hertility

The Report Report



Pioneering Change in Women's Health



"Be ReProductive"/ "ReProductive"

riːprəˈdʌktɪv adjective

- Getting productive with your 1. reproductive health by testing your hormones and getting the streamlined clinical care you need with Hertility.
- Equipping yourself with the knowledge 2. you deserve about your body, to make informed decisions when it matters, not when it's too late.

Executive summary

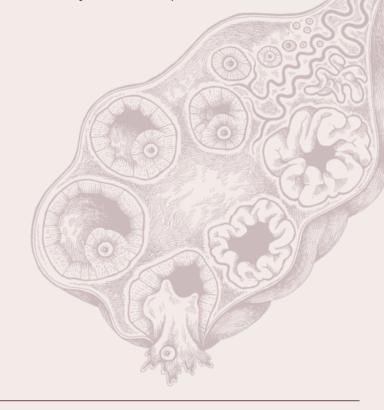
I am very proud to present our second annual ReProductive Report where we publish our pioneering findings in reproductive health research and women's health. Until now, robust data on women's health has not existed, yet up to the end of 2023, we collected anonymised realworld data from a staggering 325,430 women living, breathing and reproducing today.

We do this by simply asking questions, but crucially (and less simply) the right questions & in a way that makes women feel safe enough to give honest anwers.

Today, doctors are expected to know all the right questions to ask patients and fit them into a 10 minute appointment whilst women are expected to divulge details about their bodies, periods and sex life to a doctor they've only just met. Understandably, many women don't feel confident enough to open up about such intimate details which not only leads to lengthy diagnoses times but also skewed healthcare data. So, we built our proprietary online health assessment to provide a safe digital interface that asks curated questions, designed to get to the bottom of every symptoms and what they mean.

Women can answer from the comfort and privacy of their own homes and at their own pace, which means they are more likely to be open, honest and comprehensive.

Removing the ultimate barrier to medical entry- physically needing to go to a clinic- enables ultimate access to private care. The honesty of a digital interface in a clinic that never closes enables us to not only give women clarity into their own bodies and streamline them to appropriate care faster, but it also allows us to further scientific research in women's health by using this data for good, for as many women as possible.



With gynaecology waitlists at an all time high, and diagnosis times taking up to 7-8 years for some conditions, something needed to change.

Hertility is a research-led company whose clinical and scientific team spans over 70 years of experience. As a company, we have presented over 30 abstracts at national and international scientific conferences and our team of experts include clinicians, scientists, data and machine-learning scientists and statisticians with years of experience in genetics, obstetrics, gynaecology, polycystic ovary syndrome (PCOS) and endometriosis.

However, we want to share our findings and data with you, our community, not just the scientific community. So, our (all-female) research team has conducted invaluable research on this unparalleled, anonymised dataset to uncover four 'ReProductive Revelations' which each spotlight a gap where the current healthcare system is letting women down.

From inadequate education to a lack of parity at home, this report outlines the ways in which womanhood today is under attack from the systemic inequalities which are impacting women's health (both mental and physical) and ultimately potentially sabotaging their family-forming goals. This needs to stop.

Answers about what's going on in their own bodies and in the healthcare system that is supposed to be supporting them. And up-to-date, data-backed, expert-reviewed evidence on reproductive health so that we can all work towards a society that is more equal, towards a healthcare system that works for the many instead of the few and towards a world where every woman who wants a baby has the best chance of success.

Dr Helen O'Neill MSc PhD
CEO and Founder of Hertility and
Lecturer in Reproductive and
Molecular Genetics





Methodology

This report is based on data from 325,430 women

on which our team of world-leading data scientists and scientific researchers have conducted multiple data analyses and published scientific papers that we outline in this report.

The ReProductive Revelations

- 1. Most women don't have a basic understanding of their own biology.
- 2. Mental health and Menstrual health are inextricably linked.
- 3. We need proper advice on our (preconception) vices.
- **4.** Menopause? Whenopause? Falling outside the guidelines.

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Lorna Brightmore PhD, MMATH (Hons) Most women don't have a basic understanding of their own biology

More women are starting to tune into their bodies

From a very young age, we are told essentially to fear our fertility

Our education (if given any at all) seems to focus on contraception, but what about conception?

The mainstream narrative says that the biological clock only starts to make sounds when women are turning 30, but in 2023, 55% of Hertility users were proactively looking into their reproductive health before the age of 30. In fact, 23% were between the ages of 18 and 25.

And when comparing our 2023 data to the year before, we continue to see that women are taking a Hertility at-home test from an earlier age.

It's encouraging to see that year over year women are taking their Hertility journey from an early age. This challenges the historical status quo where women only start looking into their reproductive health when trying for a baby. It also represents a move towards a society where it becomes the norm to tune into our hormones and fertility in our early twenties.

Age of Hertility users

2022 vs 2023



The majority of women are starting to think ahead

Hertility is for every woman, but each woman is unique. So, each question has been carefully crafted to cater to the diverse needs and experiences of our users.

To start, we ask the initial question, "What brings you here?" This help us understand the motivation for coming to Hertility, the most appropriate care plan and to ensure we use sensitive language for each individuals journey. To answer, every person is provided with the following options:

The majority (47%) of Hertility users state that they want to plan for future babies. Given the rise in infertility (1) cases and the fact that NHS-funded IVF does not cover a significant percentage of couples trying to conceive (TTC) (our research found that 68% of Hertility users who were TTC would not be covered by the NHS) (2). This is an important behaviour change so that women are informed about their bodies and can take any necessary steps to ensure their reproductive health is working as it should for them to have a baby when the time comes.

