

Women in STEM: Challenges Faced During the Pandemic

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Post Url

<https://www.enago.com/academy/female-researchers-during-pandemic/>



How are you coping with lockdown during this pandemic? Like many people, I have had good days and bad days. Compared to many others, I have been lucky. I am well, I still have a job and I have a comfortable place to spend the lockdown.

Recently, during a Zoom catch-up, I asked some of my colleagues – most of whom are male – how they are coping with the situation. Later, when I was thinking about their responses, I realized that [there are a few differences](#) between our experiences of lockdown.

*Enago is proud to inform our partner NCURA has organized a free information session on **Women in Innovation, STEM, and Research** on the **24th of September at 11 am EST/ 5 pm CET**. The session will provide*

insights on (1) global and regional barriers to increasing women in research particularly in STEM, (2) innovative institutional interventions to change the status quo, and (3) importance of diversity in inclusion in STEM. [Register now!](#)

Different Challenges in Lockdown

Like everyone else, researchers are working from home when possible, or using social distancing if they have to work in the lab. Of course, when work, home and family life all happen in the same space, tensions can arise.

During our chat, my male colleagues mostly mentioned work stresses and problems as the biggest challenges they face during lockdown. However, if someone were to ask me about the difficulties of living in lockdown, I would give a different answer. I would mention the problem of juggling home-schooling my children with my own work, and of finding time to write papers when I also need to cook, clean and check up on my elderly parents.

Is my experience unique, or are women really doing more domestic work in lockdown? Unfortunately, [research suggests that they are](#). During lockdown, women tend to spend longer on childcare and household chores – even when, for example, a husband and wife are doing the same amount of paid work. This is especially challenging for mothers. One study found that home-working mothers are interrupted by their children far more than fathers are!

Are Female Researchers Falling Behind in Lockdown?

Researchers seem to experience the same challenges during lockdown as everybody else. One female researcher from the University of Toronto has discovered that [women are producing fewer papers](#) than men during the pandemic. Megan Frederickson, an ecologist, looked at preprint servers to find out any difference in the number of papers published by men and women. She discovered that, across diverse scientific fields, women's publishing rate has fallen relative to that of their male colleagues.

Frederickson focused on two different preprint servers, bioRxiv (for life science preprints) and arXiv (for physical sciences.) She compared March and April 2020 with the same time last year. Interestingly, on both servers slightly more preprints were issued, by both men and women, than last year. However, while the number of male authors had increased by 6.4%, for women the figure was just 2.7%.

Frederickson notes that, so far, the duration of lockdown has been fairly short (although it may not feel like it!). The few months of lockdown represent just a small part of the normal research timeline. Preprints appearing on servers now will, in many cases, describe work completed months ago. This delay means that we will have to wait to see the true impact of the pandemic on research publishing.

Why Are Women in STEM Falling Behind?

So why are female researchers falling behind? Basically, it seems like female researchers are taking on more domestic work during the pandemic. Top amongst these are caring responsibilities, not only for children but also for elderly or sick relatives. Also, male researchers are far more likely to have a spouse who is not in paid work, and can devote their time to domestic tasks. One study found that male faculty members are four times more likely to have a partner engaged in full-time domestic work, compared to their female colleagues.

Many researchers who can contribute to COVID-19 work are actually busier than ever. However, it seems that we, women are less likely to be [involved in this research than men](#). Why this might be is not clear. It could be because women are less willing to take the risk of moving to a new research area. There have even been suggestions that employers are more likely to hand new projects to men. This is because some employers believe that women are more likely to be involved in childcare, and thus less able to devote time to their career.

Will the Pandemic Increase Gender Disparities in STEM?

Unfortunately, for many female researchers and academics like me, gender disparities are not new: they have simply been highlighted by the pandemic. While progress has been made in recent years, there is still [gender inequality in many STEM areas](#). This is particularly true for women of color. Some academics believe that, unfortunately, the current pandemic will cause some of the progress that has been made in tackling gender disparity to be lost.

In a recent article, 35 female scientists explained [how the pandemic is reinforcing gender inequalities](#). One important point was that women are often expected to do the bulk of the “invisible work.” This includes, for example, supporting students and colleagues; valuable yet easily overlooked duties when it comes to career advancement.

Unfortunately, these issues seem to affect early-career female researchers most of all. Unless steps are taken to correct gender disparity, we could soon see many young female researchers leaving for other careers.

Moving Past the Pandemic

There are a few things that institutions and individuals can do to help:

- Extend deadlines for programme and job applications, for funding, for publication. This will ensure that any researchers who have other responsibilities during the pandemic have time to catch up. If your institution isn't doing this, why not ask?
- Find new ways to ensure that all members of a research team can contribute at this time. This could be something as simple as changing the time of Zoom

meetings.

- Don't neglect mentorship and other support structures. For some researchers, they might be more important than ever.
- Finally, as lockdown ends, remember: "We are all in the same storm, but not in the same boat." For some researchers, getting back to "normal" will take longer than others.

Are you a female researcher who has experienced work challenges during the pandemic? Do you have any tips to help others? Share your thoughts in the comments below.

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