Wainwright *et al. Reproductive Health* (2025) 22:152
https://doi.org/10.1186/s12978-025-02079-x

Reproductive Health

RESEARCH Open Access

Fertility awareness in 97,414 women trying to conceive: gaps, misconceptions, and implications for reproductive education

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Abstract

Background Fertility rates in the UK are at an all-time low, with infertility affecting approximately 1 in 7 couples. Despite the rising demand for fertility services, fertility awareness, specifically knowledge of ovulation and the fertile window, remains low among women of reproductive age. Most existing studies offer a broad perspective, lacking focus on women actively trying to conceive (TTC). This study aims to assess the level of understanding surrounding the fertile window among women TTC, identifying factors associated with knowledge gaps.

Methods A retrospective, cross-sectional analysis of 97,414 women actively TTC who answered an online health assessment was conducted. Participants provided information on menstrual cycle characteristics, previous pregnancies, and fertility knowledge, including the timing of the fertile window. Frequencies, percentages were calculated and chi-squared tests performed to assess differences in categorical data. Logistic regression models were used to calculate odds ratios (ORs) to better understand factors significantly associated with not knowing the fertile window.

Results Out of the total respondents (97,414), over a third (33,756, 41%) could not accurately identify the fertile window, with substantial misconceptions observed across all age groups and ethnicities. Women with previous pregnancies were more likely to correctly identify the fertile window (OR = 1.45, 97.5% CI: 1.20–1.75, $p < 0.001$). However, knowledge was significantly lower among those with irregular cycles, non-White ethnicities, younger age groups and longer time TTC. Additionally, misconceptions about cycle regularity were apparent, of 60,322 women describing their cycles as regular 10% did not know their cycle length (66,95) and a further 2.9% fell outside of the clinically regular 21–35 day range. These misconceptions followed a similar trend with younger age groups, non-white ethnicities and longer time TTC having significantly increased rates of misidentifying regular cycles. This further increased the odds of not knowing their fertile window (OR = 2.99, 97.5% CI: 2.83–3.17, $p < 0.001$).

Conclusions The findings reveal gaps in fertility awareness among women actively TTC. Addressing these knowledge gaps through targeted educational interventions could potentially reduce time-to-pregnancy and the reliance on assisted reproductive technologies. Improved fertility education focusing on cycle tracking and ovulation timing is essential to assist women with accurate information during their TTC journey.

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Introduction

Birth rates in the UK have decreased by 12.4% over the last decade and conception rates are the lowest since 2001 [1]. This coincides with the demand for fertility treatments increasing, with a 10% rise in access to assisted reproductive technologies between 2019 and 2021 [2]. Despite this growing reliance on fertility services, menstrual health education and awareness remain limited among women of reproductive age. A crucial component of natural family planning is understanding ovulation and the fertile window, to help optimise chances of conception. However, research in women's reproductive health has historically overlooked this aspect. A systematic review of 71 studies reported generally low fertility awareness among both men and women, but only 11 specifically assessed knowledge of the fertile period, with mixed findings across diverse populations [3]. The term fertility awareness itself is broad, encompassing fecundity, infertility, risk factors, and reproductive biology [4], yet few studies focus explicitly on ovulation and the fertile window.

A study across the UK (555 women and men) and Denmark (682 women and men) found relatively good awareness of age-related fertility decline but did not specifically assess knowledge of ovulation and cycle timing [5]. Many studies focus only on women experiencing infertility rather than those actively trying to conceive (TTC). For example, a US/Canadian study found that while general knowledge about the fertile window was good, there was confusion about optimal timing for conception among 1,006 women who had been TTC for over 12 months [6]. Similarly, an Australian study of 200 women undergoing assisted reproductive technologies found that only 12.7% could accurately identify the fertile window [7]. There are very few studies on women who are TTC, where this knowledge and information is most important. In the UK, a small study including 102 women currently TTC, found just 50% have correct fertility knowledge [8].