In fact, 20% of those planning for future babies (PFF) reported at least one reproductive health condition, which increases the likelihood of a more complicated fertility journey so all the more reason to take timely precautions.

47%

of Hertility users are currently planning for future babies (PFF)

1 in 5

of those PFF reported at least one pre-existing reproductive health condition

So, what brings you here?

This helps our doctors tailor which hormones to test you for as well as creating your care plan and report.

Please select one or more options	
+ I am actively trying to conceive	+ I am experiencing symptoms
+ I am planning for babies in the futu	+ I am just curious
+ I think I'm going through perimeno	pause + I'm perimenopausal
+ I'm menopausal	

But women are still largely uninformed about their menstrual cycles

When we look at our menstrual cycle data, we can see that there still is work to be done when it comes to educating women on their bodies. Every woman should be aware of what is considered healthy when it comes to menstrual cycle characteristics;

- length of cycle
- length of bleed
- amount of bleeding
- any symptoms.

A whopping 27,655 women in 2023 told us that they had no idea how long their menstrual cycle was. In addition to this, another 120,029 women told us they have regular menstrual cycles, but 12% of them actually did not know how long their cycle was and in many cases, they went on to enter details on their cycles which told us they actually have irregular menstrual cycles.

Why is this important?

Because your cycle is the pulse of your reproductive health and changes in cycle length or how heavy your period is could be a sign that something is not quite right with your reproductive health. It's time we knew the basics, so we can access help when needed.

27,655

of women in 2023 had no idea how long their cycle was

Almost half of our women trying to conceive, don't know when their fertile window is

Not understanding our menstrual cycle has a damaging impact when assessing our risks and hormones, but also when trying to conceive. Sex education at the majority of schools focuses on how not to get pregnant to such an extent that when we try to get pregnant, we have no real idea how.

This was evident in our data that showed that 42% of women who were actively trying to conceive weren't sure when in their cycle they were more likely to conceive. Since the <u>fertile window</u> is only up to 6 days per month, couples could be only having sex on non-fertile days and therefore taking a much longer time to get pregnant (3).

42%

women TTC in 2023 didn't know when their fertile window was



Lasting behaviour change is incremental and generational

It's time for us to be experts in our own bodies

Whilst the trend of young generations of women learning about their bodies is encouraging, lasting societal changes will take time.

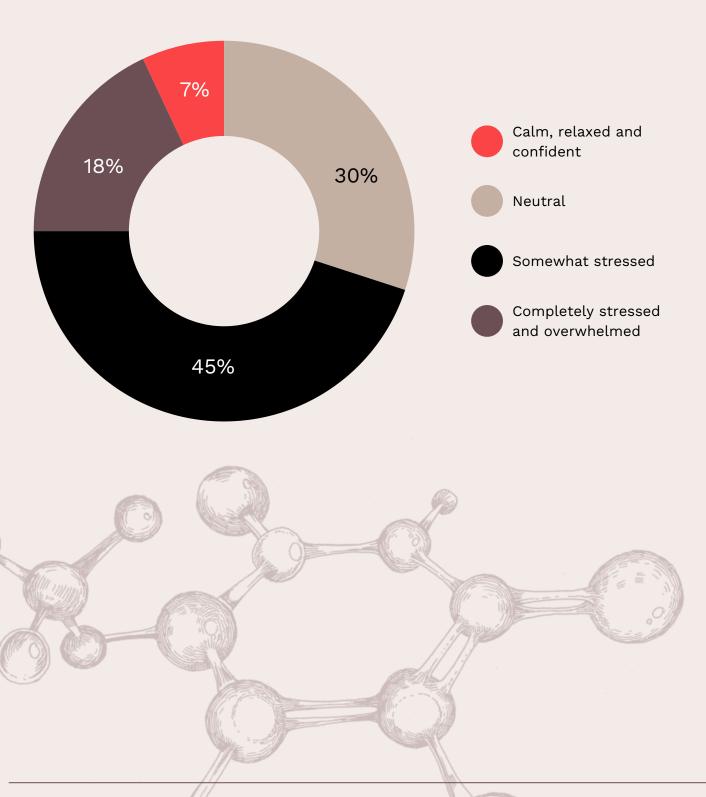
There is still a huge education gap when it comes to women understanding their own bodies and subsequently causing both the physical pain of undiagnosed reproductive health conditions but also the emotional turmoil of long journeys to parenthood.

But we hope that over time, we can help raise the bar of sex education and make expert information the norm for all women.



Mental health and Menstrual health are inextricably linked

A mere 7% of Hertility users describe themselves as 'calm, relaxed and confident'



The stress and pressures of womanhood (and modern life) are immense. Stress can cause many different types of health problems, including knocking our hormones off balance and impacting our fertility (4), so knowing how we feel can help us get to the bottom of any symptoms we might be experiencing.

It's also why we've got an in-house counsellor on hand to support anyone with their mental health.

One of the most important questions we ask in our health assessment is simply "How have you been feeling recently?".

Are you Calm relaxed and confident, Neutral, Somewhat stressed or Completely stressed and overwhelmed?

So often, medicine focuses on our physical health, with no mention of our mental or emotional health, despite the importance of the role each plays on the other.

