Abstract

Background: Fertility awareness methods can be used to monitor menstrual cycles, to better understand when conception is most likely to occur. Being able to identify the 'fertile window' (the time in the menstrual cycle when pregnancy is most likely), and having unprotected vaginal sex or undergoing insemination during this time, increases the chance of conception. However, this window can be difficult to identify, even for those with regular cycles. So far, there has been little research on fertility awareness methods from the perspectives of individuals and couples using them to improve chances of conception, including their usability and acceptability.

Online and app-based fertility awareness methods are becoming increasingly available. 'Natural Cycles' is an app that can be used as a method of contraception ('prevent a pregnancy' mode) or to plan conception ('plan a pregnancy' mode), as it indicates on which days users are most likely to conceive. The app costs £40 for a year and users receive a basal body temperature (BBT) thermometer. BBT, reached after at least three hours of rest, rises after ovulation due to increased progesterone levels and can be used retrospectively to identify when ovulation occurred. Users enter data on their menstrual cycle and daily BBT readings. As they enter data on more cycles, uncertainty is reduced and fewer fertile days are indicated. An algorithm, which allows for uncertainties in ovulation day predictions and pre- and post-ovulation temperatures, is used to calculate the fertile window. So far, the app has been promoted most widely as a method of contraception. As far as we know, no research has yet looked at users' experiences of the app's 'plan a pregnancy' mode.

Methods: We are conducting a qualitative study to explore users' and their partners' views and experiences of using Natural Cycles and other methods when trying to conceive, and how this fits in with their everyday lives and plans. We aim to carry out up to 30 in-depth interviews with a diverse range of current and former Natural Cycles users and their partners (interviewed individually) who are currently living in the UK, and have ever used 'plan a pregnancy' mode. We will be taking an iterative, inductive approach to analysing the data, meaning that we will identify key themes based on what participants tell us (rather than testing preconceived theories). We will use the results to improve understanding of how people are using technology to help conceive. We will make recommendations to Natural Cycles and other app developers, health professionals, policy makers and researchers in the fields of fertility and (pre-)conception health. The results will also be relevant to current, former and potential Natural Cycles and their partners, others trying to conceive or considering doing so, people working and/or interested in the use of technology to manage health and well-being, and the wider public. All results will be freely and publicly available, via links on the project website (www.lshtm.ac.uk/freyja).