Collectively, this data points towards a general lack of understanding about ovulation and the fertile window in women of reproductive age, which may contribute to difficulties conceiving and potentially increase the number of women seeking fertility treatments. This has been demonstrated in South Asian countries where ignorance of ovulation was identified as a significant predictor of primary infertility [9]. The current study aims to understand misconceptions surrounding cycle length, cycle regularity, period length and fertile window knowledge from a large cohort of women who are actively TTC. A secondary outcome is to identify demographics or subgroups where misconceptions may be most prevalent. By understanding the breadth and prevalence of knowledge gaps around menstrual cycles and the fertile window we can inform decisions to help better equip these individuals and potentially improve fertility outcomes. To our knowledge, this study is the largest cohort of women actively TTC, addressing the much-needed deficit in knowledge of how these women understand the fertile window and their own menstrual cycle.

Methods

Study design and setting

This is a retrospective, cross-sectional study of women within the UK who answered an online health assessment (OHA) between September 2020 to January 2025. Those TTC were identified by indicating their reproductive motivations were "actively trying to conceive". All eligible users who consented to their anonymised data being used in research were included in this study. The OHA collected detailed information on demographics, medical history, menstrual cycle health and lifestyle behaviours. Anyone with missing information was excluded. Age was calculated as the difference, in years, between OHA completion date and date of birth. Ethnicity data was categorised into the White, Black, Asian, mixed or other (which includes Middle Eastern, Indigenous/First Nations and any not listed). Fertile window understanding was determined by the question "Do you know when your fertile window is?" and the selection of "Yes", "No" or "I'm not sure". Cycle regularity was reported as either "Regular", "Irregular", "I'm not currently periods", "I have never had periods". Cycle length was reported as the number of days and time spent trying to conceive as the number of months through a sliding scale or including the option of "I don't know" for both. Reproductive conditions were self-reported previous diagnoses through selection boxes. "Yes" was determined if any of the 18 conditions were chosen (multiple could be chosen) and "No" if none of the conditions were selected.

Statistical analysis

All statistical analysis was performed in R Studios Version 2024.04.2 + 764. Frequencies and percentages were calculated for categorical variables and means with standard deviation (SD) for continuous. Cycle length was binned into < 21, 21–35 days and > 35 days as per clinically recognised regular cycles. Binary logistic regression was used to calculate adjusted odds ratios for not knowing their fertile window (combination of "I don't know" and "no") as the outcome variable. All variables were included in the final model with age and time TTC as continuous variables, white as the reference category for ethnicity, "No" as the reference category for previous pregnancy and "regular" as the reference category for cycle description. The interaction terms included were: age with time trying to conceive and age with pregnancy (Yes or No).

Results

Demographics

Ninety-seven thousand four hundred fourteen women indicated they were currently trying to conceive. The mean age of this cohort was 31.3 (SD = 5.7) and just over half (50.7%) had never been pregnant before (Table 1). The majority had been trying to conceive for less than a year (58.5%), with 3886 women not knowing how long they had been TTC for (Table 1). The mean time TTC was 19.9 months (SD = 24.1).

Fertile window

Lack of understanding of the fertile window can affect a couple's ability to time intercourse effectively and may contribute to delays or difficulties in conceiving. Of the 97,414 women actively TTC, 13.4% ($n = 11,052$) did not know their fertile window and a further 27.6% ($n = 22,704$) were unsure. When stratified by age, significant fluctuations were seen (χ^2 statistic = 2616, $p < 0.001$). Knowledge was lowest among the youngest cohort with just 42.5% of respondents under the age of 25 knowing when their fertile window was and generally increased with age until 45 + years old when this reduced back down to 47.6% (Table 2). Ethnicity was significantly associated with not knowing the fertile window (χ^2 statistic = 248, $p < 0.001$). Those with black ethnicity had the lowest awareness of their fertile window with fewer than half (49.2%) answering Yes. Previous pregnancy (χ^2 statistic = 2616, $p < 0.001$) and time TTC (χ^2 statistic = 767, $p < 0.001$) significantly affected this. Those with no prior pregnancies or TTC > 12 months showed decreased knowledge of the fertile window (Table 2).