And this is reflected in our data with a dismal 7% of Hertility users describing themselves as 'calm, relaxed and confident' and with the majority of users reporting their state as 'somewhat stressed' (45%) or 'completely stressed and overwhelmed' (18%).

GENERAL HEALTH

How have you been feeling recently?

Stress can cause many different types of health problems, including knocking our hormones off balance, so knowing this can help us get to the bottom of any symptoms you've been experiencing. It's also why we've got an in-house counsellor on hand to support your mental health.

Calm relaxed and confident

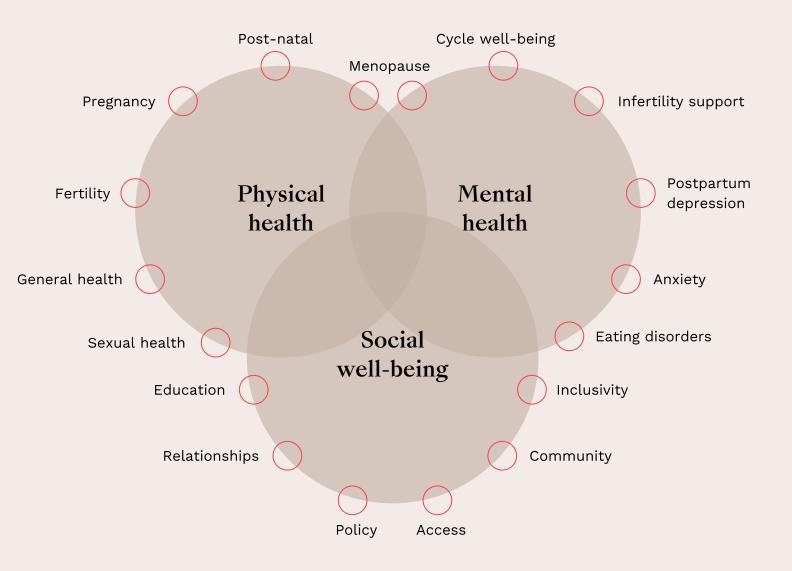
Neutral

Somewhat stressed

Completely stressed and overwhelmed

Reproductive Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes including the ability to have a satisfying and safe sex life.

- World Health Organisation



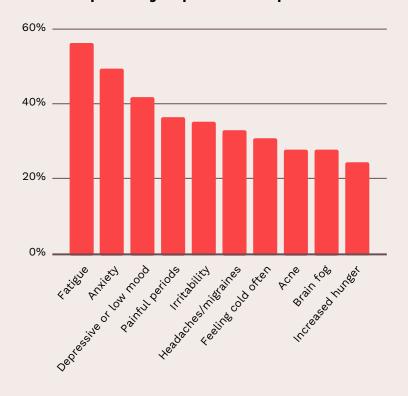
Mental health related symptoms are more prevalent than physical symptoms

This correlates with the most prevalent reported symptoms amongst our users which are actually mental health related as opposed to physical symptoms (like painful periods for example).

These included:

- fatigue (55%)
- anxiety (49%)
- depressive or low mood (42%).

Top 10 symptoms reported



63%

of Hertility users are 'somewhat stressed' or 'completely stressed and overwhelmed'.

49%

of Hertility users self-reported anxiety as a symptom.

The more stressed we are, the more unbalanced our hormones become

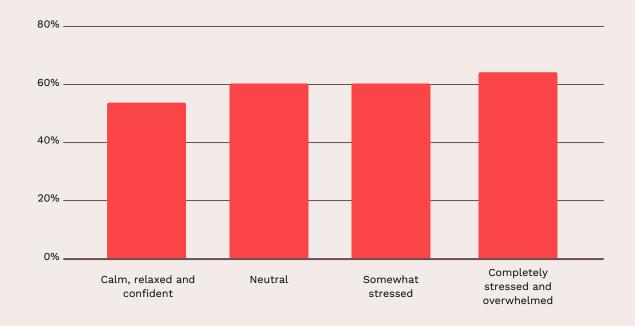
To try and understand the biological impact of these elevated levels of stress, we looked at hormone levels of the individuals who were stressed versus calm and neutral.

Somewhat unsurprisingly, what we saw was a correlation between stress levels and hormone balance with the percentage of users who had a hormone imbalance increasing as the stress levels increased.

Why is this important?

Because hormones are responsible for everything from our hair and our skin to our mood, metabolism and sleep. Put simply, if there is instability in the harmonisation of hormones, it can cause a disruption to the reproductive cycle and lead to subsequent <u>fertility issues</u> (5).

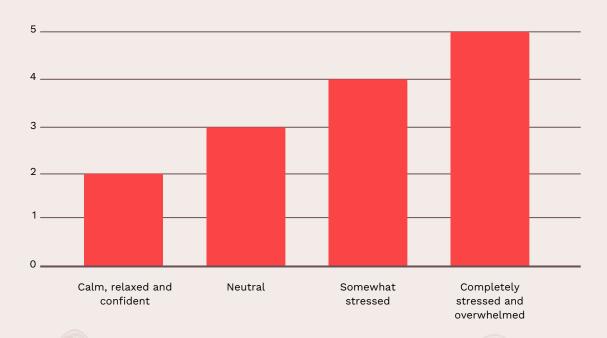
% of users with a hormone imbalance per stress level



The more stressed we are, the more physical symptoms we have

When conducting further research on our dataset, it seems that stress levels also correlate directly with the number of symptoms reported, suggesting that mental health has a further effect on our physical health. When we look at our users' stress levels, we see that those who are more stressed report an increased number of symptoms, with those who are 'calm, relaxed and confident' reporting a median of 2 symptoms compared to 5 in those who are 'completely stressed and overwhelmed'.

