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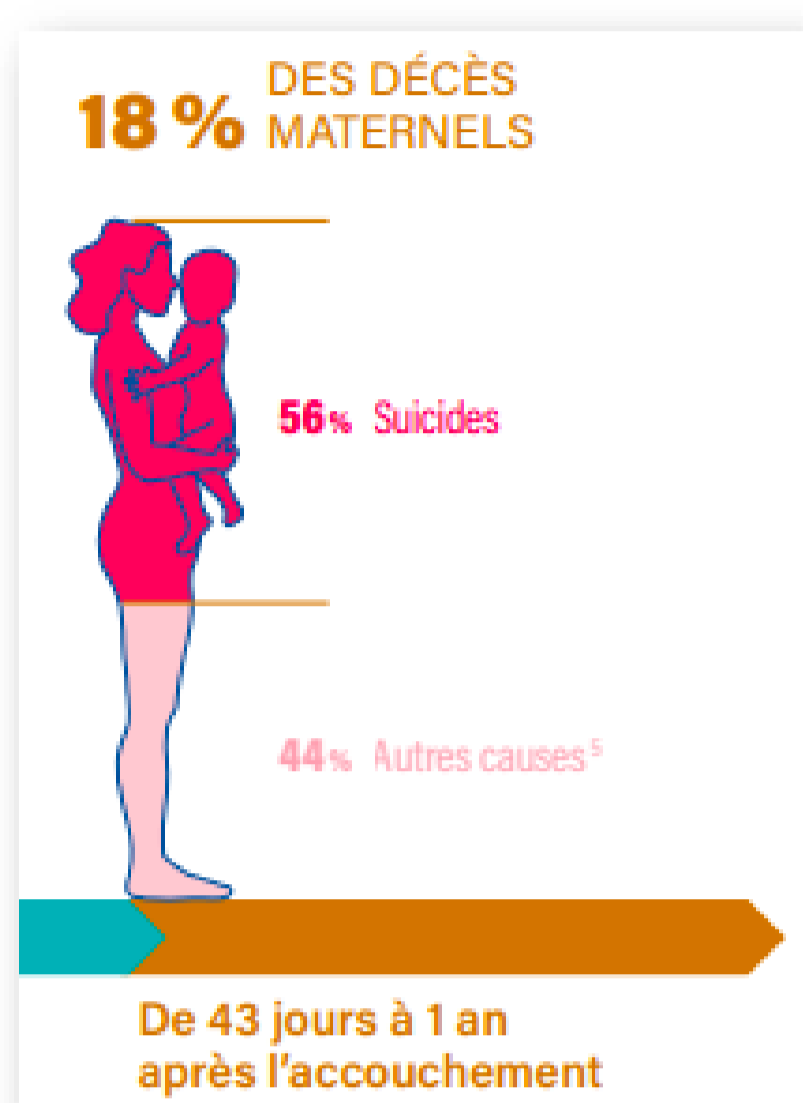
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A digital peer support tool to prevent postnatal depression : a forthcoming RCT

Emma Leavy, Swann Pichon, Sonali Quantius, Laurent Gaucher

Background & current state of research



Depression during the postnatal period is a worldwide issue, affecting nearly 20% of new mothers in certain regions (1).

Self-stigmatization may explain women's unwillingness to seek psychiatric help. Receiving appropriate care is an important protective factor, but actions to avoid self-stigmatization and improve **help-seeking behavior** is needed. In this study, we aim to evaluate the effectiveness of a **digital peer-support application** within mothers at risk of postpartum depression.

