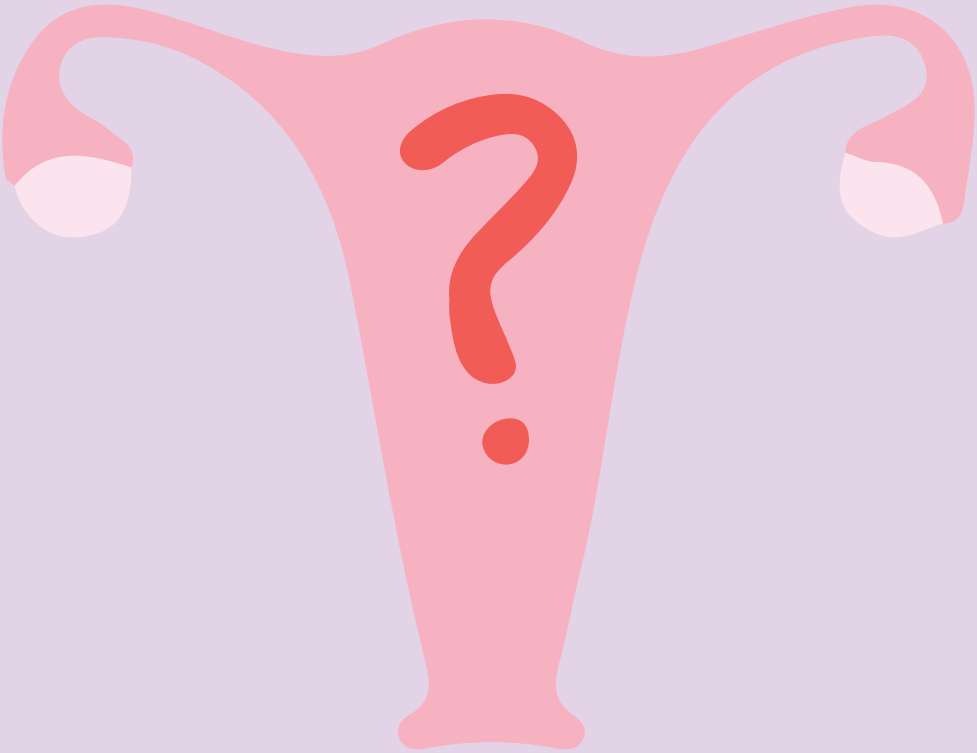
Miss Diagnosed

The health handbook every woman (and man) should read



livi

Foreword by Emma Gannon

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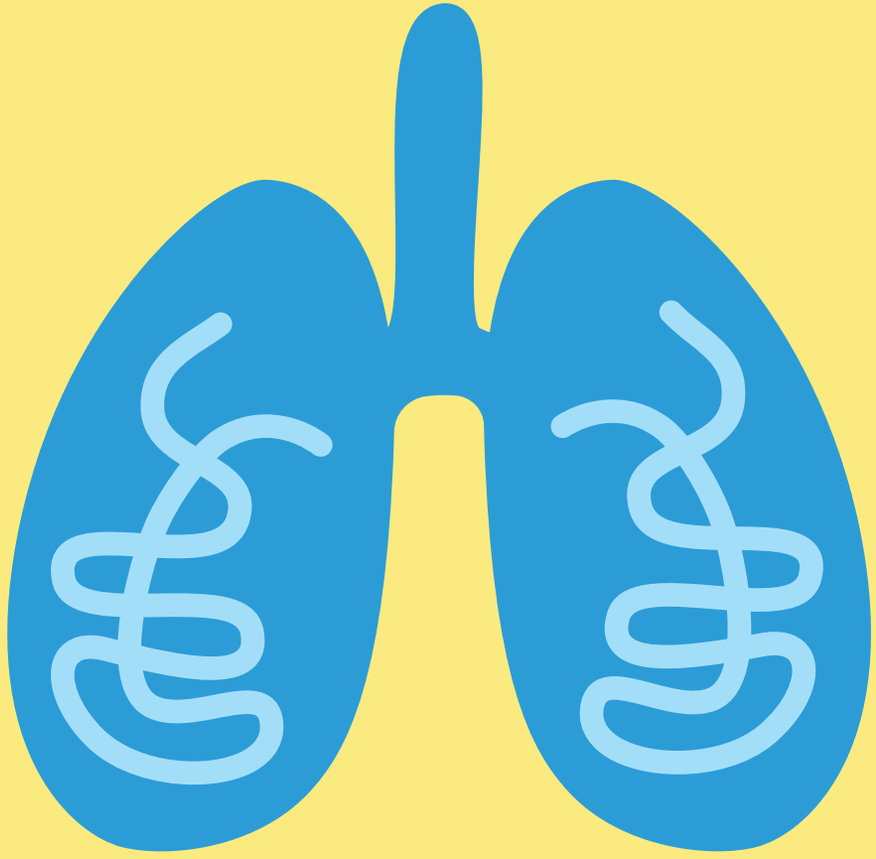


Written by Victoria Holloway and medically reviewed and supported by Dr Bryony Henderson and Dr Elisabeth Rosén.

Foreword by Emma Gannon

For centuries, women were told they had hysteria. This was considered a diagnosable condition to explain women's health complaints men did not understand. There's been a long, painful relationship between women and medicine — many still do not feel heard or understood in the context of our bodies.

This is mostly down to the fact there's simply not enough data or research available, so we're left going around in circles, wondering what is wrong with us as we move through a patriarchal world.

Research from Livi reveals that 34% of women believe their doctor has previously failed to take their symptoms and health concerns seriously. And, over half (57%) of women have felt they weren't diagnosed correctly after visiting a healthcare professional, rising to 64% of women aged between 35 and 44.

That is a huge amount of women who still don't feel they're getting the help they need. Women are 50% less likely to be diagnosed with a heart attack because the symptoms differ to men, and are not diagnosed with autism until much later in life. Though I know the statistics, I'm still shocked to hear them. We know most doctors genuinely work hard to help, but the data and knowledge clearly hasn't caught up yet.

This is the gender data gap, and it's at the root of systemic discrimination against women. Caroline Criado Perez, in her award-winning book *Invisible Women*, outlines a wealth of significant research. It includes the fact our phones are slightly too big for our hands, that several drugs prescribed were never actually tested on women, and that we're 47% more likely to be seriously injured in a car accident because the seatbelts were designed for men. These aren't just fun facts for the next pub quiz, but hard truths that have a massive impact on our health and wellbeing.

The fact that research is mainly focused on men is damaging women's health, resulting in misdiagnoses and threats to women's lives. This is where this book comes in. It's a crucial piece of the puzzle, allowing us to not only learn more about this issue, but feel more empowered.

'Empowerment' feels like an overused word in the feminist lexicon, but to be armed with information about your own body feels like the true definition of the word.

I know many women personally who suffer with endometriosis, and I learned it affects 1 in 10 women. It's not only the illness itself that's a constant challenge — it's also the constant uphill battle to be believed, taken seriously and diagnosed. My friend Holly wrote about her experience of being told over and over again that her symptoms were nothing but a 'bad period', until after lots of persistence, a giant cyst was discovered on her ovary.

The research is staggering in showing us just how much this is affecting women — 91% said being misdiagnosed impacted their life.

Another issue is the length of waiting time in healthcare, and we're living in a time where there is pressure mounting from all angles. Often with a lack of resources, especially in mental health. Even if we do get to see someone, there's more waiting to be correctly diagnosed. My friend Holly had to keep going back to ask for more clarification, so there was a lengthy delay in getting a diagnosis.

According to the research, 10% of women said it took 7 to 12 months and 11% waited 1 to 2 years to be correctly diagnosed (while 29% of women still don't think they've received the correct diagnosis even at that point). When it comes to our health, we shouldn't normalise delays.

The research also found that nearly a third of women don't believe doctors are properly trained in all aspects of women's health, which feels shocking to read in this day and age. Hosting free women's health training for GPs is just one of the steps Livi are taking to help rebuild some of this confidence. They have already demonstrated the demand for these education sessions with previous events on the menopause and the results speak for themeslves.

GP's self-assessed knowledge for menopause-related symptons soared from 4.6 out of 10 to 8 out of 10. A hugely reassuring step forward. We are only scraping the surface when it comes to the menopause conversation.

Perimenopause or menopause is the second biggest health concern currently (28%) following mental health (31%) and these two often come hand in hand.

I know many women who have been sent away with antidepressants, only to realise later that the diagnosis wasn't correct. It turned out they were going through the nuances of menopause — a process with many different side effects that affect women differently.

My older sister sobbed through a documentary about the menopause, because it feels as though we are only just speaking candidly about it. "It wasn't until I heard other women speaking about their experiences that I realised I wasn't losing my mind," she said. With the lack of information available until recently, you wouldn't think this is something that affected half the population.