Average number of symptoms reported per stress level





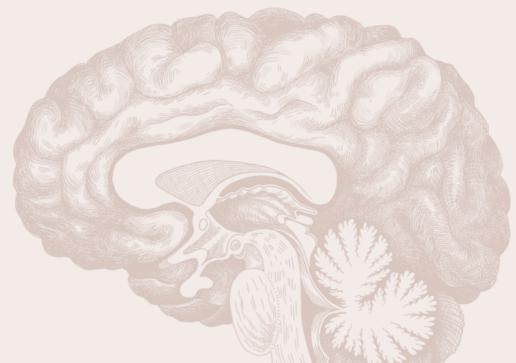
Our <u>research</u> on Polycystic Ovary Syndrome found women reported waiting up to 2 years to seek help with the biggest reason being that they did not realise that their symptoms actually warranted medical help in the first place (6).

This is because women themselves often brush over these symptoms as things that should be put up with due to our lifestyles, societal expectations and 'normal' symptoms of having a menstrual cycle. the delay was also compounded by a culture of symptom dismissal by healthcare professionals.

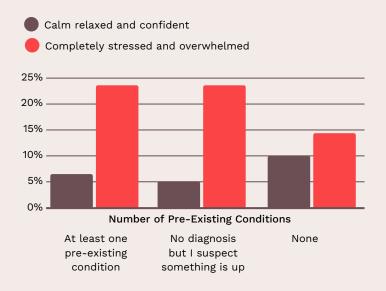
We also saw that anxiety was the most commonly reported symptom by those living with PCOS. And whilst we know that PCOS increases the isk of depression and anxiety (7) and guidelines recommend that symptoms should be screened for in all women with PCOS (8), participants said that mental health was the least focused on during consultations and with no appropriate management options offered.

Despite the evidence, mental health symptoms are often *ignored*

(by both patients and doctors alike)



Having a reproductive health condition further increases a woman's stress



3x risk

of depression and anxiety if you have PCOS.

2-3x risk

mental health disorders in women with reproductive system disorders For some women, the stress can also come full circle because having a reproductive health condition can actually lead to an increased risk of developing stress and mental health disorders (9).

Current <u>research</u> spotlights approximately 2 to 3 times overall increased odds of psychiatric disorders in women with reproductive system disorders with women diagnosed with PCOS and Chronic Pelvic Pain (CPP) having approximately 1.7 to nearly 4 times those of women without those disorders (10).

Our dataset supports current research findings, highlighting that those with existing conditions are more likely to report being 'completely stressed and overwhelmed' than those without.

Stress may also contribute to more difficulty when trying to conceive

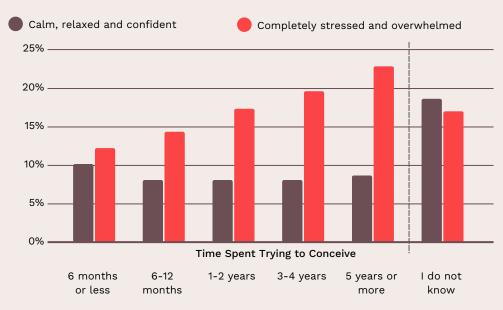
Time spent trying to conceive can be a difficult rollercoaster of emotions, especially if things aren't going to plan. What is ironic, is that we only seem to invest time in understanding how our fertility works when things aren't going to plan.

It's a shocking wake-up when we realise we have spent our twenties trying not to get pregnant, only to spend our 30's trying to get pregnant. But what does the data say? What we see is that as the time spent TTC increases, so does the number of users who report being 'completely stressed and overwhelmed' with those TTC for 5 years or more being the most stressed of any group.

What we can't tell from this is whether the group are taking longer TTC because they're stressed or whether navigating a longer TTC period is making them more stressed but it's likely a combination of both factors. Unfortunately this is still highly debated in <u>literature</u> and needs more research before we know for certain what is going on. (11)

The real question is, how can we really support women to feel less stressed rather than just flippantly tell them to not be stressed?

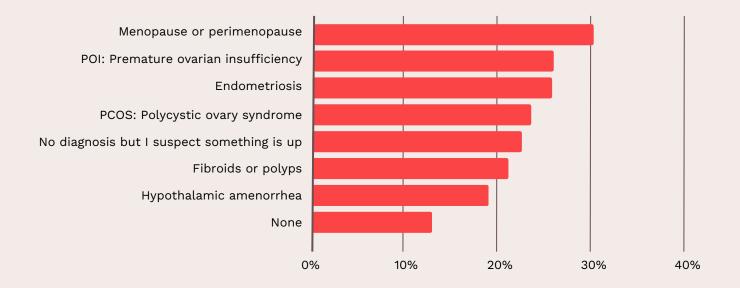
The more time spent trying to conceive the higher the stress levels



Feeling perimenopausal or menopausal is our most stressed cohort of women

When we look at our data, we see that those users that have already had a diagnosis for menopause or perimenopause report the highest levels of stress compared to any other pre-existing health condition.