Table 1 Demographic information on 97,414 actively trying to conceive, with frequency and percentages for age, ethnicity, previous pregnancy, time trying to conceive and cycle descriptions

Age group	Number of women	Proportion (%)
< 25	14,410	14.8
26–30	28,466	29.3
31–35	33,141	34.1
36–40	15,298	15.7
41–45	5157	5.3
45+	666	0.7
Ethnicity		
White	78,638	81
Asian	7803	8
Black	4436	4.6
Mixed	3192	3.3
Other	3072	3.2
Previous pregnancy		
Yes	47,124	49
Never been pregnant	48,747	50.7
skip	356	0.4
Time trying to conceive		
Over a year	39,560	41.5
Under a year	55,819	58.5
Cycle description		
Regular	67,238	69.2
Irregular	25,964	26.7
Never had a period	228	0.2
No periods on HRT/contraception	590	0.6
Not getting periods	3121	3.2

Cycle regularity and length

Tracking and understanding the menstrual cycle is an integral part of knowing when the fertile window is, therefore literacy around menstrual cycle length and regularity is extremely important when planning for a pregnancy. In total, 69.2% ($n = 67238$) described their cycles as regular, 26.7% ($n = 25964$) said their cycles were irregular and 4.1% ($n = 3939$) were not getting periods (Table 1). Fertile window knowledge was significantly associated with cycle regularity (χ^2 statistic = 24261, $p < 0.001$). Those with regular cycles were most likely to know their fertile window (73.9%), compared to 26.8% of those with irregular cycles and 8.5% of those not getting periods (Table 2).

Cycle and period length

The average cycle length in the UK is 28 days and anything within the 21–35 day range is considered clinically regular [10]. Mean cycle length in our cohort was 29.8 days (SD = 14.7) with a mean period length of 5.36 days (SD = 3.43). 1.5% said their cycle and period were the same length ($n = 1442$), showing a lack of familiarity with definitions of menstrual health.

16.7% of the cohort did not know how long their cycle was ($n = 16243$). As expected this was most common among those who had irregular cycles (Table 3). 7.6% did not know how long their period was ($n = 7419$), with 57% of those also not knowing their cycle length. Cycle length was associated with fertile window knowledge (chi-saquared statistic = 13787, $p < 0.001$) with those who did not know or who had cycles shorter than 21 days or longer than 35 days having greater proportions unsure of their fertile window. Bleeding description was also significantly associated (χ^2 = 1203, $p < 0.001$), with those who experienced spotting showing the lowest awareness of their fertile window.

Comparing cycle length and reported cycle regularity highlighted a lack of understanding about regular menstrual cycles. 87.2% of women who described their cycles as regular fell within the 21–35 regular range (Table 3). 10% stated they did not know their cycle length, 2.3% had cycles less than 21 days and 0.6% had cycles longer than 35 days (Table 3). It is also worth noting that 37.3% of those who described their cycle as irregular fell within the 21–35 day range, however, their cycles may still not

Table 2 Number of women and proportion of fertile window Understanding in 97,414 women actively trying to conceive, stratified by age, ethnicity, time trying to conceive, previous pregnancies, cycle regularity and length and bleeding description

	Do you know when your fertile window is?					
	I'm not sure		**No**		**Yes**	
	Number of women	**Proportion of group**	**Number of women**	**Proportion of group**	**Number of women**	**Proportion of group**
Age group						
< 25	4000	34.8%	2602	22.7%	4880	42.5%
26–30	6998	29.1%	3820	15.9%	13,201	55.0%
31–35	7116	24.9%	2989	10.5%	18,427	64.6%
36–40	3195	24.3%	1132	8.6%	8841	67.1%
41–45	1169	26.8%	412	9.4%	2789	63.8%
45+	225	36.6%	97	15.8%	292	47.6%
Ethnicity						
Asian	1986	29.9%	1032	15.5%	3626	54.6%
Black	1326	35.0%	599	15.8%	1868	49.2%
Mixed	784	29.1%	357	13.2%	1557	57.7%
Other	800	29.6%	364	13.5%	1536	56.9%
White	17,808	26.8%	8700	13.1%	39,843	60.0%
Time TTC						
Under a year	12,609	26.1%	5475	11.3%	30,276	62.6%
Over a year	10,095	29.8%	5577	16.5%	18,154	53.7%
Previous pregnancy						
Been pregnant before	10,774	26.7%	4726	11.7%	24,786	61.5%
Never been pregnant	11,907	28.5%	6270	15.0%	23,572	56.5%
Cycle regularity						
Regular	12,226	21.4%	2681	4.7%	42,310	73.9%
Irregular	9702	44.4%	6289	28.8%	5857	26.8%
Not Getting periods	776	24.9%	2082	66.7%	264	8.5%
Cycle length						
Don't know cycle length	4661	40.5%	3675	31.9%	3183	27.6%
< 21 days	612	39.6%	324	21.0%	610	39.5%
21–35 days	14,209	23.5%	3320	5.5%	42,864	71.0%
> 35 days	2450	43.7%	1650	29.4%	1507	26.9%
Bleeding description						
Heavy	5112	30.4	2839	16.9	8888	52.8
Medium	13,766	26.9	4695	9.2	32,700	63.9
Light	2254	26.6	928	10.9	5294	62.5
Spotting	799	30.9	506	19.6	1282	49.6