In my books I write about my passion for technology, the opportunity we have to use it to connect, campaign and change the world for the better. Livi's digital healthcare platform can help make this happen, connecting us more easily to the right care when we need it the most.

The research suggests that digital convenience could really help in terms of healthcare and equality. Modern life is busy and stressful, especially for many women who still carry so much of the hidden domestic and emotional load. Plus, there are various things that can get in the way when it comes to getting help.

We can be worried about wasting people's time, put appointments off because we are scared, feel like we don't have time for ourselves, or wonder if it's 'serious enough'.

It's no wonder we sometimes doubt ourselves, even when our bodies are giving us the signal that something isn't quite right. The ebook you are about to read needed to exist, and I'm so glad it now does. It will help us find the tools to solve this big problem and continue this critical conversation.

This is the book every woman must read.

1. An uneven medical field

In today's health system, collective research suggests there is a wide gap in knowledge about how medical conditions affect men and women differently, and about the conditions that only affect women. As a result, women are receiving poorer medical advice and diagnosis, often leading to worse outcomes. We take a closer look at some of the evidence and how this is affecting women in the UK.

Women make up 51% of the population, and 72% of those aged 16 to 64 are currently in employment, supporting their families, communities and the economy.

An even greater proportion work in roles we all rely on to look after our own health, with a 77% female workforce in the NHS and an 82% female workforce in social care.

But despite their role in society, women will spend around a quarter of their lives in poor health or with a disability, compared with one fifth for men.

Symptoms can often differ greatly between men and women, and collective research studies, as well as our own, prove that certain conditions are more likely to be missed in women than men. But where does this gender gap come from?

The under-representation of women in clinical trials for generations has created a significant imbalance in medical data. Until about 25 years ago, almost all medical research was carried out exclusively on men, though the results were applied to both men and women.

Despite decades of playing catch-up, this historic bias still exists in research and has created a huge disparity between men's and women's health.

1. An uneven medical field

Beyond the basic biological differences of a female's development and function, women tend to have a different approach to their health and how they describe medical symptoms. Research studies also show that when seeking medical help, men favour a more succinct summary of their symptoms, compared to women who build a narrative about how they feel. In turn, this can have an impact on their experience of primary and secondary care.

Medical studies on gender bias indicate that clinicians are more likely to interpret men's symptoms as organic and women's as psychosocial. This leads to more female patients being given nonspecific symptom diagnoses and prescribed more psychoactive drugs than men.

In our recent survey we found that 57% of women feel they have been misdiagnosed

Another challenge women face is identifying which common female symptoms like pelvic pain and heavy bleeding are normal, and which are not. A landmark study from 2001 introduced the idea of a gender pain gap to describe the unconscious medical bias that contributes to women's pain being 'written off either as a normal part of womanhood or as a matter of little relevance.'

This confirmed that women are more likely to experience dismissal of their pain due to stereotypes of being irrational, hysterical and emotional.

The health and wellbeing of women goes far beyond a personal level due to their roles at work and home. Recent research from 2 leading health companies reveal that over half of working women feel unable to discuss their health at work.

And during their working lives 3 million have left work because of women's health problems, including more than a million due to period-related problems.

Women continue to take on disproportionate responsibility for childcare and caring for the elderly or disabled, which can further impact their own health. Many women will find it more challenging to access healthcare while balancing work and caring for others, and are more likely to report deteriorating health because of care responsibilities.

Perhaps most shocking of all is the likelihood of misdiagnosis in women.

A 2019 study of 7 million people discovered that women were diagnosed later than men in more than 700 different health conditions.

Let's Talk!

Rebecca's story

In 2017 my dad had his first stroke. A year later he was diagnosed with dementia and a few months later I became his carer.

It was a really hard time and the crunch point came when, one evening, I was driving dad home from a hospital stay and I had to stop the car because I thought I was having a heart attack. It happened about once a week and increased until breaking point.

The doctor told me I was having panic attacks because of my situation. I had talking therapy, signed off work and was put on some medication.

Over time I started to get more symptoms on top of the panic attacks and anxiety, like an irritable bowel and really bad back aches. Through Livi I found out I was also perimenopausal.

Us women really do have lifelong challenges – from pre-teens all the way through life – our hormones affect us, especially someone like me who had PCOS (polycystic ovarian syndrome).

I'm from a generation where my mum and her mum never talked about women's health. It's still one of those things that's difficult to ask people about, because people can understandably be very private. But overall I believe we are more open now.

What I'd say to anyone else going through perimenopause is that it doesn't need to be the end of life as you know it and your GP can help you with many different options to help symptoms. The actual menopause probably won't happen until our 50s. But it's just important to talk, raise awareness and not scare people.

2. The Yentl Syndrome

While we can only scratch the surface, this part uncovers some of the numbers behind the so-called 'Yentl Syndrome' – a term used to describe the differences in how men and women are treated medically, particularly after having a heart attack.

To help paint the bigger picture, we also look at several other prominent diseases and conditions which present clear disparities in men and women.

Chapter 1: Heart disease

Chapter 2: Stroke

Chapter 3: Autoimmune disease

Chapter 4: Dementia

Chapter 5: Cancer

Chapter 1

Heart disease

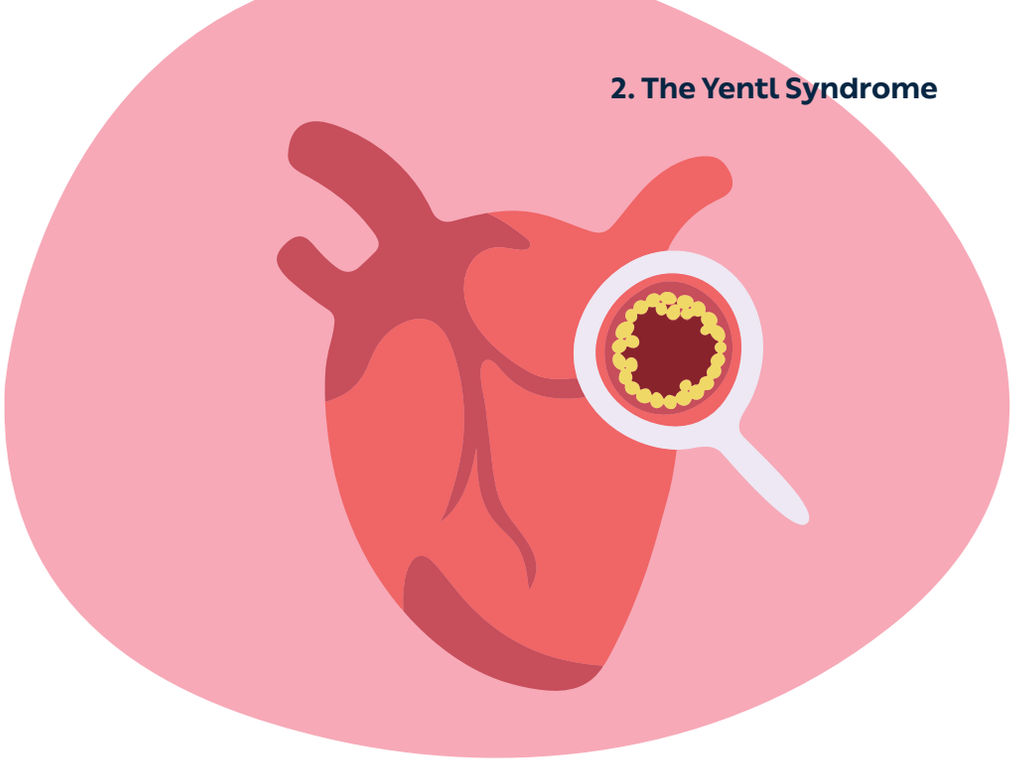
3.6 million women are living with some kind of heart or circulatory disease in the UK. Research from the British Heart Foundation reveals 8,200 women will die needlessly following a heart attack over a 10-year period because they have not received the same quality of care as men. The charity's briefing sets out the scale of the inequality:

A woman is 50% more likely than a man to receive the wrong initial diagnosis for a heart attack

Women are less likely than men to receive a number of potentially life-saving treatments in a timely way

Women having a heart attack delay seeking medical help longer than men because they don't recognise the symptoms

Following a heart attack, women are less likely to be prescribed medications to help prevent a second heart attack



With an ageing and growing population and improved survival rates, these numbers are set to rise. Research from the European Society of Cardiology highlights why a woman is more likely to have a missed heart attack diagnosis.

The study examined gender differences in the presentation, diagnosis and management of 41,828 patients admitted to an emergency department with chest pain. The physician's initial diagnosis considered acute coronary syndrome as a more likely cause of chest pain in men than another cause such as anxiety or a musculoskeletal complaint.