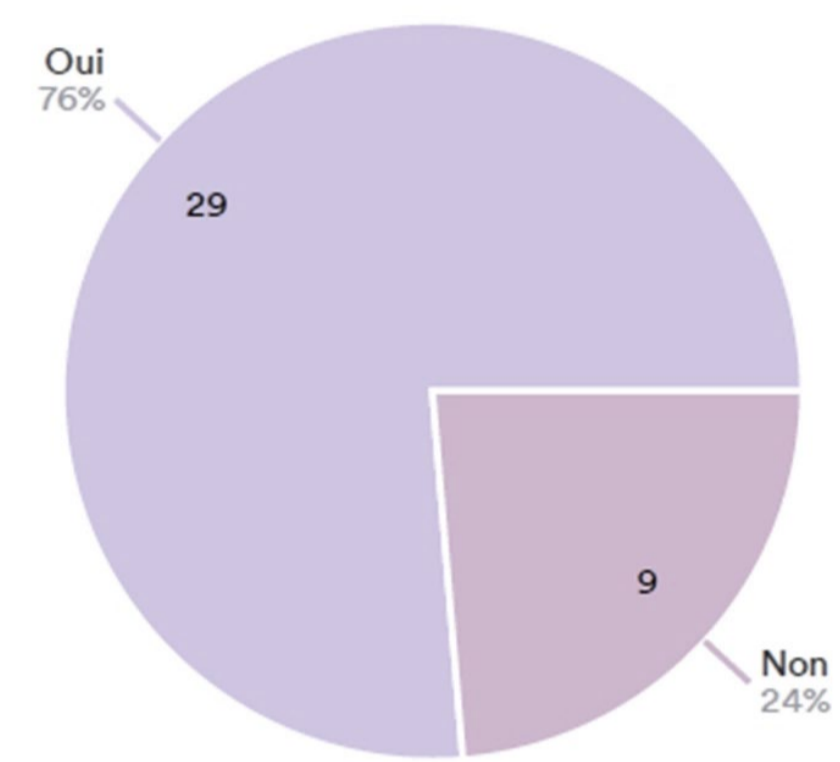
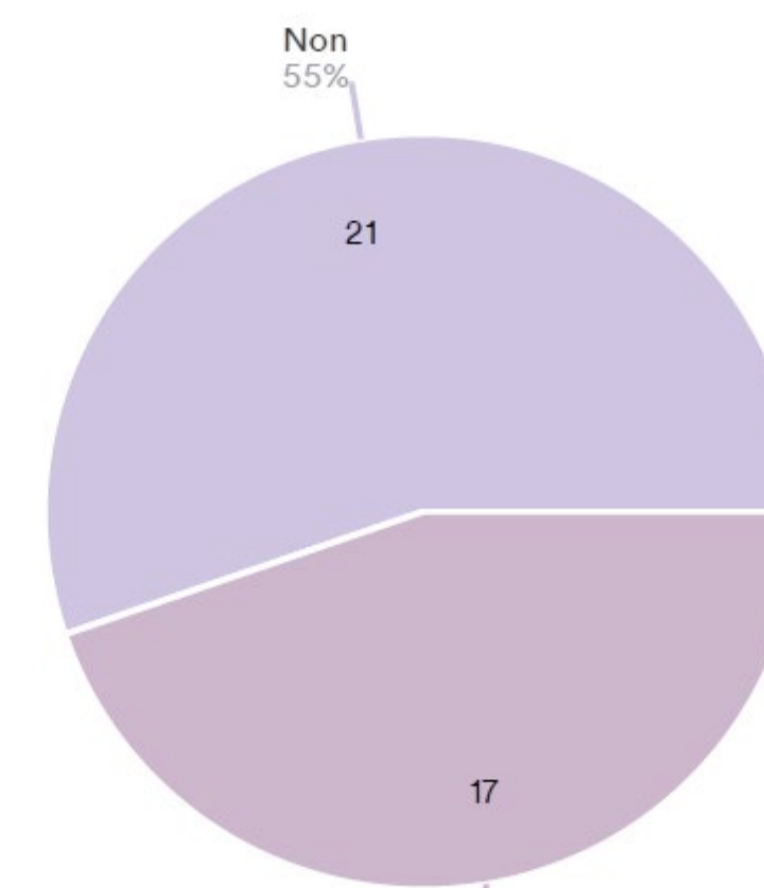
Receiving appropriate care is an important protective factor, but how to avoid self-stigmatization and improve help-seeking behavior ?

