

Misconceptions around cycle length, regularity and fertile window in 97,414 women trying to conceive.

Esther Wainwright¹, Zoya Ali¹, Natalie Getreu^{1,2}, Helen C. O’Neill^{1,2}

1. Hertility Health Limited, UK; 2. EGA Institute for Women’s Health, University College London (UCL), London, UK.

Background

Variation in menstrual cycle length (1) and regularity (2)(3) make it more difficult for women with variable cycles to successfully time intercourse for conception within the fertile window (4).

With 12.1% of females between 15 and 44 years old experiencing difficulty conceiving (5), improving identification of cycle characteristics could improve women’s understanding of their ability to conceive and inform clinical decision-making.

This study aimed to assess misconceptions surrounding cycle length, regularity, and fertile window knowledge among women actively trying to conceive (TTC).

Methods

- Retrospective, cross-sectional analysis using data collected through an online health assessment (OHA).
- 97,414 women aged 18–50+ who reported they were actively TTC via the OHA.
- Participants provided self-reported data on menstrual cycles, fertile window knowledge, and contraceptive use.

- Responses were stratified by age and time trying to conceive (in months).
- Statistical analysis included descriptive summaries performed in R.

Variables:

- Menstrual cycle length
 - Length in days or ‘I don’t know’
 - described as ‘regular’, ‘irregular’ or ‘not getting periods’
- Fertile window knowledge
 - ‘Yes’, ‘no’, or ‘I don’t know’
- Contraceptive use

Stratified sampling:

- Age
- Time trying to conceive (months)