Table 3 Number of women and proportion of reported cycle regularity in 92,908 women actively trying to conceive and having periods, stratified by cycle length grouped into "I don't know", clinically regular 21–35 days, under 21 days and over 35 days

Cycle Description	**Cycle length (days)**	**Number of women**	**Proportion of cycle description group**
Irregular	I don't know	9548	36.9%
	< 21	979	3.8%
	21–35	9668	37.3%
	> 35	5696	22.0%
Regular	I don't know	6695	10.0%
	< 21	1512	2.3%
	21–35	58,407	87.2%
	> 35	403	0.6%

be regular month on month (varying more than 7 days) but their average falls here (Table 3).

Subgroup analysis on those who reported regular cycles and answered the cycle length question (n = 60,322) showed trends based on age and ethnicity. Cycle literacy showed a similar pattern to not knowing the fertile window with age (χ^2 statistic = 214, $p < 0.001$). Misidentifying a regular cycle was highest in younger age groups with 6% of respondents under the age of 25 s, over double that in 31–35 year olds (Table 4). Ethnicity also had a significant association (χ^2 statistic = 95.9, $p < 0.001$). Those with a black or mixed ethnicity had a slightly higher prevalence of misidentifying a regular cycle (4.8% and 5.4% respectively Table 4). This was also more common in those who had been TTC for over a year with 3.6% who thought their cycles were regular but were not, compared to 2.8% who had been TTC for under a year (χ^2 statistic = 34.2, $p < 0.001$) (Table 4).

Contributions to fertile window lack of knowledge

Binary logistic regression models were used to assess how demographics and lack of awareness and knowledge around menstrual cycles may contribute to an individual knowing when their fertile window was (Fig. 1). Increasing age was associated with a slight but significant decrease in odds of not knowing when their fertile window was (aOR = 0.966, 97.5% CI 0.962–0.971, $p < 0.001$). Time TTC was associated with a slight but significant increase in the odds not knowing when the fertile window was (aOR = 1.008, 97.5% CI = 1.004–1.012, $p < 0.001$). A previous pregnancy almost halved the odds of not knowing (aOR = 0.589, 97.5% CI 0.588–0.711, $p < 0.001$). The largest increase of odds was from not getting periods seeing a 44 times increase in odds of not knowing when one's fertile window was compared to those who had regular cycles (aOR = 44.527, 97.5% CI 38.50-51.818, $p < 0.001$), which is expected due to the fact they do not have a fertile window whilst not menstruating. Irregular cycles also saw an increased odds of over 8 times (aOR = 8.161, 97.5% CI 7.864–8.469, $p < 0.001$). The misconception around regular cycles was also a significant factor in not knowing when the fertile window was (aOR = 3.046, 97.5% CI 2.881–3.22, $p < 0.001$).

Furthermore, 3.6% of those actively trying to conceive said they were using some form of contraception still, with 1.3% using hormonal contraception.

Discussion

Key findings

The main finding of this study is that women who are currently trying to conceive often lack knowledge about their fertile window, with significant disparities in age, ethnicity and menstrual cycle characteristics. Overall, 13.4% did not know their fertile window and a further 27.6% were unsure. Additionally, 16.7% did not know their cycle length and 12.7% of women reported regular cycles but did not know their cycle length or were outside of the clinically regular range. These discrepancies in menstrual cycle awareness contributed to a lack of knowledge of the fertile window.