Heart attack symptoms can vary from person to person whether you are male or female. Women can have different and sometimes vaguer symptoms to men when it comes to heart disease and heart attacks. These include generalised fatigue, nausea and back, neck and jaw pain. And, despite the differences in a male and female circulatory system (such as the size of blood vessels around the heart), standard testing for detecting heart disease is generally carried out on men.

For more information on research into heart disease, visit the British Heart Foundation's website at **www.bhf.org.uk.**

Chapter 2

Stroke

Every 5 minutes, someone in the UK will have a stroke. It continues to be a leading cause of disability and death, which can be preventable with early diagnosis and treatment.

Research has shown around 60% of women die from strokes compared to 40% of men, due to their unique symptoms and increased range of risk factors. What's more, women are 33 percent more likely to be misdiagnosed than men following a stroke.

Like with other cardiovascular problems, not all strokes are clinically obvious. As well as experiencing non-specific stroke symptoms, women are more likely to have headaches and dizziness of benign causes, adding an extra layer of complexity.

These non-specific symptoms women experience present problems for diagnosing a stroke and increase the likelihood of a misdiagnosis. In a study which analysed 23,809 cases, 9% of all strokes in women were not recognised at first medical contact and 13% of probable strokes were missed.

The biggest risk factors for stroke are obesity, high blood pressure and atrial fibrillation, which apply to both men and women. But because women live longer than men, they are more likely to have a stroke in their lifetime. They are also more likely to die from a stroke, which could be due to lifestyle, medical conditions such as high blood pressure, as well as age.

Alongside this, there are additional risk factors for having a stroke that mostly affect women - hormonal contraceptives, pregnancy, HRT, migraines and lupus, an autoimmune disease which is most common in women.

For more information on research into stroke, visit the Stroke Association website at **stroke.org.uk**

Chapter 3

Autoimmune disease

Around 4 million people in the UK have an autoimmune disease and 80% of these are women. In all autoimmune conditions, the immune system attacks healthy cells which impacts the quality of daily life.

Some of the most common conditions include psoriasis, rheumatoid arthritis, type 1 diabetes and MS. Around a third of people with an autoimmune condition are living with more than one, which can lead to very complicated symptoms and health needs.

Research shows it takes women an average of 5 doctors and nearly 4 years to get an accurate autoimmune diagnosis. In a survey of 12,000 patients in Europe, it took an average of 12 months for male patients to be diagnosed with the autoimmune disease Crohn's, compared to 20 months for female patients.

One of the biggest challenges in diagnosing autoimmune diseases in women is the range of complex symptoms such as fatigue, pain, mood changes and digestive issues. These can fall under a spectrum of conditions and often prompt a 'watch and wait' approach that uses a period of time to see whether improvements happen naturally.

While research has been carried out into the causes of these conditions, including lifestyle factors and family history, there are still many unanswered questions. Some studies have shown that the X chromosome, of which men carry 1 and women 2, hold a large number of immune-related genes. By having 2 copies of the gene, there is an increased chance that mutations will occur.

Several charities have joined forces in an attempt to recognise autommunity as a distinct area of research science, alongside cancer, dementia and infectious disease. This will hopefully accelerate research into finding a way to prevent these medically challenging conditions.

For more information on research into autoimmune disease, visit the Aims charity website at **aimscharity.org.**

Chapter 4

Dementia

Women with dementia outnumber men 2 to 1, with Alzheimer's disease being the most common cause. Although women are more likely to live longer than men, their risk of dementia is disproportionately high.

Dementia risk is a vastly complex puzzle, but understanding the biological differences between men and women could help dementia researchers identify other causes and develop new treatments.

Female hormones, like oestrogen, can play a significant role in how a disease is diagnosed and treated. Oestrogen affects a woman's brain, cardiovascular system, liver, mental health and much more. It can also improve cognitive function.

Some researchers believe this health benefit presents problems for dementia diagnosis. As women tend to have a strong verbal memory, they often do better on the initial memory test for dementia, even if they have underlying cognitive problems. As a result, more and more women are underdiagnosed.

According to Alzheimer's UK, studies into the use of HRT to reduce women's risk of dementia have been inconclusive and contradictory.

But some research suggests that oestrogen-based treatments could be beneficial for protecting brain cells, and potentially reducing the risk of the disease.

For more information on research into dementia, visit the Alzheimer's website at **alzheimers.org.uk**

Chapter 5

Cancer

In the UK, a woman is diagnosed with cancer every 3 minutes, and every 7 minutes a woman dies from cancer. We know that treatment is more successful and the survival rate is higher when it is diagnosed at the earliest stage.

Research shows that women are seeking medical help within 2 weeks for symptoms such as an unexplained lump, change in bowel habit or mole, unexplained bleeding or weight loss.

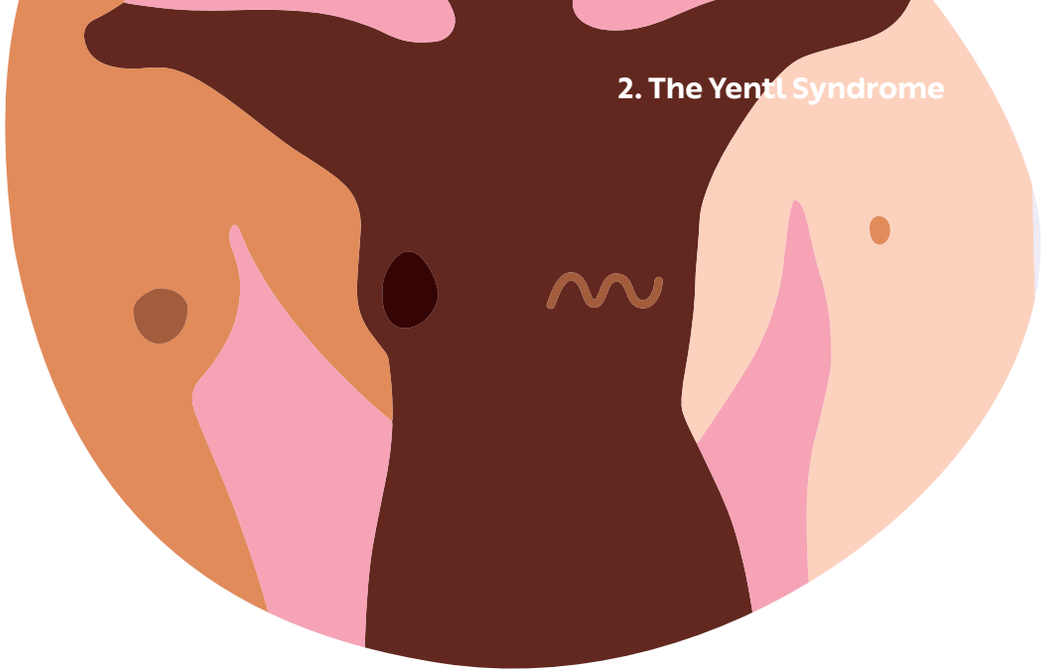
Despite over 90% of women recognising one of the main signs or symptoms of cancer early, there are also barriers for women seeking medical help. These include:

Difficulty getting an appointment (45%)

Difficulty getting an appointment at a convenient time (46%)

Not wanting to talk to the doctor's receptionist about symptoms (46%).

These barriers lead to cancer being missed, even with plenty of awareness around regular screenings.



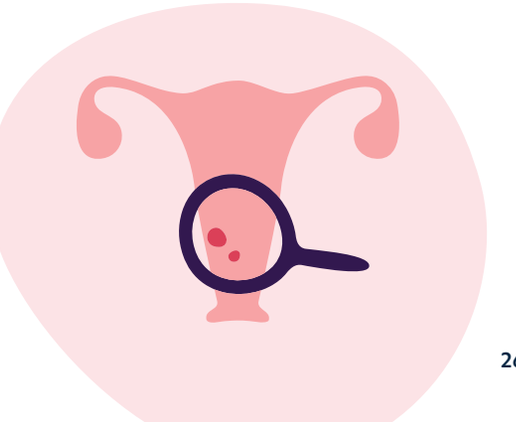
2. The Yentl Syndrome

One study found that nearly a third of breast cancer cases are misdiagnosed. A similar problem occurs for ovarian cancer. If diagnosed at the earliest stage, 9 in 10 women will survive. But two thirds of women are diagnosed late, when the cancer is harder to treat.

Unlike breast cancer, ovarian cancer can have various subtle and non-specific symptoms such as bloating, abdominal discomfort, indigestion and frequent urination.

These symptoms can be easily confused with much more common gastrointestinal issues, food allergies or urinary tract infections. As well as the fact there is no early-detection test, it means a diagnosis comes after the cancer has advanced.

For more information on research into cancer, visit the Cancer Research UK website at **cancerresearchuk.org**



Let's Talk!

Sam's story

I got the cancer diagnosis on my 50th last year. I definitely won't forget that birthday.

