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Opinion

Academic motherhood – what happens when you can't make it happen?

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Balancing motherhood and a career in academic research is a formidable challenge, and there is substantial literature available on the many difficulties that scientists and mothers face (Kamerlin, 2016). Unsurprisingly, these challenges are very off-putting for many female scientists, causing us to keep delaying motherhood while pursuing our hypercompetitive academic careers with arguments "I'll wait until I have a faculty position", "I'll wait until I have tenure", and "I'll wait until I'm a full professor". The problem is that we frequently end up postponing getting children based on this logic until the choice is no longer ours: Fertility unfortunately does decline rapidly over the age of 35, notwithstanding other potential causes of infertility.

This column is therefore not about the challenges of motherhood itself, but rather another situation frequently faced by women in academia, and one that is still not discussed openly: What if you want to have children and cannot, either because biology is not on your side, or because you waited too long, or both? My inspiration for writing this article is a combination of my own experiences battling infertility in my path to motherhood, and an excellent piece by Dr. Arghavan Salles for *Time* Magazine, outlining the difficulties she faced having spent her most fertile years training to be a surgeon, just to find out that it might be too late for motherhood when she came out the other side of her training (Salles, 2019). Unfortunately, as academic work models remain unsupportive of parenthood, despite significant improvements, this is not a problem faced only by physicians, but also one faced by both myself and many other women I have spoken to.

I want to start by sharing my own story, because it is a bit more unusual. I have a very rare (~ 1 in 125,000 in women (Laitinen *et al*, 2011)) congenital endocrine disorder, Kallmann syndrome (KS) (Boehm *et al*, 2015); as a result, my body is unable to produce its own sex hormones and I don't have a natural cycle. It doesn't take much background in science to realize that this has a major negative impact on my fertility—individuals with KS can typically only conceive with the help of fertility treatment. It took me a long time to get a correct diagnosis, but even before that, in my twenties, I was being told that it is extremely unlikely I will ever have biological children. I didn't realize back then that KS in women is a very treatable form of infertility, and that fertility treatments are progressing forward in leaps and bounds. As I was also adamant that I didn't even want to be a mother but rather focus on my career, this was not something that caused me too much consternation at the time.

In parallel, like Dr. Salles, I spent my most fertile years chasing the academic career path and kept finding—in my mind—good reasons to postpone even trying for a child. There is really never a good time to have a baby in academia (I tell any of my junior colleagues who ask to not plan their families around "if only X…" because there will *always* be a new X). Like many, I naïvely believed that *in vitro* fertilization (IVF) would be the magic bullet that can solve all my fertility problems. I accordingly thought it safe to pursue first a faculty position, then tenure, then a full professorship, as I will have to have fertility treatment anyhow. In my late twenties, my doctors suggested that I consider fertility preservation, for example, through egg freezing. At the time, however, the technology was both extravagantly expensive and unreliable and I brushed it off as unnecessary: when the time comes, I would just do IVF. In reality, the IVF success rates for women in their mid-to-late 30s are typically only ~ 40% per egg retrieval, and this only gets worse with age, something many women are not aware of when planning parenthood and careers. It is also an extremely strenuous process both physically and emotionally, as one is exposed to massive doses of hormones, multiple daily injections, tremendous financial cost, and general worries about whether it will work or not.

Then reality hit. What I believed would be an easy journey turned out to be extremely challenging, and took almost three years, seven rounds of treatment, and two late pregnancy losses. While the driving factor for my infertility remained my endocrine disorder, my age played an increasing role in problems responding to treatment, and it was very nearly too late for me, despite being younger than 40. Despite these challenges, we are among the lucky ones and there are many others who are not.

I am generally a very open person, and as I started the IVF process, I talked freely about this with female colleagues. Because I was open about my own predicament, colleagues from across the world, who had never mentioned it to me before, opened up and told me their own children were conceived through IVF. However, many colleagues also shared stories of trying, and how they are for various—not infrequently age-related—reasons unable to have children, even after fertility treatment. These experiences are so common in academia, much more than you could ever imagine, but because of the societal taboos that still

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surround infertility and pregnancy and infant loss, they are not discussed openly. This means that many academic women are unprepared for the challenges surrounding infertility, particularly with advanced age. In addition, the silence surrounding this issue means that women lose out on what would have otherwise been a natural support network when facing a challenging situation, which can make you feel tremendously alone.

There is no right or wrong in family planning decisions, and having children young, delaying having children or deciding to not have children at all are all equally valid choices. However, we do need more openness about the challenges of infertility, and we need to bring this discussion out of the shadows. My goal with this essay is to contribute to breaking the silence, so that academics of both genders can make informed choices, whether about the timing of when to build a family or about exploring fertility preservation—which in itself is not a guaranteed insurance policy—as relevant to their personal choices. Ultimately, we need an academic system that is supportive of all forms of family choices, and one that creates an environment compatible with parenthood so that so many academics do not feel pressured to delay parenthood until it might be too late.

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