This lack of awareness of an individual's fertile window could have implications on their ability to conceive, time spent trying and potentially, their need for intervention. Knowledge of the ovulatory cycle, as assessed by whether participants identified a fertile time and when it occurs,

Table 4 Frequency and proportion of women whose cycle length is within and outside of the clinically regular 21–35 days in 60,322 women actively trying to conceive who reported having a regular cycle and knew their cycle length

	Described cycles as regular and knew cycle length (*n* = 60,322)			
	21–35 days		**not regular**	
Age	Number of women	Proportion of group	Number of women	Proportion of group
< 25	5698	94.0%	365	6.0%
26–30	15,660	96.9%	495	3.1%
31–35	21,973	97.6%	546	2.4%
36–40	11,023	97.0%	338	3.0%
41–45	3671	95.9%	155	4.1%
45+	381	96.0%	16	4.0%
Ethnicity				
Asian	47,545	97.1%	1419	2.9%
Black	4385	95.2%	220	4.8%
Mixed	2621	94.6%	150	5.4%
Other	1962	96.9%	63	3.1%
White	1894	96.8%	63	3.2%
Time TTC				
Under a year	36,173	97.2%	1026	2.8%
Over a year	21,757	96.4%	816	3.6%

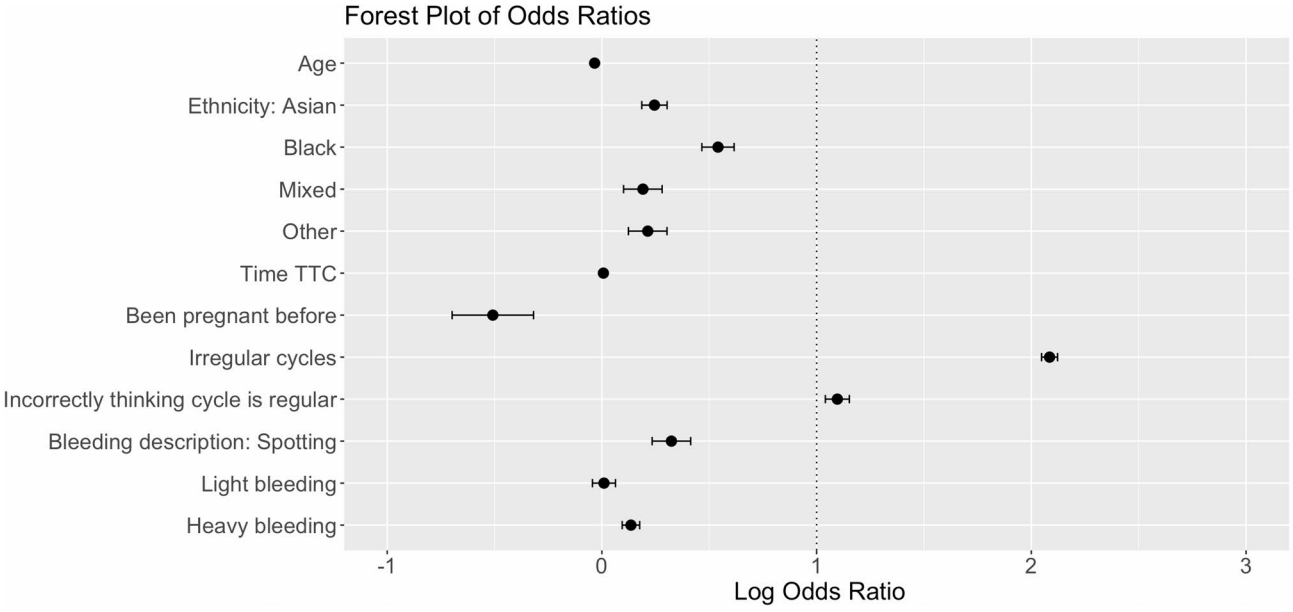

Fig. 1 Forest plots of the odds ratios and 97.5% confidence intervals for not knowing the fertile window. Dotted line is =1, any above show an increased odds if not knowing the fertile window and any below show a decreased risk.

has been shown to predict primary infertility in India and Bangladesh [9].

Studies have suggested inaccurate timing of sexual intercourse may be a reason for delay in conception in subfertile women and interventions to introduce this have improved cumulative chances of conception [10]. Furthermore, increasing fertility focused intercourse through interventions using a range of fertility awareness based methods, have been shown to improve time to conception in those without subfertility, in multiple countries including the UK [11]. 41% of the cohort not knowing their fertile window whilst TTC is concerning. Notably women TTC > 12 months were less knowledgeable about their fertile window than those TTC < 12 months. Longer TTC duration was also significantly associated with increased odds of not knowing their fertile window. This is in agreement with other studies [6, 12] suggesting lack of knowledge can increase the time to conception.