When I found a lump I knew I had to get it checked, but after not being able to get an appointment with my GP for two weeks I turned to Livi, who got me in to see a doctor the next day.

Despite the doctors thinking they'd caught it early, it had spread to my lymph nodes, so I had to have chemo which had some really difficult side effects. After that, I'll be on hormone treatment for 10 years, which is what I'm worried about most.

Before the diagnosis I went through a lot – an armed robbery and a sequence of traumatic things – and I'd been on antidepressants for a while until my prescription was suddenly stopped. With the chemo and everything else I was dealing with, I was distraught.

I then talked to another amazing doctor on Livi. We were on the video call for a long time and she just listened. She managed to reinstate my medication, and she also referred me to a mental health service for more support. It doesn't sound like much, but it's just the fact she listened, learned my whole backstory and dedicated that time to me.

3. Handling your health

The team of GPs and health specialists at Livi are dedicated to putting patient safety first and making healthcare accessible to everyone.

We have worked closely with our Lead GP and women's health specialist to create this health handbook for women and men.

Here is a brief introduction about their professional background and why they are passionate about women's health.

Handling your health

Dr Bryony Henderson, Lead GP at Livi

Dr Henderson graduated in 2006 from Imperial College London and started her GP career as a partner in Berkshire. Since the beginning of her career, she has strived to change clinical practice so that women are not only heard but listened to.

Dr Henderson's GP career includes working at a London-based practice but she has more recently settled in Hampshire. Dr Henderson joined Livi in December 2020 and in May 2022 became a Lead GP.

"Women's health is of critical importance and I am passionate about bringing it into the spotlight where it belongs, in particular helping women going through the menopause. Seeing a GP is the first practical step to get help. We can give advice, diagnose and talk you through what we think is the problem. We can discuss possible treatment options with you and refer you to a specialist if that is what is needed. The important thing to remember is that you are not alone and doctors are here to help and listen."

"Discussing female health issues and our reproductive organs can feel intimate and emotive. Lots of patients get apprehensive, but it is my job to put them at ease as much as possible. Women come in all shapes and sizes, and will have their own unique story to tell. This is why I have chosen to specialise in gynaecology – to make sure each woman receives the personalised care they deserve."

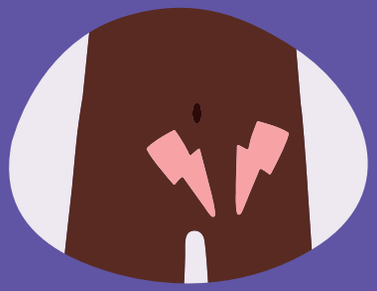
Dr Elisabeth Rosén, specialist in gynaecology and obstetrics at Livi

Dr Rosén began practising as a gynaecologist in 2014 and started working at Livi in 2017 to become part of the digital transformation of healthcare. Since then, she has been responsible for women's health and involved in many global initiatives.

Chapter 6

Helping women be heard

This chapter turns our lens to medical concerns that primarily affect women, and the multitude of challenges they face in accessing consistent care. The female body is not only misunderstood in relation to men, but also in conditions that women alone must deal with. For clarity, we are referring to all women and people with a cervix.

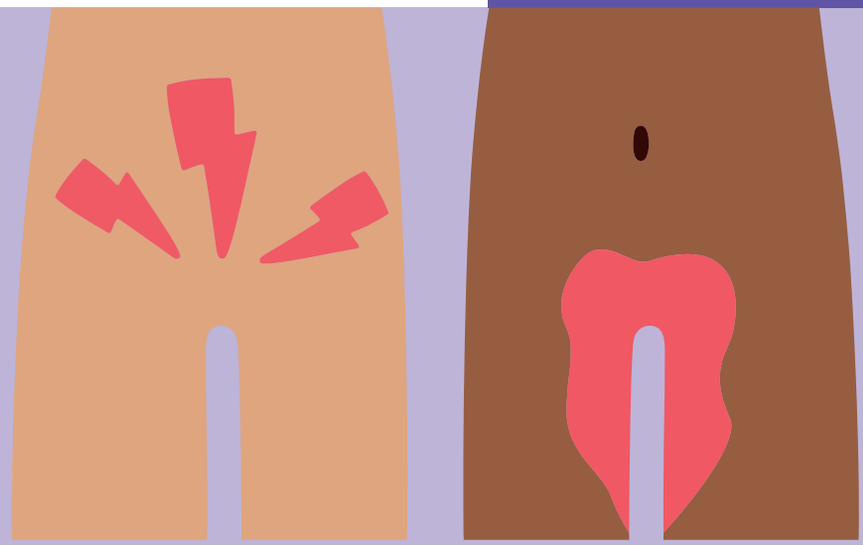


Over 80% of women feel they are not listened to by healthcare professionals about debilitating female-specific symptoms, and 1 in 10 women in the UK are living with severe pelvic pain due to undiagnosed or misdiagnosed gynaecological conditions.

60% of women suffer with a hormone or gynaecological issue, yet more than half a million women across the UK are currently on long gynaecology waiting lists. This area of healthcare has seen the steepest rise in waiting times since the Covid-19 pandemic began - with a 60% increase since 2020

The needs of the women waiting for medical help range from initial outpatient appointments and tests, through to scans and life-changing surgery. There is also a vast postcode lottery in sexual health services, access to menopause care and eligibility criteria for fertility treatment like IVF. On average it takes 2 to 8 years for women to be diagnosed with a fertility disorder before starting any treatment.

The gender bias in research around women's health is clear too. There's 5 times the amount of research into erectile dysfunction which affects 19% of men, compared to premenstrual syndrome which affects 90% of women. In terms of research prevalence as a whole, less than 2.5% of publicly-funded research is dedicated to women's reproductive health.



Let's Talk!

Jen's story

It took three years to get my diagnosis. In September 2014 I noticed a lump on my neck, which turned out to be a tumour in my thyroid. What should have been no more than a two-and-a-half-hour surgery to remove it, ended up taking over five hours because the tumour had grown out of my thyroid and around the nerves of my left vocal cord. Thankfully, the tumour was benign, but tests showed that my left vocal cord was paralysed from the operation and my voice didn't return.

I then began feeling the symptoms of an underactive thyroid, like exhaustion and weight-gain and what I called 'thyroid legs'. It was the most horrible pain I'd ever experienced. I was told the pain was down to a vitamin D deficiency and was given medication for it, but the pains and pins and needles never went away.

Fast forward to August 2016, I was pregnant and the pains all over my body got so much worse than before, the pins and needles unbearable, the exhaustion constant. I was told the pins and needles were carpal tunnel syndrome and the pains were my thyroid and vitamin D deficiency, and the pregnancy was just taking its toll on me.

After a difficult labour and when Chloe was four months old, my husband had a head-on car crash. I had a breakdown. I was diagnosed with severe depression and anxiety. As I talked more to my GP, I realised I'd been living with depression since my operation in 2015 that hadn't been diagnosed – even though I have a mental health first aid qualification.

Three years later and I've finally been diagnosed with fibromyalgia. The receptors in my brain are telling me I have pain but I don't. Every day it's difficult, but a flare-up is unbearable. It will never go but it's mostly managed. A Livi doctor recommended supplements, like turmeric, that make the biggest difference.

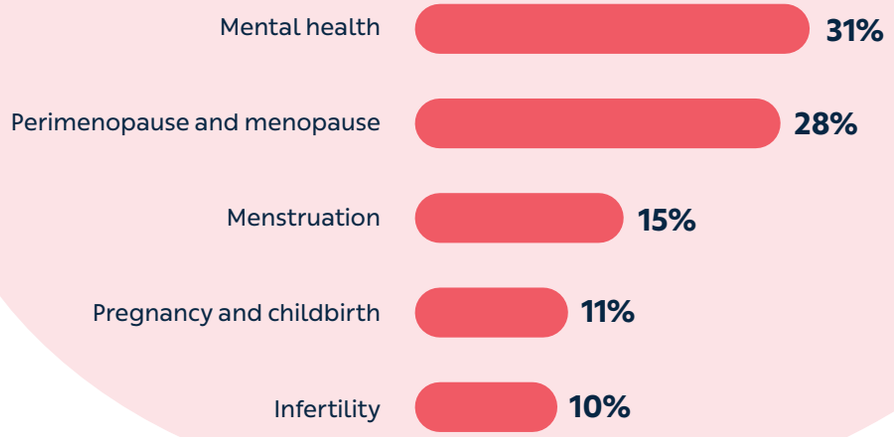
To get a clearer picture of how women are feeling and their personal health experiences, Livi conducted a survey in April 2022 with 2,000 women in the UK (a sample of the general population). We pulled together some of the most hard-hitting findings to get a sense of what women find most challenging with their health, and which areas of women's health are most important to them.