Peer-support has shown to be of interest in past research (5,6).

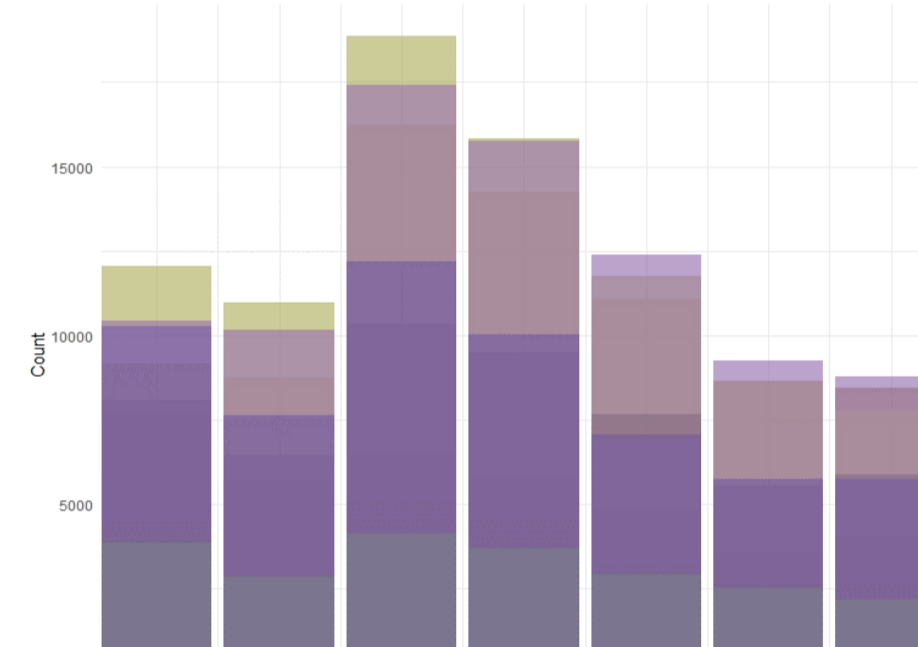
We know there is a desire for digital support, as a result of a short survey. Two surveys among pregnant women (n=38)

Did you experience the baby blues, anxiety or depression during or after your pregnancy ?

Would you be interested in using a mobile application to help you track your emotional changes ?

