

Women in medical education: an exploration of female educators' narratives

C4ME SUPPLEMENT

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Link to YouTube Video:

<https://www.youtube.com/watch?v=45Bk0fDilaA>

Background

During the last decade, growing evidence has shown that women are underrepresented in medical education, particularly in senior roles. (1) Medical education is a subset of academic medicine and encompasses the fields of research, management, curriculum design and assessment. (2) A 2018 report by the Medical Schools Council found that the proportion of women in academic medicine decreases with increased seniority, with only 19% of the UK's medical professors being female. (1, 3)

Some implementations, such as programmes in mentoring, have attempted to combat gender imbalance in academic medicine; (4) however, these are poorly evaluated and primarily conducted in the US. A shortage of women in medical education may lead to a loss of intellectual capital and potentially cause issues with staffing as the proportion of women entering clinical medicine continues to rise. (4-7)

A literature review using the Medline Via Ovid database revealed little information on the reasons behind the underrepresentation of women in medical education. The primary aim of this study is to explore the narratives of women medical educators in the UK at a point of career crossroads to investigate the factors which may advance or retard career progression.

Methods

Due to the exploratory nature of the study, the researchers adopted an inductive approach using qualitative methods. Interview participants were recruited via a two-step self-selection process. Firstly, a short survey was distributed via the AOME twitter account inviting female medical educators to complete a case report on their experience of a career crossroads. These written data were analysed in a separate report. The survey provided an option for women to leave details to be contacted for an interview. The target participants were female medical educators from the UK who were members of an official academy or network of medical education.

Three researchers (KW, JB and LA) conducted semi-structured telephone interviews to investigate the experiences of female medical educators. A topic guide ensured a consistent interview approach.

Grounded theory analysis was employed to generate theoretical concepts. This was deemed appropriate for the research topic as the literature review revealed little pre-existing research on women in medical education. To ensure rigorous analysis the interviews were double-coded. Two reviewers coded the transcripts independently and undertook discussions of the coding with a third reviewer present. An analytical framework was developed collaboratively by all three researchers and transferred to NVivo, allowing structured visual organization. The framework was continually adapted, and new codes added as they emerged. New themes were still being identified throughout analysis, suggesting that data saturation was not reached. However, the data collected were rich and informative, giving good insight into women's experiences.

To minimise researcher bias, the author employed reflexivity throughout the process and considered her own position as a woman in medical education who may have her own preconceptions.

The Cardiff University School of Medicine Research Ethics Committee granted ethical approval in 2018, prior to data collection. An ethical amendment was passed in September 2019 for the author to access the data, conduct data analysis and collect further data if required.

Results

A sample size of $n=9$ was achieved, generating 6 hours, 37 minutes of data.

The effect of gender

Only one participant noted explicit gender bias within a male-dominated workplace. The others did not mention it.

There was evidence of internalised gender bias by some of the women, particularly through their use of gendered language. Participant D stated feeling she needed to "*man-up and get some resilience*", whilst participant I claimed that she was not the "*wishy-washy female type*".

This suggested that the women were influenced by stereotype threat, whereby women may be less likely to pursue leadership as they fear others regard them as less suited to these typically masculine positions. (7)

Some of the women denied any influence of gender upon their career path, but subsequently described how gender-related experiences, such as being a single mother, had affected their job progression. Many of the women perceived an incompatibility between active parenting and senior professional roles, providing another possible explanation for the lack of women in leadership in medical education:

"Does [my gender] affect me sitting on national boards? Yes, because I'm a mummy... maybe a little more than that I'm a single mummy." – Participant D

Motivators

A variety of intrinsic and extrinsic motivators were identified in driving the progression of the women's career paths. These included the intrinsic motivators of personal interest and an established medical educator identity and extrinsic motivators of gaining qualifications and funding for research, having effective role models and creating meaningful professional networks.

Discussion

The challenges of establishing a medical educator identity, overcoming gender bias, gaining social capital, creating meaningful networks and achieving required qualifications often outweigh the perceived reward of leadership roles. The complexity of navigating

these factors often inhibits women from fully participating in and taking up opportunities since they may perceive more senior roles as being incompatible with other aspects of their lives. To combat the continued presence of implicit gender bias in the workplace, a change in workplace culture and the implementation of additional work-facilitating policies are vital. (8)

Establishing meaningful workplace networks was found to be important for female medical educators. However, literature suggests that women are more likely to experience guilt and shame from utilising professional networks than men. (9) Guidance for female networking could prove useful in reducing feelings of shame and generating effective networks in the workplace.

Overall, by exploring the narratives of nine women, this study has revealed the complex interaction of multiple factors, which influence the pathway of female medical educators. There are many changes in workplace culture and structure as well as in the support networks provided for women that could contribute to increasing female representation. More research is required in these areas to generate achievable and specific solutions.

Lessons Learnt

Working with data collected prior to my involvement was a challenge. I initially felt I may be unable to adequately analyse the data, as I had not conducted the interviews myself and was concerned that I may not understand the project as deeply as if I had designed the data collection. However, I came to realise that not being involved in data collection might have its advantages, particularly in grounded theory analysis where minimising researcher bias is of utmost importance. (10) I felt I could enter data analysis with a high level of impartiality, as I had no preconceptions of the interview participants. To ensure I fully understood the methods used, I conducted an interview that was not included in the final report, but this helped deepen my knowledge of the methods. Overall, I learnt that entering a project after data collection is not a disadvantage and may even be an advantage in some cases. In future projects, I will feel more comfortable and confident if I am part of a larger project, even if I have not been involved in every aspect of the research design.

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