- Over half (57%) of women have felt like they weren't diagnosed correctly after visiting a healthcare professional, rising to 64% of women aged between 35 and 44.
- 29% of women still don't think they've received the correct diagnosis, whilst 10% said it took 7-12 months and 11% waited 1-2 years to be correctly diagnosed.
- 22% of women believe their health has previously been overlooked by a healthcare professional, or they have received a misdiagnosis because of their gender.
- 34% of women believe their doctor has previously failed to take their symptoms and health concerns seriously.

The most common symptoms women suffer from include fatigue (43%), achy joints (39%), painful periods (38%), heavy periods (37%), lightheadedness and dizziness (36%), sweating and hot flushes (34%), stomach cramps (34%), heartburn/indigestion (33%), nausea/vomiting (29%) and urinary tract infections (29%).

What are women most worried about?

Our research reveals that women's biggest health concerns are:



The following part of the book explores each of these concerns in more detail. As well as discussing what's normal and what's not, our team of experts help you feel more in control of your body and confident about seeking advice.

Chapter 7

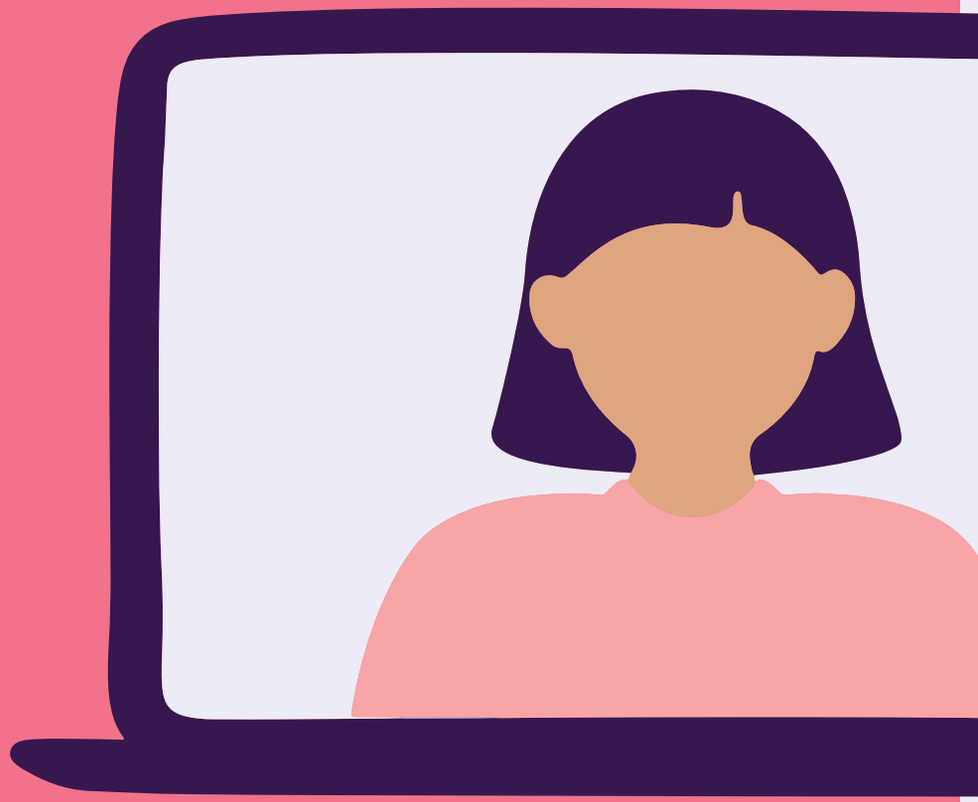
Who's the expert in your body?

No one knows your body like you do, so you will always know when something doesn't feel quite right.

We've turned to our team of in-house experts for their words of wisdom on the 5 main women's health concerns: menstruation, pregnancy, infertility, menopause and mental health.

For each topic we'll cover what to expect for your body and any warning signs that something might not be right. We'll also shine a spotlight on some really important health topics and concerns that you may not know much about.

Even if you don't notice any of the symptoms discussed, always speak to a GP if you have concerns about your body and health



Menstruation

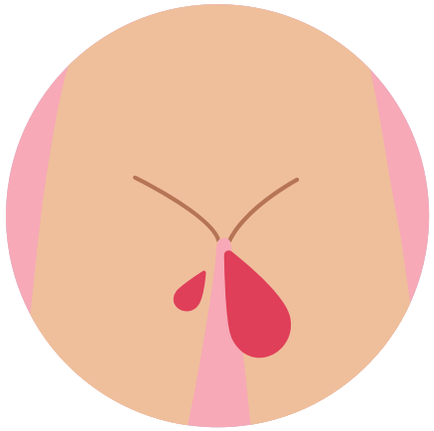
What to expect

The average menstrual cycle lasts for 28 days, though everyone is different. Anything between 21 and 40 days is considered normal. An average woman will start their period at around 12 years old, and will experience menopause between the ages of 50-55. This suggests women will have about 480 periods during their lifetime, but fewer if there are pregnancies.

A typical period lasts 2 to 7 days, and women lose between 3 and 5 tablespoons of blood during this time. However, it is normal to experience some heavy periods (menorrhagia) and at different times. These can be caused by hormonal changes, certain medications, stress and depression.

Your body will experience both physical and psychological changes throughout your menstrual cycle. Sometimes a disturbance in the normal cycle could suggest something is not right.

If there is no cause found for any heavy bleeding or painful periods, there are plenty of options that can help relieve these symptoms. A doctor might suggest a hormonal or non-hormonal treatment.



When to seek medical help

Irregular periods that last for more than 3 months

Bleeding between menstruation also known as spotting or breakthrough bleeding

Persistent severe pain

Very heavy bleeding or passing blood clots regularly

Dr Henderson's advice

It's useful to keep a track of your cycle so you know what is normal for you. If there are any changes, like the amount you are bleeding, changes to your cycle or level of pain, it's important that you speak to a GP. They can discuss these symptoms with you and advise on any necessary tests, or refer you to see a gynaecologist.

Dr Rosén's advice

It's important to remember that experiencing new symptoms or changes to your cycle do not always indicate an underlying condition or complication. However, the menstrual cycle is a great way to monitor the status, not only of your reproductive organs, but your whole body – which is why you should keep an eye on changes.

Sometimes changes are part of a natural process like the menopause, a condition affecting your reproductive organs or a condition affecting another part of your body, like the thyroid. But you are the expert on what is normal for you and what is not, and you have the right to feel well.

Spotlight on...

There are many gynaecological conditions that can be missed or misdiagnosed, and in some cases may lead to problems with fertility and pregnancy. Some of the most common include polycystic ovary syndrome, endometriosis and fibroids.

Polycystic ovary syndrome (PCOS)

This condition impacts how your ovaries work and affects 1 in 10 women. You may be diagnosed with PCOS if you have at least 2 of the following:

- Irregular or absent periods
- Signs of excessive androgens (male sex hormones) like excess hair growth, oily skin or acne
- Polycystic ovaries (from an ultrasound scan)

People with PCOS are more likely to seek out and require fertility treatments, but research shows that both people with and without PCOS have a similar number of pregnancies and children over their lifetime.

Did you know?

Not everyone with PCOS will have small cysts in their ovaries. While the cysts can contribute to hormonal imbalances, they are a feature of the condition rather than a cause, and are usually harmless.

PCOS also increases your risk of developing type 2 diabetes, cardiovascular disease, endometrial cancer and psychological problems. A GP can help you get the right diagnosis, treatment and support.

Did you know?

Up to 2 in 5 women who struggle with fertility have endometriosis. This can often be due to scarring. However, there are fertility treatments available that can improve chances of conception.

Endometriosis

This is the second most common gynaecological issue in the UK, but it takes an average of 8 years to get a diagnosis. The main symptoms are:

- Pelvic pain, especially during your period
- Period pain that stops you doing normal activities
- Pain during or after sex
- Pain when peeing or pooing during your period
- Nausea, constipation, diarrhoea, or blood in your pee during your period
- Difficulty getting pregnant

Endometriosis can have a big impact on your physical and mental health which is why getting a proper diagnosis and support from a doctor is so important. Treatment options include pain relief, hormone treatment and surgical procedures to remove the excess tissue.

Fibroids

These non-cancerous growths develop when muscle cells in the womb multiply too many times. They come in various shapes and sizes, and only 1 in 3 women with fibroids will experience symptoms which can make them difficult to diagnose. Symptoms include:

- Heavy or painful periods
- A distended or painful tummy
- Lower back pain or a feeling of pressure
- Need to pee more often or having accidents
- Constipation
- Pain during sex

A doctor can investigate whether there is an underlying condition and if treatment is required to shrink or remove the fibroids. Sometimes untreated fibroids can lead to complications of anaemia if there is heavy bleeding, or problems with fertility and pregnancy. Treatment can involve medication or a surgical procedure.

Did you know?

