
CONFERENCE ABSTRACT

An eHealth application to support vulnerable mother and child dyads: design of a randomized controlled trial

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Introduction

The postpartum period is challenging as many mothers struggle with physical and emotional symptoms, infant caregiving, breastfeeding concerns, and lifestyle adjustments. Health outcomes of mothers and newborns differ largely during this period between populations, shifting negatively towards the more vulnerable population. Previous qualitative research showed that postpartum care and information provision regarding postpartum care and the postpartum period are seen as key elements of support with the potential to enhance maternal empowerment. Several eHealth programs and applications have proven their potential to support preventive lifestyle changes during pregnancy. EHealth can provide essential information, in addition to regular postpartum care. We hypothesize that an eHealth application with information provision and tailored care based on individual patient-reported outcomes, during pregnancy and the postpartum period could help reduce low maternal empowerment postpartum among vulnerable women.

Methods

This open label, randomized controlled trial will be undertaken in six maternity care organizations in the Netherlands. We aim to include nearly 500 participants. The intervention combines an eHealth application with risk-based, tailored care from pregnancy onwards. The control group receives care as usual. The eHealth application, a mobile phone application, will send out the research questionnaires for risk identification and patient-reported outcomes, push messages focusing on enhancing empowerment, and it will provide access to a library with supportive information. The push messages and information in the library are tailored to readers with a low health literacy; simplified language is used and reference is made to images and footage when possible.

To create a larger window of opportunity for risk reducing strategies, the regular assessment of women's expected care requirements based on the risk identification questionnaire will shift from the third trimester of pregnancy to the second. Maternity care

assistants will tailor their care during the first eight days after childbirth based on the identified risks and patient-reported outcomes for each individual.

The primary outcome is the maternal empowerment score postpartum. Secondary outcomes include patient-reported experience measures regarding received care and healthcare responsiveness, quality of life, postpartum depression, substance usage (smoking, alcohol, and drugs), self-efficacy regarding breastfeeding, and the assessment of the usage of the eHealth application. All outcomes will be analyzed according to the intention-to-treat principle.

Results

The inclusion will start in October 2019 and ends in April 2020. The data collection process will last until November 2020.

Discussions

This intervention will contribute to evidence regarding the effectiveness of integrating adjusted eHealth in individualized regular care, focused on enhancing the empowerment of vulnerable women during pregnancy and the postpartum period.

Conclusions

We expect that this study shows a reduced low empowerment and provides more information for effective eHealth integration in care for vulnerable populations.