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Menopause's toll: how universities can help

Some women are leaving science because their employers are failing to support them during this stage of life. That can't be right.

LUIS ALVAREZ/GETTY

Menopause coincides with a time when people move into more senior roles.

Half of all the people on Earth will go through menopause. It is a natural part of ageing, affecting the majority of women, as well as some trans men and non-binary people. Levels of hormones including oestrogen, progesterone and testosterone decline, causing symptoms that can last a decade or more. Unfortunately, it is only in the past decade or so that its effects on women's lives and careers have been the focus of more than a handful of studies.

Women don't need telling that menopause symptoms, such as insomnia, fatigue and difficulty focusing, can have a major impact on their lives. Researchers are now discovering that such symptoms also disrupt a significant number of careers. In Japan last year, a study of thousands of people — the country's first to focus on menopause and work — found that 'menopausal loss' affected one-fifth of women experiencing menopause, who quit, turned down promotions, reduced their working hours or were demoted as a result of their symptoms (see go.nature.com/38sf3uh).

Menopause often comes at a time when people move into more senior, more demanding roles. In research, as in other careers, this coincidence is almost certainly causing some to reconsider their career ambitions, adding yet another drain to the 'leaky pipeline' of women in science. Women going through this stage of life shouldn't have to row back or leave careers because of a lack of support from employers, as we report in a Careers Feature (see *Nature* **605**, 381–384; 2022). Everyone must make their own choices, but no one should feel forced into any decision because of an unwelcoming workplace.

There are many ways in which research workplaces can support staff going through menopause, as the authors of an essay last month in *BDJ Team* suggest (J. A. Bell *et al. BDJ Team* **9**, 24–26; 2022). Offering flexible working hours and accepting menopause symptoms as a valid reason to take sick leave are good places to start. Some workplaces are also creating quiet spaces for staff; this not only helps those experiencing noise sensitivity, hot flushes and other symptoms of menopause, but also benefits those seeking quiet time for other reasons.

In some countries, people have established peer networks — either in-person or virtual — to support women going through menopause. One example is Red Hot Mamas in Canada and the United States. Another is menopause 'cafés', which began in the United Kingdom and offer informal gatherings that anyone, regardless of sex or gender, can attend to learn about and discuss menopause over a bite to eat and a drink.

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The Royal Society in London, the world's oldest science academy, launched a menopause support group for staff last year and is drawing up guidelines to ensure that women know how to access support, such as adjustments to roles, working hours or technology. The University of Nottingham, which has campuses in the United Kingdom, China and Malaysia, also has guidelines to help managers support staff going through menopause. This could include offering flexible working hours or better ventilation — by providing desk fans, for example, or, better still, using innovative approaches to interior architecture and design.

Workplaces can also offer advice on how to manage symptoms or provide information on where to obtain such advice — although more research is needed in this area, too.

However, such support needs to be offered with care. If institutional policies and support programmes are drawn up without involving the individuals most affected, they risk making those they aim to support feel self-conscious and stigmatized. Several women contacted by *Nature* expressed concern that highlighting the challenges some women face during menopause could put academic employers off hiring older women. Those fears are understandable, and there should be some ground rules for the discussion. Institutions should never force anyone to disclose their menopause status, nor require them to engage in discussions of the topic if they prefer not to.

Doing nothing should never be an option. Many employers (including Springer Nature) are pledging workplace support for people experiencing menopause. These pledges include ensuring that they are listened to, should they approach their managers, and that practical support is available. But these are just first steps. There is more

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that all employers, including those in the scientific and research space, can do.

The research community also needs to devote more attention and resources to studying the impact of menopause on careers everywhere, not just in high-income countries. And those organizations that have not yet started to address the difficulties that menopause can pose for working life need to do so now. It's time for the stigma around menopause to be lifted. Doing so will make research a better place to work for everyone.

Raising the bar on sex and gender reporting in research

Authors submitting to Nature journals will be prompted to provide details on how sex and gender were considered in study design.

In late 2020, the European Commission announced that its research-grant recipients would need to incorporate analyses of sex and gender in their study design. This could include disaggregating data by sex when examining cells, or considering how a technology might perpetuate gender stereotypes. Back then, *Nature* wrote that this was a significant step and urged other funders to follow suit (see *Nature* **588**, 196; 2020). At the same time, we said that publishers, too, have a role in encouraging sex and gender reporting. The responsibility does not lie only with funders.

Some journals have encouraged reporting of sex and gender analyses for years, and the number of research studies that include such data has increased substantially in the past decade. But gaps remain — especially insufficient reporting of data disaggregated by sex and gender[1–3].

To remedy this, from now on, researchers who submit papers to a subset of Nature Portfolio journals (see list at go.nature.com/3mcu0zj) will be prompted to state whether and how sex and gender were considered in their study design, or to indicate that no sex and gender analyses were carried out, and clarify why. They should note in the title and/or abstract if findings apply to only one sex or gender.

They will also be asked to provide data disaggregated by sex and gender where this information has been collected, and informed consent for reporting and sharing individual-level data has been obtained. The changes apply to studies with human participants, on other vertebrates or on cell lines, in which sex and gender is an appropriate consideration.

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Many research studies don't account for sex and gender.

> **"We aim to promote transparency in study design and, ultimately, make findings more accurate."**

At the same time, we're urging care and caution in communicating findings about sex and gender, to avoid research findings having inadvertent and harmful effects, especially where there is the potential for societal and public-policy impact. More details about these changes can be found at go.nature.com/3mcu0zj. They are part of the SAGER (Sex and Gender Equity in Research) guidelines[4].

In addition, from 1 June, four journals — *Nature Cancer*, *Nature Communications*, *Nature Medicine* and *Nature Metabolism* — will be raising awareness of the updated recommendations in letters to authors and reviewers during peer review. The aim here is to improve understanding of the degree to which sex and gender reporting is already part of study design, data collection and analysis in the research these journals publish. The journals will also evaluate author and reviewer reception of the changes so that we can iterate on them as we learn through experience.

The new measures are needed because research is still mostly failing to account for sex and gender in study design, sometimes with catastrophic results. Between 1997 and 2001, ten prescription drugs were withdrawn from use in the United States; eight of these were reported to have worse side effects in women than in men (we recognize that not everyone fits into these categories). These differences had probably been missed, in part, because of insufficient or inappropriate analysis of data on sex differences during clinical trials.

By introducing these changes, we aim to promote transparency in study design and, ultimately, make findings more accurate. Over time, we hope to see integration of sex and gender analysis in study design by default.

1. Woitowich, N. C., Beery, A. & Woodruff, T. *eLife* **9**, e56344 (2020).
2. Rechlin, R. K., Splinter, T. F. L., Hodges, T. E., Albert, A. Y. & Galea, L. A. M. *Nature Commun.* 13, 2137 (2021).
3. Brady, E., Wullum Nielsen, M., Andersen, J. P. & Oertelt-Prigione, S. *Nature Commun.* **12**, 4015 (2021).
4. Heidari, S. *et al. Res. Integr. Peer Rev.* **1**, 2 (2016).