Research shows oestrogen and progesterone play a role in the growth of fibroids. This is probably why fibroids tend to shrink after menopause, when production of these hormones has decreased.

Lauren's story

I've always found the time of the month extremely painful but assumed this was normal. At 17 I found the courage to speak to a GP about my painful periods and the pain I felt during sex. They suggested the best thing was to take the contraceptive pill back to back. But the symptoms carried on. While at university I felt I needed more answers. During this time I was diagnosed with depression and anxiety. A local GP suggested I could be suffering from dyspareunia which was causing me to be tense during sex. They recommended seeing a sex therapist with my partner but I really did not want to do.

The GP eventually referred me to a gynaecologist but I really had to push to be taken seriously. The constant worry of what was going on had a big impact on my relationship.

My partner was really supportive but he felt he was doing something wrong, and I felt guilty for my body's reaction to sex. When I had an ultrasound scan at 18, they told me I had signs of adenomyosis, linked to painful sex. The gynaecologist encouraged me to continue with the pill and try lubricants or propranolol. But I still had spotting and a lot of pain. The same gynaecologist mentioned at another appointment that I could have endometriosis.

She explained I can't officially be diagnosed without a laparoscopy. I was prescribed mefenamic acid to help with the pain but didn't feel like I understood the condition or how I could deal with it. I just knew there was no cure. I carried on following the advice but when I moved home after graduating, the pain became more severe and was affecting my day to day life. I asked another GP to refer me again. When I explained my symptoms to a different gynaecologist, they put me on the waiting list for a laparoscopy. She said I should have the coil fitted at the same time for symptom relief, but I had a lot of anxiety about this. After more than 8 months, I finally had the procedure.

Once I came round, they confirmed the affected areas had been treated and I was signed off work for a week.

The endometritis diagnosis took 7 years after first seeing a GP. But there was no follow up. One consultant told me fertility problems are fairly unlikely with the condition, while another said it was highly likely my fertility would be impacted. One doctor even suggested the best way to stop the symptoms was to get pregnant and breastfeed to avoid having a period. I was put on a waiting list for another laparoscopy in September 2021.

About 7 months later, I was given a date for the second procedure (April 2022). The surgeon explained afterwards they had treated 7 sites of endometriosis – although I wasn't sure whether this was normal. Despite being signed off for 2 weeks, I haven't told anyone at my current workplace about the condition. I have now recovered from the surgery but like last time I have had no follow up about the implications. It's hard to say yet whether things have improved, but I'm feeling more hopeful.

Pregnancy

What to expect

Pregnancy can be a very special time, but presents physical and emotional challenges for many women. It can be hard to know which changes are normal and which require medical attention.

Nausea is one of the most common symptoms in the first trimester due to high levels of the HCG and progesterone. Fatigue can also be quite intense in the first couple of months or closer to the due date because of the physical strain on the body.

Common symptoms during the second and third trimester include bloating, heartburn or indigestion, backache, pelvic girdle pain, haemorrhoids and Braxton Hicks contractions.

Other changes to physical health that can affect a woman during any stage of pregnancy include feeling faint, headaches, constipation, changes to skin and hair, varicose veins and needing to pee more. It can be normal to feel more emotional and overwhelmed during pregnancy too, because of the impact on your mental health.

If any of these symptoms become severe or difficult to manage, speak to a doctor or midwife for more advice.

When to seek medical help

Bleeding during pregnancy

New, unexplained or severe pain

A sudden decline in foetal movements

Shortness of breath or chest pain

Dr Henderson's advice

Pregnancy is an exciting time and there's a lot to think about while getting ready to meet your new arrival. However, your body goes through a number of changes during this time and complications can develop. If you feel worried at any point, it's always best to discuss your concerns with a GP or your maternity team.

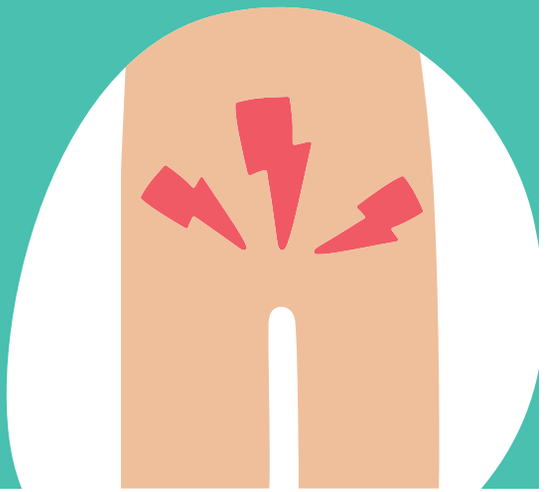
Dr Rosén's advice

Experiencing discomfort or new symptoms does not always indicate a problem with your pregnancy, but you should listen to your body. If you experience a new or more intense symptom with no obvious explanation, don't hesitate to contact your midwife. Some bleeding, pain and a decline in foetal movement can be considered normal during pregnancy but can also indicate a number of issues.

It's very common to feel worried about all the changes and symptoms during a pregnancy. There is lots of help available to help with feeling confident about the physical changes and how best to look after your body. This can help you enjoy your pregnancy as much as possible.

Spotlight on...

There are many pregnancy-related conditions and complications that can be much easier to manage with medical help and support. Some of these challenges include hyperemesis, pelvic girdle pain and varicose veins.



Hyperemesis gravidarum (HG)

Sickness and nausea will affect 8 in 10 women during pregnancy and can happen at any time of the day, even though it's often known as 'morning sickness'. The nausea is caused by an increase in the HCG hormone that supports pregnancy, and usually eases during the second trimester.

Some women experience more severe sickness and nausea that lasts a lot longer. This condition is thought to affect around 1 to 3 in every 100 pregnancies. Symptoms of HG include:

- Severe nausea and vomiting
- Being dehydrated
- Weight loss
- Low blood pressure when standing

Some women will experience these symptoms until the baby is born, and others will see improvements at around 20 weeks. Because there are other conditions that can cause nausea and vomiting, your doctor will need to rule these out first before prescribing medication.

If a person is unable to keep food and drink down, hospital treatment may be needed to avoid dehydration.

Pelvic girdle pain (PGP)

PGP, also known as symphysis pubis dysfunction (SPD), has been found to affect up to 1 in 5 pregnant women and can have a significant impact on mobility.

As pregnancy develops, the body will produce higher amounts of a hormone called relaxin. Relaxin makes the joints in the pelvic area looser, and makes them move unevenly. This can lead to the pelvic area becoming less stable and painful. As your baby grows, the extra weight adds to the strain on your pelvis.

If you have already experienced a back problem, pelvic injury or have hypermobility syndrome, you may be more at risk of PGP. Although it is not serious, pelvic girdle pain can cause a lot of discomfort if left untreated. Women with PGP usually feel pain in the areas highlighted below.

- Over the pubic bone, roughly level with the hips
- Across the lower back
- In the area between the vagina and anus (perineum)
- Spreading to the thighs

Some women may feel a clicking or grinding in the pelvic area, and will find the pain is worse when walking, going up or down stairs, getting dressed, turning over in bed or getting out of a car.

A doctor can advise a range of measures that can help you manage the pain including physiotherapy or wearing a support belt.

Varicose veins and haemorrhoids

Haemorrhoids and varicose veins might appear as different problems, but are both caused by swollen, twisted veins. Many women will experience either or both during their third trimester of pregnancy.

Normally, your veins have one-way valves to help keep blood flowing towards the heart. Pressure on these valves allows blood to back up and collect in the veins, causing them to enlarge and swell.

Varicose veins usually appear when the veins in your legs swell but they can affect any area including the vagina. Varicose veins are not harmful but can be uncomfortable.

To help manage the discomfort, it is best to:

- Avoid standing or crossing your legs for long periods of time
- Sit with your legs up as often as you can
- Maintain a healthy weight
- Wear compression tights
- Try sleeping with your legs higher than the rest of your body
- Keep active and introduce simple foot exercises

Haemorrhoids appear when the veins in your rectum swell. They can get worse with pushing or straining, especially with constipation and during delivery. Being overweight or having haemorrhoids before pregnancy can also make them worse.

To help manage the discomfort, it is best to:

- Sit in a warm bath several times a day for about 10 minutes
- Use ice packs or a cold compress to reduce the swelling
- Ask a GP about creams or other medicines, such as stool softeners
- Drink lots of water and eat lots of fibre to prevent constipation

After giving birth, when the physical pressure on the veins and blood volumes are back to normal levels, varicose veins usually become less pronounced and may even disappear fully. Haemorrhoids also tend to reduce in size and disappear on their own. If you have any concerns, a doctor can advise you on how to get help.

Did you know?

During pregnancy, the volume of blood in your body increases by 50% to help support the womb and baby.

Fertility and infertility

What to expect

It's normal to become pregnant within a year – 80% of all couples do so, but fertility decreases with age, especially after 35.