Those diagnosed with menopause/perimenopause are most likely to report being completely stressed and overwhelmed



Women are in need of the Mother of all solutions

Yes, some <u>research</u> might suggest that women might be more prone to feeling stressed (12) but no, this does not mean there isn't anything that can be done about it.

The stress of womanhood spans the entire female reproductive lifecycle and stems from systemic inequalities which leaves some women trapped in a cycle of stress, leading to mental health issues (13), physical symptoms and negative reproductive health (14) and fertility outcomes (11).

As a society we need to unburden women from unattainable expectations as well as support transitions through puberty, pregnancy, postpartum, perimenopause and beyond.

We need to arm women with knowledge about their bodies, red flags to look out for and how and when to seek help.

We need to equip healthcare professionals with up-to-date education and tools to screen for reproductive health conditions and make support for mental health conditions a priority.





There is no thorough guidance when it comes to the preconception period

Lack of preconception guidance is thwarting women's chances of getting pregnant before they've even started trying

How often is the question about drinking, smoking and drug habits glossed over when face-to-face with a doctor? Our lifestyle habits hold major answers to our overall health and yet we rarely acknowledge them ourselves, let alone in front of a medical professional. What's more, we read headlines that state "a glass of wine is good for you" all the time. More often than not, these are poorly powered or misinterpreted studies that cause confusion and allow exceptions.

It's widely known that you shouldn't drink, smoke or do drugs when you're pregnant but when it comes to the preconception period (the months leading up to getting pregnant) there is barely any guidance at all. It's not about restricting what we can do, it's about arming ourselves with as much evidence-based information so that we can make informed decisions.

The problem is that not enough research exists about preconception behaviour, so we set out to change that.

Looking at the Hertility dataset to find answers

We ask about your lifestyle because it matters. Drinking, smoking, vaping, drugs - it all impacts our bodies in different ways, especially when it comes to frequency and duration. To fill the preconception data gap, we looked at users who were planning for future babies and those who were trying to conceive and analysed their lifestyle habits including alcohol consumption, smoking, vaping and recreational drug use.

7%

of women actively trying to conceive still used recreational drugs

14%

of people planning for future babies were still taking recreational drugs For those in the preconception period (ie: actively trying to conceive), 40% consumed 1-14 units of alcohol weekly and 4% of them even exceeded 14 units, which is more than recommended for a healthy adult, whether they are TTC or not (15). 22% regularly or occasionally smoked, 22% regularly or occasionally vaped and 7% used recreational drugs regularly or occasionally.

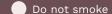
4%

of those actively TTC were consuming more alcohol than NHS guidelines for a healthy adult who's not even TTC

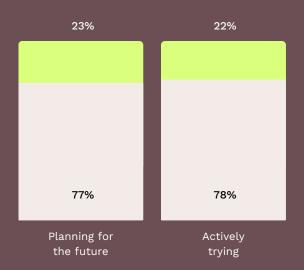
The chances of drinking, smoking and taking drugs doubles in the period before actively TTC

When looking at our users who are planning for future babies (PFF) (but not actively TTC just yet), we see that these percentages almost double across the board. Among those PFF, we saw 57% consumed 1-14 units of alcohol weekly, almost 6% exceeded 14 units, 23% regularly or occasionally smoked, 27% regularly or occasionally vaped and 14% used recreational drugs regularly or occasionally. Whilst this is a widely acceptable social behaviour of younger people, the impacts on future fertility are not often talked about.

Breakdown of smoking per archetype



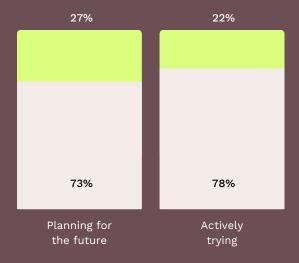
Regularly or occasionally smoke



Breakdown of vaping per archetype

Do not vape

Regularly or occasionally vape



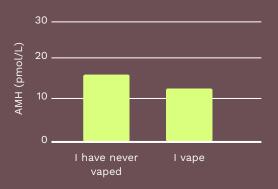
The research around vaping is limited

Whilst the effects of <u>drinking</u> (16), and <u>recreational drugs</u> (17) on future fertility have been widely researched and proven to have an effect on future fertility, when scrutinising the research around smoking and vaping and its effect on fertility and reproductive health, we found that whilst the comparable effects of smoking are more established, the effects of vaping are lesser understood.

The relatively new vaping industry has hidden behind a false promise of being a healthier alternative to smoking

Vapes are even termed a "smoking cessation device", but the reality is far from this. Given the increase in vaping behaviours as an alternative to smoking, especially amongst younger people, we set out to understand the impact once and for all.

Mean serum AMH in vapers and non-vapers, aged 36 to 40

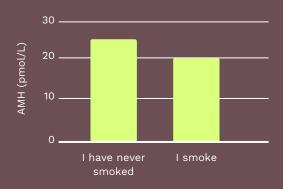


Current <u>evidence</u> suggests that smoking could accelerate the decline in ovarian reserve and increase the risk of experiencing menopause 1 to 4 years earlier (18), but to understand the influence of vaping on ovarian reserve as well, we looked at the medical history data and blood serum levels of ovarian reserve markers, Anti-Müllerian Hormone (AMH), in 8,340 Hertility users.

Our initial findings show vaping also influences ovarian ageing

We observed trends in serum AMH concentrations that support existing research on smoking's potential influence on ovarian ageing and reserve and our preliminary and novel data also suggests that vaping may influence AMH concentrations as well, with lower AMH values observed in smokers and vapers in all age groups.