Results

Figure 1. Awareness of Cycle Regularity and Fertile Window by Age Group

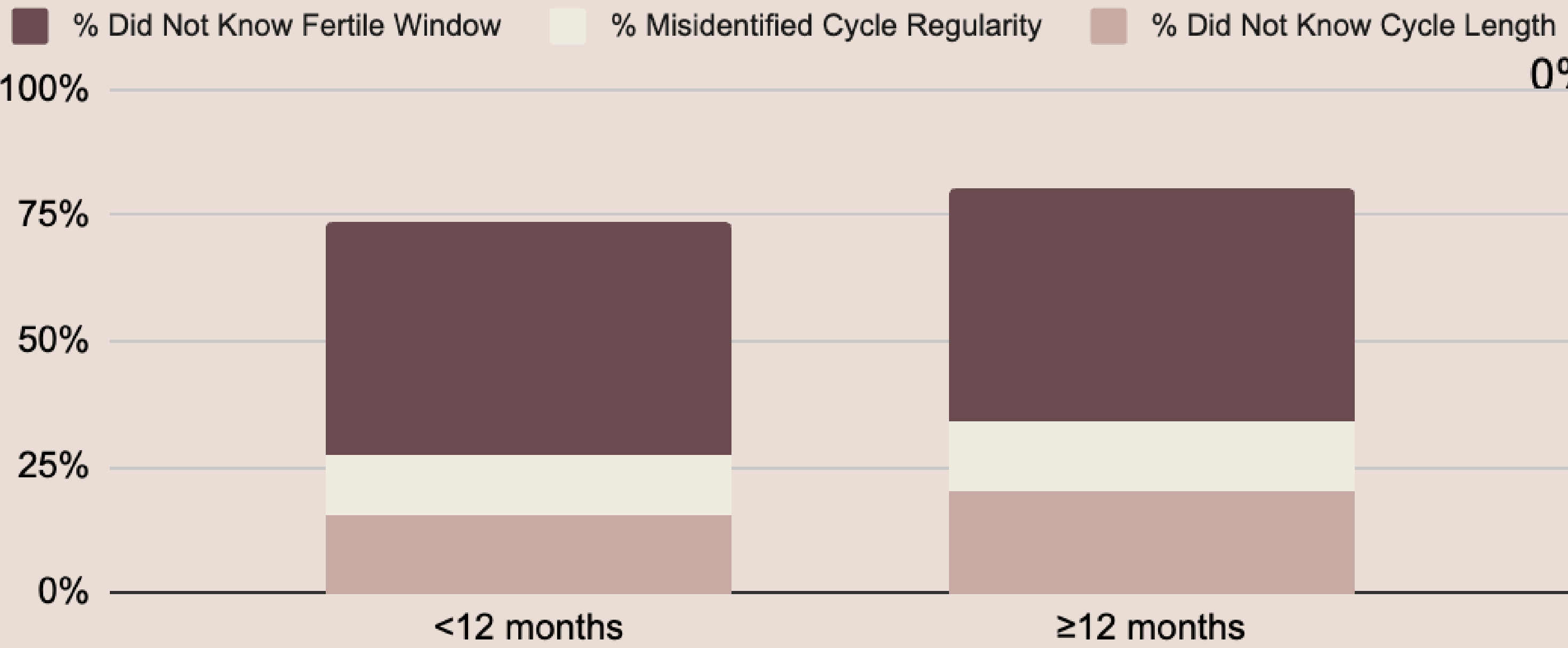
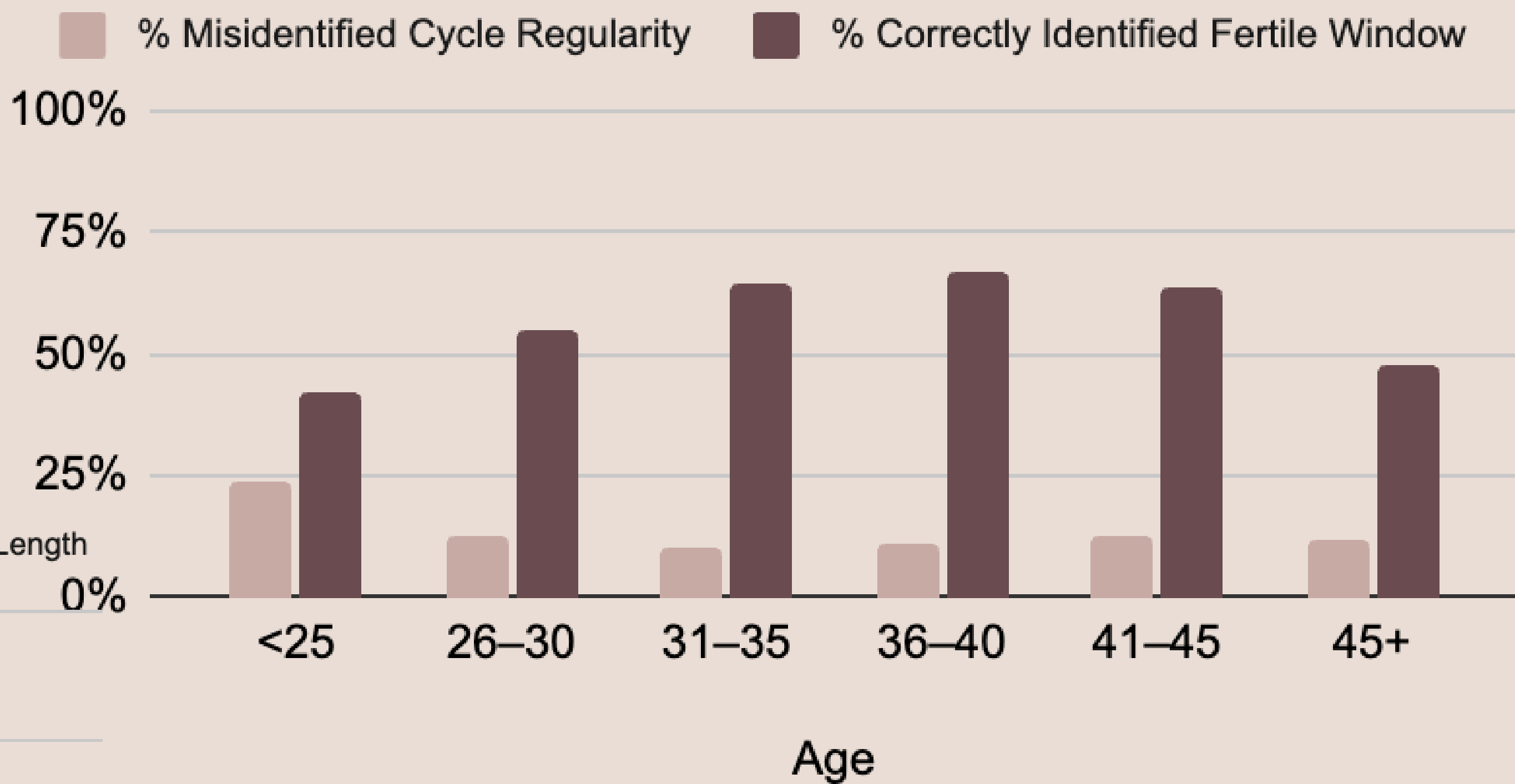


Figure 2. Fertility Awareness by Time Trying to Conceive (TTC)

- Of 97.414 women, 16.7% didn’t know their cycle length; 69.7% reported regular cycles, but 12.8% of these were outside the 21–35 day range
- Cycle awareness lowest in <25s (23.5%); improves with age until a slight rise post-40 (Figure 1)
- TTC >12 months: more uncertainty (20.2%) and misidentified regularity (13.8%) vs. TTC <12 months (15.3%, 12%, respectively) (Figure 2)
- 13.4% of participants didn’t know and 27.6% were unsure of their fertile window
- Fertile window knowledge: lowest in <25s (42.5%), highest in 36–40s (67.1%) (Figure 1)
- Only 53.7% of TTC >12 months knew their fertile window (Figure 2)
- A small but significant proportion (3.6%) of participants actively TTC reported using contraception, with 1.3% using hormonal methods.

Conclusion

This study highlights critical gaps in reproductive health literacy among women TTC, particularly regarding fertile window knowledge and menstrual cycle regularity. Younger women demonstrated significantly lower awareness, potentially reducing their ability to optimise conception efforts.

Misconceptions about cycle regularity and continued contraceptive use further emphasise the need for targeted educational initiatives and accessible resources to improve fertility outcomes. Future research should explore interventions to address these gaps and enhance reproductive health education and support.

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