Trying to conceive can be a very challenging and emotional process, so it's important to support each other as much as possible. Fertility can be affected by many different things:

- Problems with ovulation, for example PCOS or thyroid problems
- Cervical mucus problems
- Fibroids
- Endometriosis
- Pelvic inflammatory disease
- Certain prescribed medications and illegal drugs
- Alcohol

If you are in the early stages of planning a pregnancy, the best place to start is to make sure your body and lifestyle are as healthy as possible.

- Stay fit and active
- Aim for a healthy BMI
- Stop smoking
- Cut down alcohol and caffeine
- Try to reduce stress in your life

Other lifestyle changes can help boost your fertility too:

- Keep track of your fertile days
- Have lots of sex
- Take a prenatal supplement
- Choose a paraben and glycerin-free lubricant
- Change to a non-hormonal contraception

If you are struggling to get pregnant, you may be referred to a fertility clinic for further investigation. For 1 in 4 couples struggling to conceive, a cause will not be found.

When to seek medical help

You have not conceived after a year of trying

You are concerned about your fertility, perhaps after having treatment for cancer or a sexually transmitted infection (STI)

You or your partner have a known condition that affects fertility

Dr Henderson's advice

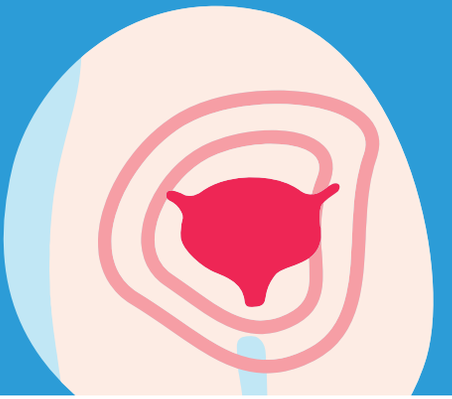
"Most couples conceive normally within a year of regular unprotected sex. However for others this may not happen, and this can be an upsetting time. If you are worried about your fertility, particularly after a year, speak to a GP. Sometimes simple things like reducing stress, cutting out alcohol and losing weight can help, otherwise you or your partner may need further tests."

Dr Rosén's advice

"Couples can be referred to a gynaecologist to investigate any potential causes. You might be offered further invasive, imaging or surgical procedures. It's possible that your problems with fertility are caused by hormonal imbalances, fibroids or scar tissue. There are lots of methods used to help couples get pregnant, such as hormone supplements, medication and assisted reproduction, but it very much depends on your individual situation."

Spotlight on...

Assisted reproduction consists of different techniques. We take a closer look at how these work.



Intrauterine insemination (IUI)

Intrauterine insemination involves directly inserting sperm into a woman's womb.

In vitro fertilisation (IVF)

IVF is a process that involves combining an egg from the woman and sperm from the man outside the body to create an embryo, which is then placed back into the womb.

Did you know?

Your chance of success with IVF may be higher if you are under the age of 37, you have been pregnant before and you have a healthy body mass index (BMI) between 19 and 30. Around 1 in 4 IVF procedures lead to a successful pregnancy.

Intracytoplasmic sperm injection (ICSI)

This is a similar technique to IVF and can be used if there is reduced male fertility. Sperm is injected into the egg and the embryo is placed back in the womb.

Menopause

What to expect

The menopause is a natural part of a woman's life that usually occurs between the ages of 44 and 55. In the UK, the average age for a woman to reach the menopause is 51.

Menopause is the ageing process of a woman's ovaries, affecting their production of oestrogen and progesterone, and eventually causing periods to stop.

The first stage – known as perimenopause – involves the menstrual cycle becoming more irregular. Although it can be a slow and gradual process, women may experience a range of mild to severe symptoms.

The decrease in hormone levels will affect the body in many different ways, and be different for every person. Medically, you have reached menopause after experiencing no menstrual bleeding for 12 months.

Some of the most common menopause symptoms include:

- Heavy and irregular bleeding
- Hot flushes and night sweats
- Problems sleeping
- Vaginal dryness
- Lack of libido
- Recurring UTIs and incontinence
- Memory or concentration problems
- Psychological effects

When to seek medical help

A known family history of gynaecological cancer

Spotting or bleeding after reaching full menopause

Bleeding or pain during penetrative sex

Persistent bloating or abdominal pain

There are lots of menopause symptoms that overlap with mental and physical health conditions. If you are unsure what could be causing your symptoms, speak to a doctor for help.

If left untreated or misdiagnosed, menopause symptoms can lead to complications or conditions such as vulvovaginal atrophy. This is when decreased oestrogen levels affect the lining of the vagina. You might experience dryness, itching, urinary problems and pain during sex.

It's better to treat these symptoms as early as possible using oestrogen cream to avoid any long-term problems.

Dr Henderson's advice

The menopause can be a difficult time for a woman to navigate, but if you are struggling, make an appointment to speak to a GP and talk through your symptoms. They can advise you on lots of self-help measures to try at home, local support groups and medication options, such as HRT.

Dr Rosén's advice

There will be some situations where your GP will need to refer you to a specialist. For example, if you are experiencing menopause symptoms at a young age or severe symptoms such as heavy bleeding, a gynaecologist might want to rule out other medical conditions. Or if you have a known medical condition that affects your treatment options, they can advise on alternatives.

As well as GPs and gynaecologists, there are other specialists who can offer support for menopause symptoms. Physiotherapists can provide pelvic floor training and psychologists can support you with mental health struggles during this time.

Spotlight on...

Managing the menopause with HRT

Menopause doesn't have to be miserable. There are many different treatments that can help improve your sleep and energy levels, mood and daily functioning.

You might be offered hormone replacement therapy (HRT). HRT can be taken in several forms such as a pill, patch, gel, cream or spray.

Some of the benefits of HRT can include:

- Control of symptoms such as heavy bleeding, hot flushes and sweating
- Keeping bones healthy and strong to reduce risk of fractures
- Keeping the heart healthy
- Lowering risk of colorectal cancer and diabetes
- Improving vaginal symptoms using local HRT

As with any medication there are always possible risks and side effects. With HRT, this depends on the type you take, the length of course and your own medical history.

If you're not sure whether HRT is right for you, a doctor can help you weigh up the pros and cons.

What are the other treatment options?

Non-hormonal medication – there are a range of other medications that can help alleviate menopause symptoms

Physiotherapy – pelvic floor training helps to maintain strength and control especially for vaginal issues such as incontinence

Did you know?

In some parts of the UK only 10% of women going through menopause take HRT, despite 80% of menopausal women experiencing symptoms.

Mental health

What to expect

1 in 5 women have a mental health problem such as depression or anxiety.

Significant hormonal changes from puberty and pregnancy through to menopause can have a big influence on your mental health.

It can be normal to experience mild changes in your mood and how you're feeling as your hormones fluctuate. But in some cases there may be an underlying mental health problem that needs treating.

As your hormones can cause overlapping symptoms with your mental health, it is important to speak to your doctor about any concerns.

When to seek medical help

Your mental health is affecting your relationships, employment and enjoyment of living

Feeling excessively anxious or low

Feelings of self-harm or not wanting to be alive

Dr Henderson's advice

"There are lots of ways you can look after your mental health every day. Most importantly, talk to your family and friends about how you're feeling. If you don't have a network of people to speak to, a GP can recommend local support groups. Make sure you take time to rest, eat healthily and exercise. If these lifestyle measures are not helping, a doctor may prescribe medication or refer you for talking therapy."

Dr Rosén's advice

"There is an expectation that women should feel happy after significant life events like having a baby, but many women are hesitant to admit that they don't feel this way. It's very common for new mothers to feel depressed, confused, frustrated, tired and disillusioned – and that's nothing to feel ashamed of. Support and treatments are available, so speak to a doctor to work out the best options for you."

Spotlight on...

Baby blues

Baby blues is not the same as antenatal (before birth) or postnatal (after birth) depression. It is very normal to feel emotional, overwhelmed and low after having a baby.

The baby blues is a more brief period of low mood, where you often feel tearful around 3 to 10 days after giving birth. Postnatal depression is a much deeper and longer-term depression which can develop gradually or suddenly.

The early stages of parenting can be an emotional rollercoaster and it is very natural to doubt yourself. It may take some time to feel comfortable and confident as a new parent but that is completely normal.

There are lots of ways you can look after your mental health during this time with simple self-care..

- Take time for yourself and delegate tasks like washing
- Rest when you can and try to nap while your baby is sleeping
- Eat as well as you can to help restore your energy levels
- Be aware of your emotions, ask for help when you need it from your partner, friends, family or health professionals
- Get some fresh air with a short gentle walk or introduce 10 minutes of mindfulness to break up the day

Did you know?

Baby blues affect up to 80% of women after they give birth. Although the symptoms can be upsetting, they tend to be mild and will usually pass within 14 days after the birth.

