

## The Impact Of Mentoring In Trauma And Orthopaedic Training: A Systematic Review

General Topics / Education

Joshua Enson<sup>1</sup>, Khalid Malik-Tabassum<sup>2</sup>, Alyssa Faria<sup>3</sup>, Giles Faria<sup>4</sup>, Kathryn Gill<sup>2</sup>, Benedict Rogers<sup>5</sup>

1. University Hospital Southampton NHS Foundation Trust, Southampton, United Kingdom
2. Royal Surrey County Hospital, Guilford, United Kingdom
3. Ashford and St Peters Hospitals NHS Foundation Trust, Chertsey, United Kingdom
4. William Harvey Hospital, Ashford, United Kingdom
5. Brighton and Sussex University Hospitals NHS Trust, Brighton, United Kingdom

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### Background

Mentoring is a relationship designed to provide support and build confidence in a mentee; it helps individuals take charge of their development, release their full potential, and achieve results they value. The value of mentorship in medical and surgical training is known to be beneficial; it has been shown to increase the likelihood of promotion and enhance job satisfaction. Identifying the strengths and weaknesses of mentoring programmes in orthopaedic training and recognising barriers to effective mentorship are key to unlocking the full potential of future orthopaedic surgeons.

### Objectives

While mentoring has shown to be beneficial in surgical training, a comprehensive review of its utility and benefits in Trauma and Orthopaedics has not been systematically reviewed or published. We aimed to conduct a systematic review to identify the prevalence and impact of mentoring programmes in orthopaedic training. Our secondary aim was to investigate the barriers to mentoring.

### Study Design & Methods

A systematic review of the literature was performed in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The last search was conducted on 26<sup>th</sup> June 2021. The search terms included “orthopaedics”, “training OR residency OR fellowship”, “mentor OR mentorship”. Two reviewers conducted independent searches in PubMed, Medline, EMBASE and Cochrane Library using the same search strategy. Reference lists of the included papers were screened for eligible studies and a further manual search of Google Scholar was also performed.

All studies published in the English literature that investigated the impact of mentoring on orthopaedic training were deemed eligible for inclusion. Training grades included undergraduate, postgraduate and fellowship. We included articles from healthcare systems around the globe. No limits to publication date were applied. Editorial, opinions, letters to editors, and review articles, were excluded.

### Results

The literature search identified 439 studies. After eliminating 117 duplicate studies, title and abstract review was conducted on 322 studies. Full-text articles of 49 studies were assessed for eligibility. A total of 23 studies met the inclusion criteria. All included studies were analysed qualitatively based on themes and properties of mentorship allowing us to ascertain the relative qualities of differing methods.

These studies demonstrated that formal mentorship programmes in orthopaedics are lacking but are sought after, with a positive influence on satisfaction and future career choice/subspecialty selection identified. Several barriers to mentoring in the field were recognised including the difficulty faced by female trainees, the availability of mentors and time constraints. The opportunity to choose a mentor, a mentor with the

same interests, regular meetings and the option of gender congruent mentorship were all identified as crucial requirements for effective mentorship.

### **Conclusions**

A significant desire for mentorship in orthopaedics is evident. This systematic review has highlighted a number of deficiencies in existing orthopaedic mentorship programmes and has identified several attributes as being crucial to implementing successful mentoring programmes. Formal mentorship programmes are required and must exist at all levels of the training programme. Mentors must be approachable and available to meet regularly. The cohort of mentors should be diverse, with a mix of subspecialty interests, a balance of gender and ethnic representation, thus negating any potential barriers to a successful mentoring relationship.