Mean serum AMH in smokers and non-smokers, aged 31 to 35



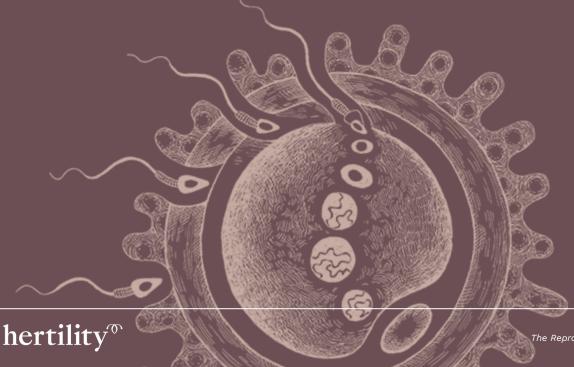
Women need robust guidance to inform their lifestyle choices in the preconception period

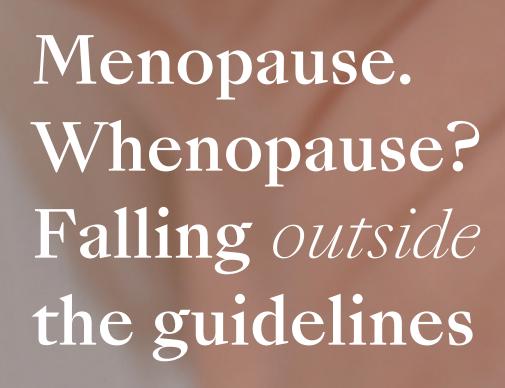
There is a cultural norm to have a last year enjoying yourself before your life changes forever. Whilst we're not against this thinking, we want to make sure that women have access to all the available evidence to enable them to make their own informed choices.

The lifestyle choices women are making when TTC is not a criticism of them, but rather a criticism of the lack of guidance to support us

Nobody wants to make decisions that will make their journey to conceive more difficult.

What we need is tailored preconception counselling and nationalised guidelines to improve fertility awareness, especially addressing the repercussions of lifestyle choices on fertility, to empower individuals with the knowledge needed to make informed decisions about their lifestyle, ultimately promoting smoother fertility journeys and less heartache along the way.





There is a lack of awareness around perimenopausal and menopausal symptoms

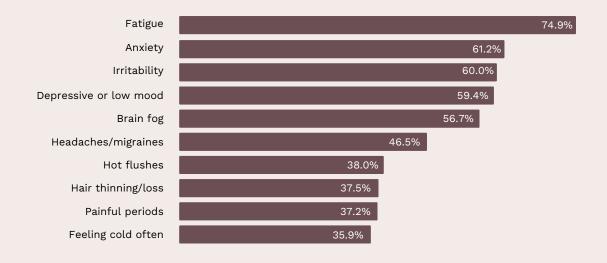
Right now, there are approximately 13 million individuals experiencing perimenopause or menopause in the United Kingdom (19). But despite a recent surge of media coverage around perimenopause, the historical lack of standardised and comprehensive education has led not only a public lack of awareness, but more importantly, a lack of understanding by the women who are actually experiencing perimenopause and menopause themselves.

We know our own bodies better than anyone, and we know when things are changing but definitive guidelines may exclude women from help.

Menopausal symptoms in the media are leading women to (incorrectly) self-diagnose that they're perimenopausal

When we looked at the reported symptoms of 8,278 people seeking Hertility services who cited "I think I am perimenopausal" as their reason for using the service. The most frequently reported symptoms were fatigue, anxiety and irritability.

Most frequently reported symptoms



The majority were still having regular periods

Surprisingly, when telling us about their menstrual cycle regularity, the majority of users who self-reported as perimenopausal still had regular periods (4,522, 55%) and only 2,556 (31%) said they had irregular periods, which is what would normally be expected during perimenopause (20).

55%

of women who thought they were perimenopausal still had regular periods.

Among people aged 40 or younger (n=524), just six would potentially fit the Premature ovarian insufficiency (POI) diagnostic criteria (21). Based on the same criteria, eight people aged 40-44 (n=279) would be diagnosed with perimenopause or menopause and thirty-five people aged 45 or over (n=88) met the perimenopause/menopause criteria (21). Therefore, only 6% of those who self-identified as perimenopausal met the diagnostic criteria for perimenopause / menopause or POI.

Only 6%

Users self-reported as perimenopausal would meet the diagnostic criteria for perimenopause

Leaving 94% of users having (mostly mental health) symptoms that still require medical attention

Our data suggests that users who think they are perimenopausal are actually more likely to experience mental health symptoms, compared to physical symptoms which are required to diagnose perimenopause or menopause according to <u>clinical</u> <u>guidance</u> (21).

This spotlights the importance of a call to women to get educated on menopause, which symptoms to look out for and when and where to turn for professional help as well as when and where to turn for mental health symptoms.

Conclusion

There is an overwhelming theme of a lack of clarity and understanding when listening to the answers of the 325,430 who have come to Hertility for answers about their bodies.

It's also clear that it's happening at every life stage. Whether it's not being able to identify our cycle lengths, taking years to get diagnoses, being in the dark about which lifestyle choices to make or the signs to look out for which signal the end of your reproductive life, the one thing we know for sure is that women are being let down. Let down by a sex education curriculum that doesn't educate girls on how to care for their reproductive health. Let down by a lack of parity both at home and the workplace, which is fuelling a stress epidemic amongst modern women and wreaking havoc with them both mentally and physically. Let down by a healthcare system that is not built for them, leading to pain, confusion and heartache from the first time she menstruates all the way to the start of menopause.

