Human Reproduction, Vol.37, No.3, p. e1, 2022
https://doi.org/10.1093/humrep/deac037

human reproduction

EDITOR'S CHOICE

Editor's Choice: Modelling chance of pregnancy in the general population

Cornelis (Nils) Lambalk *

Editor-in-Chief

*Correspondence address. E-mail: editorial@humanreproduction.co.uk

Yland *et al.* (2022) developed models to predict the chance of pregnancy based on the Pregnancy Study Online (PRESTO) project that prospectively collects data from a large number of couples from Canada and the USA who have just started, or intending to start, trying to conceive. By using machine learning methodologies, enabling complex handling of the massive amount of data, several models were developed to predict pregnancy (i) within 12 menstrual cycles, (ii) within 6 menstrual cycles and (iii) within each menstrual cycle for up to 12 cycles. Importantly, and as such distinct from existing models, this work included predominantly couples without a history of fertility problems. Many of the 163 potential questionnaire items for the models are relatively easy to retrieve; many, as acknowledged by the authors, are easy to modify including the use of a fertility app and other fertility improving actions (e.g. intercourse timing and frequency), the use of multivitamins, adjusting diet and avoiding stress. It should be realized of course that this study identified associations and not causality although several of the identified variables likely bare a mechanistic contribution to chance of pregnancy.

Reference

Yland JJ, Wang T, Zad Z, Willis SK, Wang TR, Wesselink AK, Jiang T, Hatch EE, Wise LA, Paschalidis IC. Predictive models of pregnancy based on data from a preconception cohort study. *Hum Reprod* 2022;**37**:565–576.