

Letter to Editor

Gender Biases Influencing Female Medical Students' Career Choice in Orthopaedics!

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Introduction:

Madam, The choice of specialisation by medical students is influenced by a variety of factors, including the specialty's perceived credibility, parental influence, work-life balance, money, cultural background, rotations in the clinic, mentors' experiences, etc. In various medical professions gender disparity persists, in conventionally male-dominated specialties, despite rising numbers of women in medical schools and clinical practice regions globally. Inevitably, there were statistically substantial gender variations in the medical specialties chosen by male and female doctors, with the majority of men choosing surgery and orthopaedics.¹

There is a well-documented gender gap in orthopaedic surgery, with the proportion of female trainees and attending surgeons being the lowest.² Only 7.4% of practising orthopaedic surgeons in the US will be female in 2022, according to one estimate.³ Only 6% of practising orthopaedic surgeons were female in 2020, compared to 16% of orthopaedic surgery residents.¹ Some factors that contribute to the handful number of females in orthopaedic surgery include a lack of exposure to the discipline, a lack of female mentors in the very discipline, worries about work-life balance, and preconceptions about the types of characters who incline towards orthopaedic surgery.³

Following the completion of their residency, most trainees intend to subspecialize in orthopaedics, with more than 90% undergoing fellowship training. Despite an increase, there are still fewer female orthopaedic residents than there are male residents, particularly in orthopaedic surgery. Yet, no reports of performance variations depending on gender during residency have been made.²

Female surgeons confront numerous employment problems; according to one study, women's weekly activity and surgical caseload are lower than men's, and 26% of men claimed to perform more than seven procedures per week, compared to 10% of women.² It was also discovered that orthopaedic residents valued intellectual elements as well as role models/mentors while deciding on a fellowship speciality.² Globally, the number of women pursuing medicine has grown over the last few decades, actually outpacing that of men in this field. Women remain underrepresented in the surgical field, and more importantly this is true of sub-specialties including neurosurgical procedures, urology, thoracic surgery, and orthopaedics. Gender-specific cultural barriers are one of the causes of this substantial inequality, with women who are seeking surgery encountering severe discouragement. The lack of female role models and mentors, a hostile atmosphere towards female surgeons, rigidity towards part-time practice, prejudices based on gender, and a poor work-life balance are some of the most commonly cited obstacles to women pursuing surgical careers. The conception of the "surgical personality" and the idea that surgery is an "old boys' club" are further reasons why women are deterred from pursuing surgical careers. Additionally, patients may



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think that female surgeons are less skilled than their male colleagues.⁴

Analysing speciality choice requires a multifaceted approach that takes into account both intrinsic (student-related personal parameters) and extrinsic (family, friends, role models, future earning power, etc.) influencing elements. Extrinsic factors that are considered "negative" may discourage students from choosing a particular career, such as an unfriendly workplace environment, a lack of female leaders, and insufficient professional guidance and advice.² Approximately fifty percent of female physicians are unable to practise or pursue speciality training after receiving their degrees, frequently as a result of family and social constraints.⁴ This indicates that there is an urgent need to increase public awareness of the critical role that female doctors play in advancing global health.

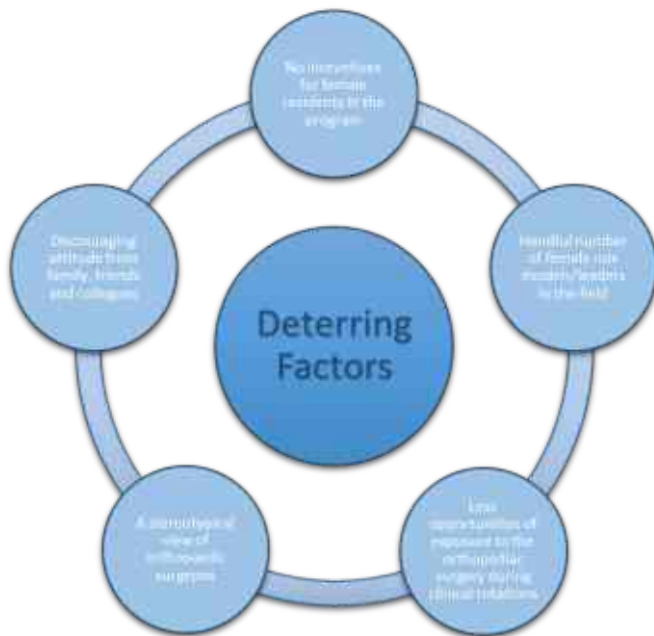


Figure 1: *The Deterring Factors that Influence the Career Choices of Female Medical Students in Orthopaedics*

As it is evident that women encounter discouragement when it comes to choosing surgical professions, they should be encouraged at home and on a national level, and their achievements should be honoured and appre-

ciated. The measures that can be utilised to reduce gender prejudices first and foremost involve raising awareness of bias and training people on how to deal with it. Furthermore, there should be a suitable reporting structure in place for those who encounter such concerns. In order for women to choose fellowships and practise various orthopaedic subspecialties with ease, a proper structure for family leave must be in place at all career phases. By receiving extensive training in the area and working with female mentors, it is possible to address the underrepresentation of women in orthopaedic surgery. Women who work in the orthopaedic speciality should be given leadership opportunities and promotions since they can be crucial in attracting and keeping female trainees. It is important to publicise the accomplishments of female orthopaedic surgeons since this will give female medical students an improved understanding of the career opportunities available in this field.

References

1. Yin K, Yang L, Zhang R, Zheng D, Wilkes MS, Lai Y. Gender differences and influencing factors in specialty choices: findings from one medical school in China. *Frontiers in Public Health*. 2021; 9(1):648612. (Volume/issue number missing)
2. Alomar AZ. Fellowship and future career plans for orthopedic trainees: gender-based differences in influencing factors. *Heliyon*. 2022 ;8(9): e10597
3. Peterman NJ, Macinnis B, Stauffer K, Mann R, Yeo EG, Carpenter K, MacInnis BR, Stauffer C. Gender representation in orthopaedic surgery: a geospatial analysis from 2015 to 2022. *Cureus*. 2022;14(7): e27305.
4. Inam H, Janjua M, Martins RS, Zahid N, Khan S, Sattar AK, Darbar A, Akram S, Faruqui N, Khan SM, Lakhani G. Cultural barriers for women in surgery: how thick is the glass ceiling? An analysis from a low middle-income country. *World journal of surgery*. 2020; 44(9): 2870-8.