The literature on fertile window knowledge is mixed most likely due to different methodologies used to determine knowledge and cohorts varying significantly with country, ethnicity, socio-economic status and education levels. A systematic review from Pedro et al. (2018) concluded low to moderate fertility awareness (encompassing age-related fertility decline, infertility and common myths) in reproductive-age individuals [3]. Of the 11 studies addressing the fertile window, four saw high knowledge (60% or greater knowing the fertile window), three moderate (40–59%) and the remaining four low (< 40%), from a wide range of study populations and settings. "Knowledge of the female body score" is derived from a set of questions on anatomy, knowledge of an individuals' own menstrual cycle and ovulation. 68% of US women in the general population had a low knowledge score, with 47.2% not knowing what ovulation was and 67.2% unsure about ovulation timing [13]. In contrast, a Hungarian study using the same questionnaire found the scores to be mostly high, with only 13% having a low knowledge score [14]. Studies specifically focus on those actively TTC found 102 women struggling to conceive to have incomplete knowledge of the fertile window [6] and 49.9% of 105 UK women TTC to have correct knowledge of the fertile window [8]. Our study represents the largest cohort of women actively TTC studied, showcasing a clear deficit in fertile window knowledge.

Several demographic factors were associated with not knowing when their fertile window. Age was found to play a role, with increasing age slightly reducing the odds of not knowing the fertile window. Less than half of respondents under the age of 25 knew their fertile window. Other studies within the general population have also found younger women to have the lowest knowledge of the fertile window [15] and the lowest female body and health literacy scores [14]. Mixed results have been found with age and general fertile awareness [3], however, studies specifically focusing on the fertile window found no age-related effects [16, 17]. In women who had been TTC for over a year, no association between age and fertility knowledge was found, however, this is in a much smaller cohort of only 102 women [6].

Ethnicity was also a significant predictor of knowing the fertile window. In this study, all non-White ethnic groups had higher odds of not knowing their fertile

window, with the largest disparities observed among Black and Asian women. While our findings are consistent with research showing that minority groups score lower in fertility awareness regardless of education level [18], they contrast with Hallerhan et al. [6], who found Asian women had higher fertility knowledge than Caucasians, while Black women had the lowest knowledge levels. Notably, our results align with the observed trends in menstrual cycle literacy, as Asian women in our study had the highest proportion of irregular cycles, while Black women had the greatest proportion of misidentified regular cycles—both factors strongly linked to lower fertility awareness. However, ethnicity remained a significant predictor of lower fertility knowledge even after adjusting for menstrual cycle regularity, suggesting that additional factors, such as cultural attitudes and disparities in sex education, may contribute to these differences [19].

Pregnancy history was another significant factor. Women who had a previous pregnancy had almost half the odds of not knowing their fertile window. While some studies support this association [14, 20], many do not. A US study [6] found no relationship between the number of children and fertility knowledge. Additionally, Lundsberg [15] reported that two-thirds of women who had children or were currently pregnant still misidentified the most fertile phase of their cycle. A systematic review found mixed results but suggested that fertility knowledge was higher among individuals with planned pregnancies [3], indicating intent may be the key factor.

The lack of literacy around an individual's cycle length and confusion around cycle regularity is a cause for concern. Clarity on cycle length can help in identifying the fertile window more effectively and studies have found increased health literacy contributes towards improved female-body knowledge scores [14]. Recent research in the UK found 72.6% of women could correctly answer how long a normal menstrual cycle is and this increased to 76.8% in the 105 women TTC, however, only 41.5% and 46.3% of those TTC knew when in their cycle they are most fertile [8]. Our study is unique in the fact it specifically asks women TTC details of their own cycle regularity, length and fertile window. Approximately 1 in 6 individuals did not know their cycle length, including 1 in 10 of those who thought their cycle was regular. A further 3.9% of people who thought they had regular cycles did not fall within the 21–35 day range considered regular. This lack of knowledge and misconception significantly increased the odds of not knowing the fertile window. An individual's misconception about having a regular cycle is further concerning, especially if they are under the assumption that they will ovulate on day 14, which 60% of the US general population thought this [15]. This underpins the importance of an individual understanding their own cycle, not just the averages used as common examples. Expanding access to comprehensive menstrual health education can significantly enhance reproductive autonomy and enable informed choices about their reproductive health.

