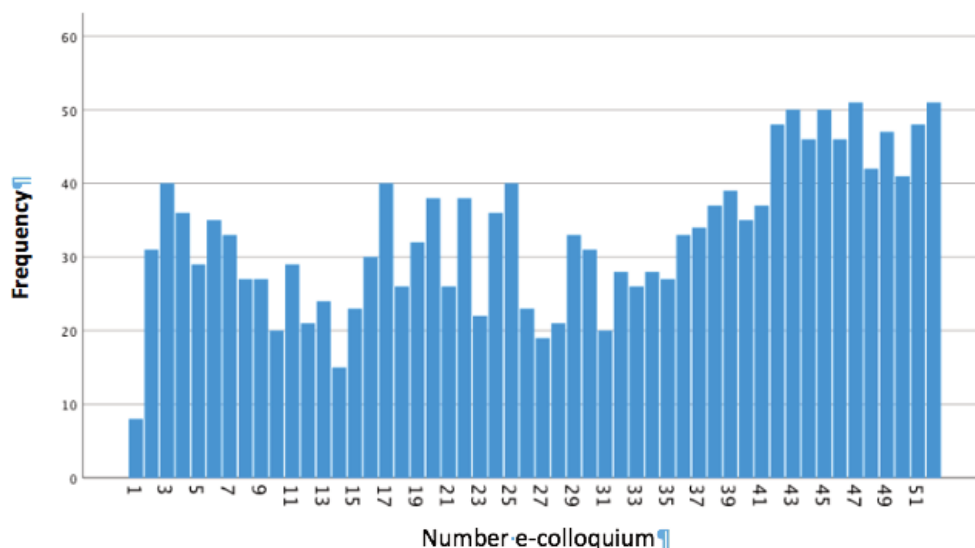


Figure 1 - Participants by e-colloquium

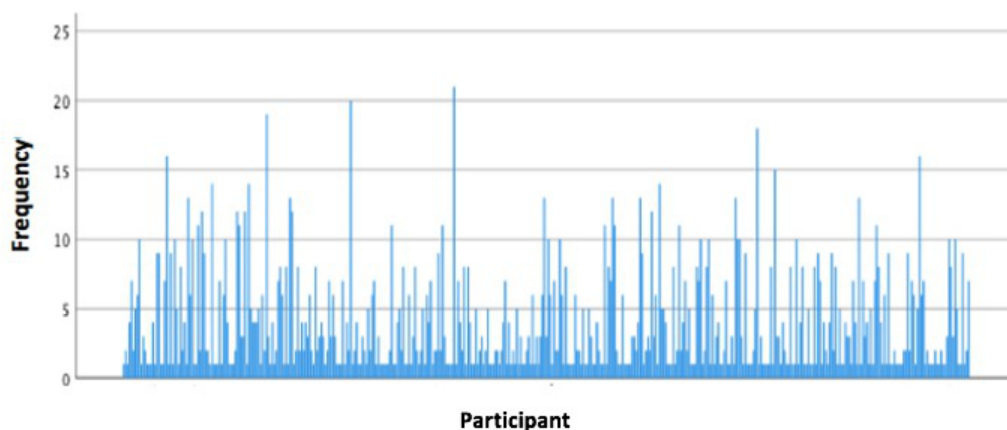


Figure 2 - Frequency of presences by participant

Table 1 - Time of participation by sex

	n	min-max	Mean (sd)	CV (%)
Male	135	10-160	92m3s±42m0s	45,62
Female	1539	10-186	102m33s±38m32s	37,57
Total	1674	10-186	101m36s±38m58s	38,29

person around the mean (CV=38.3%), (Table 1). Male participants recorded lower mean times than females (92m3s±42m0s vs 102m33s±38m32s; U Mann-Whitney=98344.000; p<0.01).

The e-colloquium that presented the shortest mean time of participation was the 35th (child-birth labour pain management), with a mean of 56m13s ± 11m58s (minimum-maximum, 23m-66m). On the other hand, the e-colloquium that presented a higher average time of participation was the 51st, with an average of 141m57s± 40m54s (minimum-maximum, 19m-173m).

Discussion:

This project, although planned to be carried out in a non-pandemic context, was forced to adapt to the conditions imposed by the national authorities but sought to overcome the restrictions on health promotion activities given that primary health care focused its action on monitoring of people flagged with SARS-COV-2 infection and their risk contacts.

A first note for the number of participation units (female/couple) that can be considered substantial, given its proportion in relation to the number of births that took place in the region of Aveiro during the years 2020 and 2021 (2841 and 2737, respectively), which leads to a minimum of 2.4% of participants, perhaps more, as the data period considered did not extend to all months.

As expected, the participation of female elements was considerably higher, which is relevant for the continuity of the dissemination of equality policies and the promotion of the role of men in parenthood, namely those with origin from the employers themselves.

If the first session revealed a timid start in terms of the number of participants, it is possible to verify a relationship with the different phases of the pandemic, visible with the decrease in participation during moments of deflation and increase in mandatory periods of restriction of movements. Another reason for this variation could be point out to the program from home avoiding unnecessary risks for the course of pregnancy [4]. A last note to raise that participation in these e-colloquiums can help to provide relatively affordable medical services, reducing inequality in the accessibility of health care.

Ethics committee and informed consent:

The project was submitted to the Ethics Council of the University of Aveiro, obtaining a favorable opinion and all the requirements inherent to the RGPD were met, and subjects gave their informed consent before they were enrolled in the study.

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