Obsessive compulsive disorder (OCD)

OCD is an anxiety-related condition where a person experiences frequent intrusive and obsessional thoughts, commonly referred to as obsessions. Although there are lots of types of OCD, these thoughts will often fall into the following categories: checking, contamination, symmetry or ordering, rumination, and hoarding.

The condition is more common in women during adulthood. But it is not always widely talked about or understood due to lots of common misconceptions.

- Struggling with obsessive compulsive thinking can often go unnoticed. Friends, family or colleagues may not be aware of or understand the problem. On other occasions you may notice that someone close has a preoccupation with cleanliness or order.
- While stress can affect OCD symptoms, the cause usually lies elsewhere. Differences in the brain, life events and genetics may also come into play.
- Most people with OCD respond well to treatment. Combining medicine and talking therapy like CBT is often a successful strategy.

A GP can advise you on how to access help for OCD and refer you to a specialist if necessary.

Let's Talk!

Kaileigh's story

When I was 13 my nan passed away. They say depression can kick in from a traumatic event, so if I had to identify a turning point, it would be then. After losing her I went through years of being unhappy and not getting the help I needed.

Back then, I was told by a children's mental health service that I might have depression, but was too embarrassed to tell my mum. Sadly my doctor was unhelpful and told me I was too young to have depression.

I didn't tell anyone I was self-harming until 4 years later. I used to get changed for PE in the toilets so nobody saw, but one day a teacher made me get changed with everyone else. I was self conscious and became isolated and lost a lot of weight, before being diagnosed with anxiety and an eating disorder.

But, it was bullying that made me hit rock bottom and led to me having suicidal thoughts. One day my friends all decided to cut me out and I was called a burden.

Starting therapy last year was the best thing I've ever done and helped me through the dark time. I really want people to know about my mental health, so that another 13-year-old like my younger self might get help sooner.

4.
Our pledge to you

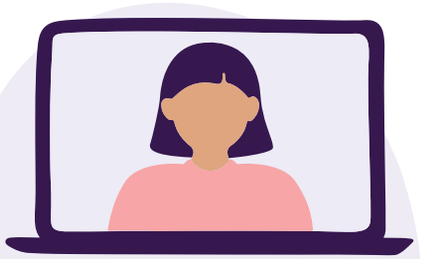
Chapter 8: Empowering women to get the right care

Speaking to a GP will be your first port of call for getting medical help. They may then decide to refer you to a specialist for further investigation.

Here are Dr Henderson's 5 tips on getting the most from a conversation with a GP.

1. Note down a list of your symptoms and any questions before your appointment to help you remember everything

2. Do not be shy to ask for a female GP if this makes you feel more comfortable



3. **Sometimes it helps to have more than one doctor's opinion and you have the right to ask for this**

4. **If you do not understand something, ask for it to be explained again, and consider taking a notebook to record useful information for family or follow-up conversations**

5. Ask for online resources to look over at home that can help you digest new or complex information

If you are referred to a specialist in women's health, here are Dr Rosén's tips to get the most from your appointment.

1. Be open with your doctor if you are feeling anxious, especially before an examination – they can reassure you and help you relax to prevent any discomfort

2. **Remember that a gynaecologist sees every female body as normal, and will not be alarmed if you are on your period**

3. Communication is key to building trust with your doctor so let them know if you want things explained again or differently, as well as during an examination – every person will have their own needs

4. Not all conditions are straightforward and so it can be beneficial to seek a second opinion

5. Even if you have done your own research or self-diagnosed, keep an open mind when speaking to a doctor

6. **If you feel you're building a good relationship with a gynaecologist, ask to see the same one again**

What we can help with

You can speak to a Livi GP about any health concern or symptom, and our doctors can provide medical advice, prescriptions, specialist referrals and sick notes if necessary.

In the meantime, you can find expert advice and health and lifestyle tips from our medical team to help protect you against illnesses, get treatment for a health problem or manage a long-term condition.

If you don't find the information you're looking for in our medical guides, you can speak to a Livi GP about your symptoms today.

Chapter 9: Our commitment to women

GP training and support

As part of our commitment to close the gender health gap, Livi is providing specialist women's health training, not only to our own GPs, but free to thousands more doctors across the UK.

We have already run training sessions on menopause that increased GPs' self-assessed knowledge of treatment options for menopause-related symptoms from an average 4.6 out of 10 to 8 out of 10.

We have further professionally certified training sessions planned on issues such as menstruation and the menopause to increase clinical expertise and confidence, which will be offered to over 2,000 GPs across the UK. Our training events will also be live-streamed to allow physicians to access the training at any time.

As well as the training, Livi has created a flexible and supportive environment for our GPs and members of staff, attracting a 70% female workforce. We offer female GPs, psychologists and nurses a sustainable career choice that fits around them. We strongly believe this benefits our female patients who will see healthcare professionals likely to understand their specific needs.

Improved health systems

Livi offers millions of patients increased access to effective primary care, regardless of their gender, age or background. 60% of our active patients are female.

While it's true that our doctors can provide female patients with contraceptives, hormone replacement therapy, STI kits, and PMS medication, we think the most important thing we can offer women doesn't require a prescription.

Women need health services that work for them. Our scale means we are uniquely placed to spot trends in women's healthcare, identify the gaps, and design services to fill them. Our practice messaging platform enables our 4,000 GP practices to distribute questionnaires that identify a range of patient demographics to help address inequalities and better serve the health needs of women. Among other targeted campaigns, we send out messages to women to increase engagement in cervical screening programmes too.

To accompany this book, we have launched a dedicated women's health hub on our website, with information and advice from our team of doctors about a range of health issues that affect women. We hope this resource will help to answer questions and provide reassurance, and we will continue to update it with the most up-to-date medical information available.

References

Part 1: An uneven medical field

https://www.gov.uk/government/publications/our-vision-for-the-womens-health-strategy-for-england/our-vision-for-the-womens-health-strategy-for-england

https://journals.sagepub.com/doi/pdf/10.2217/17455057.4.3.237

https://pubmed.ncbi.nlm.nih.gov/11521267/

https://www.nature.com/articles/s41467-019-08475-9

Part 2: The Yentl Syndrome

Chapter 1: Heart disease

https://www.bhf.org.uk/what-we-do/in-your-area/wales/campaigning-and-influencing/bias-and-biology-the-heart-attack-gender-gap-wales

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8263972/

Chapter 2: Stroke

https://www.degruyter.com/document/doi/10.1515/dx-2013-0038/html

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5361750/

https://www.stroke.org.uk/what-is-stroke/are-you-at-risk-of-stroke/women-and-stroke

Chapter 3: Autoimmune disease

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7292717/

https://www.sciencedirect.com/science/article/abs/pii/S1568997212000225?via%3Dihub

https://www.bbc.com/future/article/20180523-how-gender-bias-affects-your-healthcare

https://www.eurordis.org/IMG/pdf/voice_12000_patients/EURORDISCARE_FULLBOOKr.pdf

https://www.mssociety.org.uk/research/latest-research/latest-research-news-and-blogs/ground-breaking-research-into-autoimmune-conditions

Chapter 4: Dementia

https://www.alzheimers.org.uk/blog/why-dementia-different-women

Chapter 5: Cancer

https://www.bma.org.uk/media/2112/bma-womens-health-cancer-in-women-aug-2018.pdf

https://www.nejm.org/doi/full/10.1056/NEJMoa1206809

https://targetovariancancer.org.uk/about-us/media-centre/key-facts-and-figures

https://www.cancer.org/content/dam/CRC/PDF/Public/8775.00.pdf

Part 3

Chapter 6: Helping women be heard

https://www.gov.uk/government/publications/our-vision-for-the-womens-health-strategy-for-england/our-vision-for-the-womens-health-strategy-for-england

https://www.nationalhealthexecutive.com/articles/closing-gap-womens-health-outcomes

https://www.bbc.co.uk/news/health-60941950

https://hertilityhealth.com/thehertilitystory

https://hertilityhealth.com/research

Chapter 7: Who's an expert on your body?

https://www.nhs.uk/

https://helloclue.com/articles/cycle-a-z/pcos-and-pregnancy

https://www.endometriosis-uk.org/endometriosis-facts-and-figures#5

https://bjgp.org › content

https://www.mentalhealth.org.uk/a-to-z/w/women-and-mental-health

Many women still do not feel understood and heard in the context of their bodies. This is often down to the fact that there is simply not enough data or research available still.

We know most doctors really do work hard to help as much as they can, but the data and knowledge hasn't caught up yet and this gender data gap is at the root of systemic discrimination against women.

Medical research focusing mainly on men is damaging women's health, resulting in misdiagnoses and potentially threatening lives.

This is where this book comes in.

Emma Gannon,
best-selling author and podcaster

livi