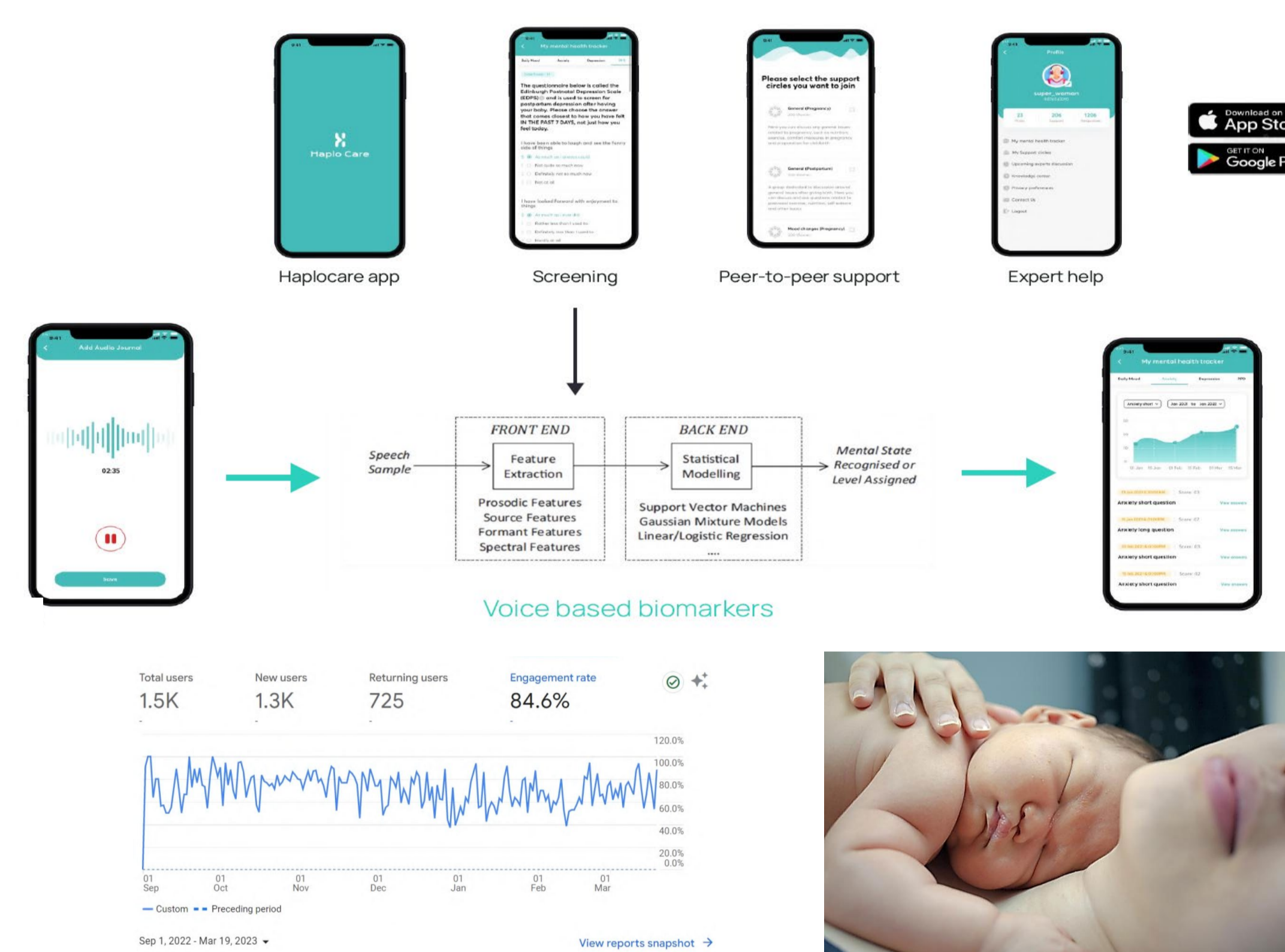


An ongoing sentiment analysis of 106'872 #postpartum tweets allows to explore **global waves of sentiments regarding the postpartum period**, from an outburst of anger during the wave of #metoo tweets to a drop in joy at the start of the global pandemic.



This research project has recently received a grant which will allow us to conduct a **randomized control trial in collaboration with the postnatal ward of the HUG.**

Intervention : Haplocare®



The intervention group will use Haplocare®, an app with **3 modules: self-questionnaires, peer support group chats, and an audio diary.**

The application was developed by Sonali Quantius to address health inequalities with an AI model designed to detect signs of depression within the mother's voices.

Expected results

Digital peer support has shown to provide support to new mothers and to improve postpartum mental health (5) as seen in a recent meta-analysis (6) and especially within new generations of mothers who seem to prefer online support. Such a device may help in early detection of postpartum depression and enable the health system to provide efficient treatment and decrease maternal mortality.

Methods

We will conduct a randomized control trial in Geneva, at the individual level in two parallel groups, within women with a higher risk of developing postnatal depression (EPDS score ≥ 7).

The aim is to evaluate the effectiveness of a digital peer support intervention during the postnatal period. The intervention group will use a digital peer support tool, in addition to current care provided by Geneva's health system and the TAU group will have access to the current care only. The primary outcome of this study is :

(1) The level of **postnatal depression** measured by the Edinburgh Postnatal Depression Scale (EPDS) (2).

The secondary outcomes are:

- (1) The **service utilization** – questionnaires will be used to identify other online or face-to-face peer support tools or mechanisms used by mothers.
- (2) The level of **quality of life** measured by the World Health Organization Quality of Life-BREF (WHOQOL-BREF) questionnaire (3).
- (3) The level of **maternal empowerment** assessed by the Patient Activation Measure Short Form (PAM-13) (4).



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