But this lack of knowledge is not about pointing the finger.

How can doctors be educated if the research didn't exist when they were at university? And how can women make decisions about their bodies when the information they need to make these decisions does not exist?

That's why we're so excited to be on this mission to build the biggest, most comprehensive data set on women's health

And crucially continue to use this data for good by both continually listening to women and growing Hertility both for them and with them. And by sharing our research with both the healthcare professionals and the women themselves.

Our vision for the future is one of clarity. A world where every woman is in tune with her reproductive health. A world where every woman is supported at whichever life stage she's at and where she wants her life to go next.

Thank you for reading this report.

Please join us in educating yourself and those around you. If you're here, you're a crucial part of the ReProductive Revolution!

Education is power and power is what is going to help us change the future of women's health for all the women to come.



About Hertility

Hertility is the world's first diagnostic, virtual clinic for female reproductive health. We provide women with comprehensive end-to-end care all the way from menstruation through menopause, including health assessments, at-home testing and specialist online consultations with experts in gynaecology, fertility, menopause, PCOS and endometriosis, alongside scanning and clinic referrals.

At Hertility, we are passionate about empowering women through next-generation diagnostics and care. Our capabilities extend far beyond conventional reproductive health solutions. We leverage predictive algorithms, cutting-edge data analytics, and AI to revolutionise testing, consultations, and aftercare.

With a focus on early detection and prevention of fertility problems, Hertility is radically reducing the time to diagnosis and fast-tracking women to specialist care sooner. In just 10 days, we can provide women with advanced diagnostic insights into their hormonal health, fertility decline and the risk of menopause as well as determine their risk factors for up to 18 health conditions.

Hertility is committed to providing affordable and accessible care to all women, based on the most up-to-date, evidence-based clinical practice, including novel research and our clinical trials are raising the standard of scientific rigour in female health.

Our vision is to reinvent healthcare for every woman and to nurture the Mother of All Movements by empowering a new generation of women who want to know their bodies better and take control of their life choices, both at home and in the workplace.

Welcome to the ReProductive Revolution!



hertility[®] in 2023

983,196

people better educated about their bodies

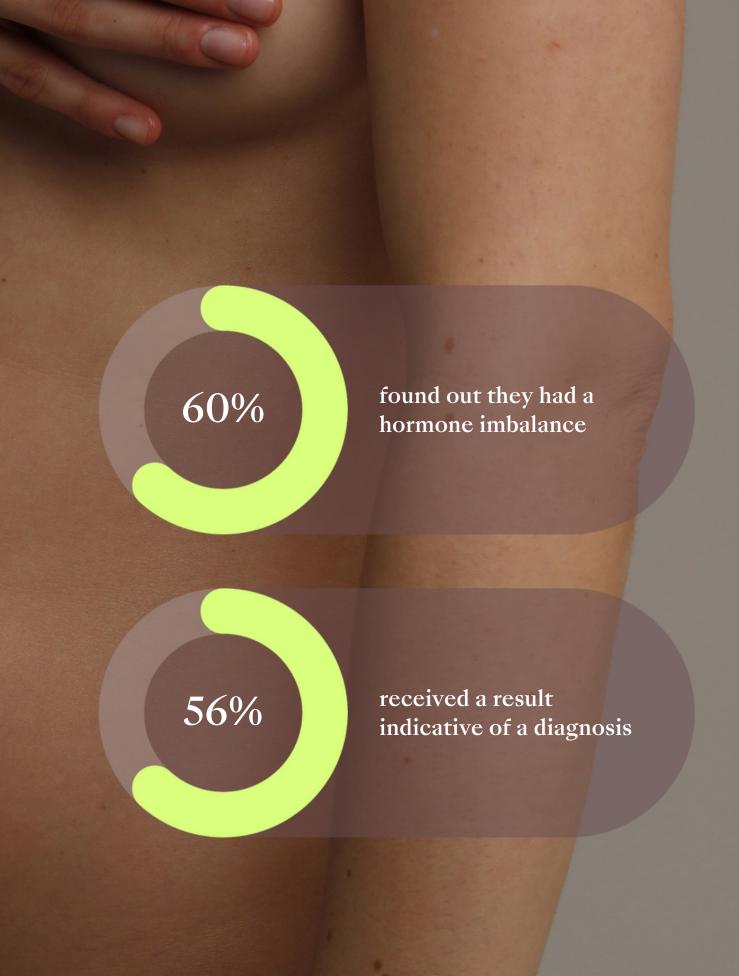
Source: completed online health assessments, social and CRM subscribers

