

# DIGITAL HEALTH INTERVENTIONS TO IMPROVE THE JOURNEY FROM PREGNANCY TO PARENTHOOD: A SCOPING REVIEW

## Background

Most children in Germany are born in maternity hospitals. These hospitals offer parents a low-threshold and uncomplicated way to be reached without feeling stigmatized [1]. In maternity hospitals, health professionals can recognize early on the parents' stress situations, educational needs or resources. Together they can provide appropriate support services. Therefore, health professionals play a guiding role by accompanying parents from the maternity hospital to further social and health networks. In this context the integration of digital health technologies can be an effective intervention to support parents with regard to pregnancy, childbirth and parenthood [2].

## Aim(s)

The aim of this study is to present preliminary findings from a scoping review that aims to map and assess published studies on digital health interventions aimed at improving support for parents in the areas of pregnancy, childbirth, and parenthood.

## Methods

A scoping review will be conducted, including scientific publications in English and German language published from 2008. A systematic database search will be performed in MEDLINE via PubMed, CINAHL, Cochrane Library, IEEE Xplore Digital Library, ScienceDirect and PsycINFO. Title/Abstract and the full-text of results from the database search will be screened independently by two authors to finally select the studies. Peer-reviewed qualitative, quantitative, and mixed methods studies that evaluated digital health interventions to improve pregnancy, childbirth and parenthood were included.

## Results

A first oriented search identified studies of digital health interventions, for example smartphone self-care applications, to help pregnant women during the corona pandemic [3]. Other studies describe counseling interventions via telehealth for health promotion, health tracking and education [2,3]. Furthermore, digital health technologies can support for example mental and physical wellness of pregnant women, health education and parenting support [2].

## Discussion

Digital health technologies (e.g. mobile apps, wearable devices, or platforms) allow pregnant women and their families to access health information, educational parenting trainings or receive personalized recommendations [3]. This can contribute to increased self-care and a sense of control over the pregnancy journey. The timely detection and intervention of risks through real-time monitoring of maternal health can lead to a reduction in adverse maternal and birth outcomes. Challenges regarding privacy, accessibility, equity, implementation strategies and digital literacy are also discussed [2,3].

## Implications and future perspectives

When health professionals play a guiding role by accompanying parents from the maternity hospital to wider social and health networks, they can integrate digital health technologies into the care process. Digital health technologies have potential for supporting pregnancy health care. There is also a need for research to understand the effectiveness and feasibility of implementing digital health interventions

## References

1. Andresen, S. et al, Neugeborene willkommen heißen und ihre Familien unterstützen: Eine empirische Studie zu Frühen Hilfen und dem Lotsendienst »Babytse Frankfurt am Main«, Beltz Juventa, 2022.
2. Bäckström, C. et al, Healthcare professionals' perceptions of a digital parental support, Childbirth Journey, constructed as a serious game-An intervention study, Front Digit Health, 5:1141350, 2023.
3. Moise, I.K. et al, Lessons from digital technology-enabled health interventions implemented during the coronavirus pandemic to improve maternal and birth outcomes: a global scoping review, BMC Pregnancy Childbirth, 23:1-21, 2023.