Previous research has identified barriers to fertility knowledge among women include limited access to accurate information in youth, mistrust of sources, and missed educational opportunities in healthcare settings [21]. Discussions about pregnancy planning are often constrained by healthcare providers' limited time and knowledge of fertility [21]. Marginalised groups, including younger women, first-time TTC individuals, and ethnic minorities such as Asian and Black women, face greater disparities. To address these gaps, comprehensive sex education is essential to promote equitable access to fertility information. Healthcare providers should receive enhanced training, including cultural competency, to capitalise on educational opportunities during patient interactions [21]. Proactively incorporating fertility awareness into contraception counselling, preconception care, and routine gynaecological exams, when appropriate, could address misconceptions before the 12-month waiting period for conception difficulties. Community engagement should also be prioritised to assist minority groups and ensure interventions are effective. Global research shows strong demand for fertility education across various sources [20]. Meeting this demand through evidence-based education, digital tools, and culturally inclusive interventions could significantly improve fertility knowledge and reproductive health outcomes.

Fertility apps are increasing in popularity as they provide low-cost, accessible options for cycle tracking and education, enhancing reproductive knowledge and autonomy [18, 21, 22]. However, many of these apps are unreliable regarding their accuracy and lack of transparency [18, 23]. Despite providing some education studies have found apps can leave a desire for increased information, particularly for those actively TTC [24]. Addressing the reliability of apps and imposing stricter regulations for the accuracy of algorithms and information available could be an integral part of improving the knowledge and usefulness of these apps when TTC.

Strengths and limitations

The strengths of this study include the large sample size of women actively trying to get pregnant and targeted information on their cycle length, regularity and fertile window. Furthermore, this cohort, although mainly white women, is comparable to the ethnic diversity of the UK (White 81% vs. 81.7%; Asian 8% vs. 9.3%; Black 4.6% vs. 4%; Mixed 3.5% vs. 2.9%; Other 3.2% vs2.1% for Hertility and UK census data respectively) [25]. This addresses the important question of how well equipped are those

who are actively trying to conceive in relation to their own bodies and reproductive health, at a time when this is most important.

A main limitation of this study is the lack of information on socioeconomic standing, household income and level of education, all of which could have a marked effect on the knowledge of the fertile window and reproductive health literacy. This reduces the generalisability of the study and could be an underestimation of the problem. A further limitation is the self-reported information and no qualifying test to see if those who said they knew their fertile window were correct. Future studies should address this by confirming the ovulation prediction of these women. Detailing the methods they may use to track and match corresponding data would give a more detailed insight into women who correctly know their fertile window and those who mispredict it.

Conclusions

This study demonstrates that fertile window knowledge is lacking in those trying to conceive and thus those that need this information the most. Age, cycle regularity, previous pregnancies, time trying to conceive, ethnicity and reproductive conditions all contribute towards this lack of knowledge. The current study highlights a clear lack of reproductive health education and the essential need for improved initiatives to help these women and potentially improve their fertility outcomes. Further research should validate fertility knowledge using ovulation tests and examine where those with misconceptions or lack of knowledge access information to improve education strategies. Longitudinal studies should assess the success of interventions through evaluation of knowledge and TTC outcomes.

Authors' contributions

EW, ZA conceptualised the study with input from HON and NG. EW and LL performed the statistical analysis and interpretation. EW prepared the manuscript which was reviewed by all authors.

Funding

This work was supported by Hertility Health Ltd.

Data availability

The datasets generated and analysed during this study are available from the corresponding author upon reasonable request.

Declarations

Ethics approval and consent to participate

This was a retrospective study where all participants involved provided informed consent for their data from the online health assessment to be used for research purposes at the beginning of the online health assessment.

Consent for publication

Not applicable.

Competing interests

HON and NG are co-founders of Hertility Health. ZA, EW, and LL are employees of Hertility Health.

Received: 8 April 2025 / Accepted: 23 June 2025
Published online: 22 August 2025

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