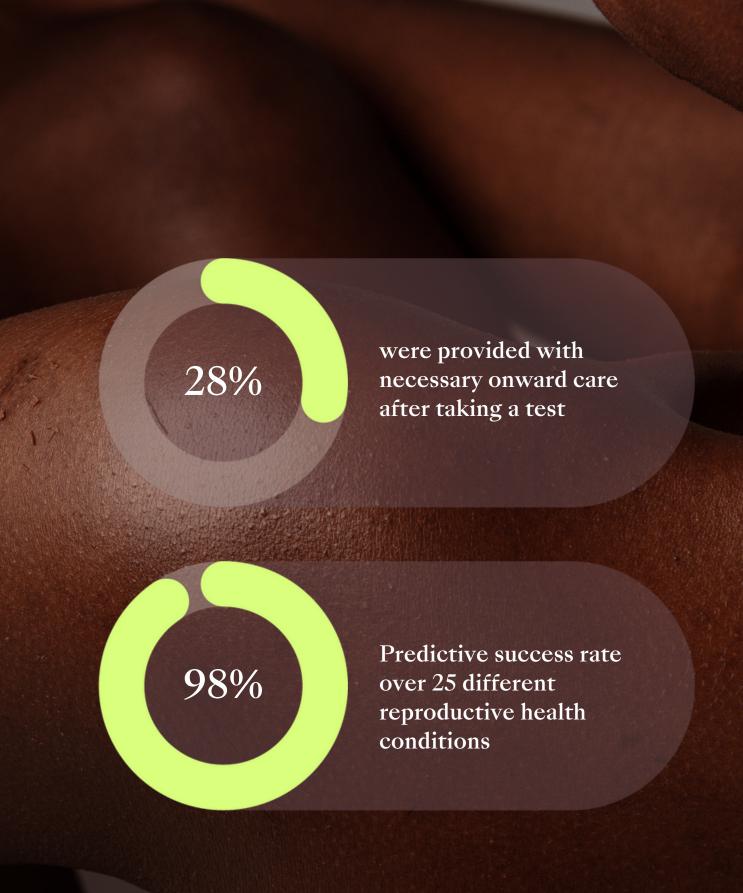
325,430

people have taken steps to better understand their bodies to date

Source: completed online health assessments







Hertility's Reproductive Research Roundup 2023

Alongside what we're doing at Hertility, 2023 has brought many scientific breakthroughs that are filling in gaps in our knowledge on women's bodies. Here is our 2023 Reproductive Research Roundup brought to you by Hertility's Senior Scientific Research Associate, Zoya Ali (BSc, MSc):

- The first uterine transplant has been performed in the UK (22) and our Hertility doctors Dr Ben, Dr Srdjan, Dr Timothy & Dr Saaliha were part of the amazing team behind it. This gives another potential family-forming option to those born with an underdeveloped or absent womb (i.e. in Mayer-Rokitansky-Küster-Hauser (MRKH) Syndrome) or have had to have it removed following cancer treatment or another serious illness.
- The first <u>study</u> using actual blood (instead of water or saline) to check the absorbency of period products (23), highlighting incorrectly labelled absorbency on many period products which could interfere with diagnosis of heavy periods (which is based on how often you change your period products).
- Currently pain killers, hormonal contraceptives, surgery and lets not forget the myth of telling people to just get married or pregnant are the few ways to manage symptoms.

But in 2023, a <u>UK clinical trial using</u> <u>dichloroacetate for pain relief for</u> <u>endometriosis offered hope to millions of</u> <u>women</u> (24). If successful, the drug could be the first ever non-hormonal and non-surgical treatment for endometriosis – and the first new treatment in 40 years.

- In 2023, researchers pinpointed a hormone called <u>GDF15</u> (released by growing foetuses) that might cause a debilitating form of morning sickness called hyperemesis gravidarum, which affects between one and three in 100 pregnancies (25).
- Microplastics are ubiquitous in the environment, including in food and drinking water and in 2023 researchers detected microplastics in the <u>placenta</u>, providing crucial information for performing risk assessments of the exposure of fetuses to microplastics in the future (26).
- It is frequently quoted in mainstream media that the clitoris has "8000 nerve endings." However in 2023, researchers discovered that here are actually 10,000 nerve endings in the clitoris (27).
- Researchers identified benign
 Gynaecological conditions as a <u>major</u>
 <u>cause of disease morbidity worldwide</u>,
 highlighting an urgent need for
 international stakeholders to prioritise the
 treatment and prevention of BGCs (28).

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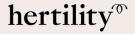
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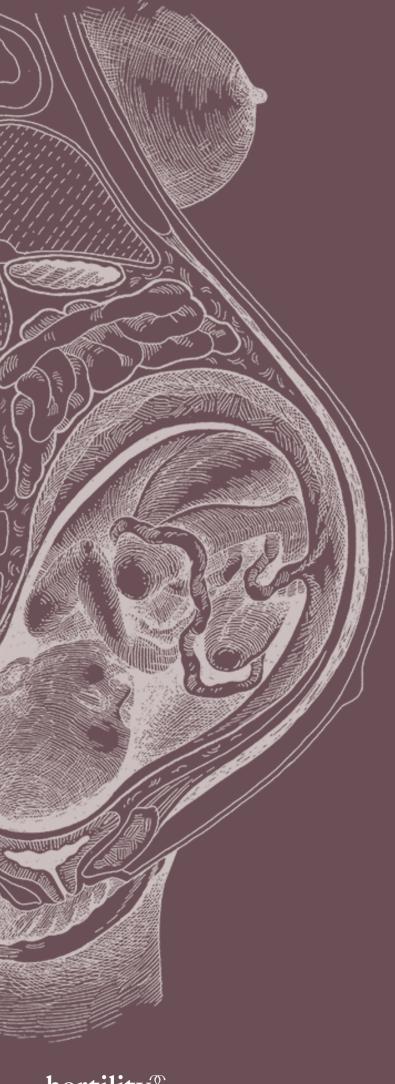
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