

# Women's Health: a life course approach

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The unmet health needs of women<sup>1</sup> present a major health and social justice inequality. This is not just a women's issue: health in pregnancy influences the long-term health of children, regardless of gender<sup>2</sup>, and women's health affects the economy and, with 75% of carers worldwide being women, the health of those they care for.

This symposium on women's health was jointly hosted by the Academy of Medical Sciences' FORUM and the Royal Society in October 2021. Speakers discussed examples of innovations that benefit women's health, and considered how to overcome the societal challenges and barriers to building systems, in healthcare and beyond, that meet the needs of all women at different stages of their lives.<sup>3</sup>



## Inequalities in health

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In the UK, 51% of the population and 47% of the workforce are women, yet health systems have deprioritised women's health issues and the funding for research of women's health is much less than for research of men's health issues.

- There is a default male bias in healthcare. For example, women are 50% more likely to be wrongly diagnosed when they have a heart attack and are less likely to be prescribed medications to help prevent a second attack. Women with dementia have fewer visits from their GP, receive less health monitoring, and take more potentially harmful medication than men with dementia.
- In wider society, women are more likely to be primary carers, which can result in them seeking medical care later. In the workplace, they face gender-based discrimination and stigma when they suffer ill health and menopause-related symptoms. The COVID-19 pandemic has widened this inequality.
- Women's representation remains low in clinical trials, particularly in phase 1 trials ( $\approx 22\%$ ). The consequence of this exclusion, both historical and current, is that women are more likely to suffer adverse drug reactions. For example, of the ten drugs the

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<sup>1</sup> While we use the terms 'women' and 'girls' throughout, the Academy is aware that we live in a gender diverse society. The [limited evidence](#) available about the care and experiences of transgender, non-binary and intersex individuals within the UK healthcare system suggests that these groups face discrimination within the health system and worse health outcomes.

<sup>2</sup> The concepts of sex and gender [are inextricably linked](#) but not equivalent, and both impact health. Throughout this response, we will be using the [ONS definitions](#) of 'sex' and 'gender'.

<sup>3</sup> For references and further reading: <https://acmedsci.ac.uk/file-download/3321727>

FDA removed from the market between 1997 and 2000, eight posed greater risks to women.

- Pregnant women are generally excluded from clinical trials, leaving women and clinicians to make healthcare decisions without the evidence they need. Furthermore, the symptoms of pregnancy are overlooked, with very few treatments available or in development. Only one medicine designed for use in pregnancy has been licensed in the last 30–40 years, only five prescription medicines are licensed for non-obstetric use during pregnancy in the UK, and 98% of medicines have insufficient or no safety data to guide dosing during pregnancy and lactation.

## Opportunities for improving women's health across all stages of the life course

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Women's health needs change throughout their lives. Approaches to improving women's health at different stages of their life were discussed, including:

**Education:** Education of both genders is critical to giving people the vocabulary they need to understand and ask about women's health issues, and to tackle misconceptions and stigma around issues like endometriosis, menstruation and menstrual conditions, and menopause. There are a few particularly useful intervention points for such education: at school and during the pre-pubertal years; young adulthood; and the post-partum period.

**Promoting menstrual equity:** An estimated one-quarter of the world's population of women and adolescent girls of reproductive age say they do not have everything they need to manage their menstruation. Challenges include menstrual stigma, insufficient menstrual education, and limited access to menstrual materials, toilets with water, mechanisms for disposal of used materials, or privacy. Breaking taboos around menstruation will require education of young people who menstruate, their parents and communities about this normal physiological process.

**Sexual attitudes and lifestyles:** The National Surveys of Sexual Attitudes and Lifestyles (NATSAL) provide a holistic view of sexual health in the UK population. Surveys have taken place in 1990, 2000 and 2010. The findings have fed into policies for major sexual health interventions, such as the HPV vaccine being recommended for the NHS immunisation programme, which has led to a significant reduction in the prevalence of HPV-16/18 in the targeted age groups, and improvement of school education on relationships and sex.

**Pelvic floor dysfunction (PFD) and preventive healthcare:** The post-partum period is a key point determining women's long-term health. For example, PFD is commonly reported after pregnancy and its prevalence increases over the life course, as does urinary incontinence and faecal incontinence. Risk factors such as mode of delivery and body mass index can be used to predict PFD and to target interventions that can help prevent PFD and incontinence in later life, such as pelvic floor muscle training, to women most at risk.

### **Menopause and menopause-related symptoms (MRS)**

In the UK alone, there are ~13 million women going through the menopause or perimenopause (the transition to menopause). MRS vary significantly between individuals but commonly include hot flushes, night sweats and difficulty sleeping. For 20–40% of women the symptoms are debilitating, affect their daily lives, and can last for up to 10 years. Although hormone replacement therapy is effective to treat MRS in many women, regulators of neurokinin pathways are also being explored as non-hormonal alternatives.

**Digital health:** Digital technology and platforms that focus on women's health is a rapidly expanding industry, expected to be worth around £60 billion by 2027. Pregnancy, postpartum and parenthood is currently the largest segment within the market and there are opportunities in other, underserved areas of women's health such as menopause. Technology can be used to empower women in different ways, such as providing information about health, making services more convenient and accessible, and providing support. Furthermore,

health technology can reduce health inequalities if used thoughtfully and with meaningful end-user engagement during development.

## Policy interventions to improve the health of women

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Improving women's health will require systemic change. In addition to the clinical, educational, and technological approaches mentioned above, policy interventions for the improvement of women's health discussed included:

**Women's Health Strategy:** Scotland's 2021 Women's Health Plan and England's upcoming Women's Health Strategy present a significant opportunity to improve women's health and to remove systemic barriers to meeting women's health needs. Following a call for evidence this year, England's Strategy is due to be published in 2022.

**'Health in all policies':** Although the Women's Health Strategy marks an important recognition of the unmet need in women's health, the principal determinants of health lie outside healthcare – recent estimates indicate that healthcare services contribute only about 11% to health overall. 'Health in all policies' approaches are difficult to deliver but there are successful examples. For example, Tower Hamlets in London has delivered a holistic healthcare approach, joining housing, the job centre, health, and other services.

**Prioritising women's health research:** Women's health research has not been prioritised by research funders, meaning there are gaps in scientific and medical knowledge for women's health issues and conditions. A women's health fund – similar in approach to the Diabetes Transformation Fund, which had a significant impact – could help redress this imbalance.

**Improving the quality and relevance research:** Furthermore, to improve the quality of research and its relevance to women, research funders, sponsors and regulators should require as default the inclusion of both sexes in preclinical and clinical studies and in research and development where relevant. Data should be disaggregated where relevant, so that it can be evaluated by sex and by other subgroups.

## Working together and building awareness

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Improving the health of women will benefit all of society. Increased collaboration and awareness will help to achieve this goal.

- The women's health field as whole needs to consider how best to build awareness, with men as well as women, of the unmet need in women's health and the burden this places on society as a whole. Reaching people who are not already engaged on this issue remains a challenge; for example, only 12% of registered attendees at this symposium were men – an imbalance not unique to this event. Empowering men and women from all backgrounds to be advocates, drivers and innovators for women's health will be essential, as will finding new ways to support groups already working in this area.

*"Men, as well as women, need to hear about this because it is an issue affecting us all, directly and indirectly – women make up half of our colleagues, families and more than half of carers worldwide."*

Dr John Elvin, Industry Programme Manager, Royal Society.