

The Impact of Early Clinical Experiences on Undergraduate Medical Education

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Introduction

Clinical experience is an essential aspect of undergraduate medical education. The way medical schools provide this experience varies. There is no standard for providing clinical experience, but comparing how schools do so could provide data showing the trend of how these experiences are being provided and the clinical learning outcomes from these experiences.

Aims and Objectives

- To Identify how medical schools in the United States and Canada provide clinical experience to their students
- To determine what clinical experience they provided for students to prepare them for clerkships and residency
- To assess the impact of clinical experience on medical students

Methods

Data regarding early clinical experience distribution methods, timing, and outcomes were collected from two primary sources:

- 1) The AAMC Snapshot that reports on how LCME-accredited Medical Schools provide clinical experience and general trends in undergraduate medical education;
- 2) A scoping review of publications on clinical experiences in undergraduate medical education (Figure 1).

Results

In most studies reviewed, clinical education was introduced in the 1st year curriculum (53.8%). The two most common forms of clinical experience presented were case-based lectures (13.9%) and skill-learning sessions (13.9%) (Figure 2). Students' perceptions and satisfaction with early clinical experience revealed four areas of benefits (Figure 3). The AAMC Snapshot showed that 84% of the medical schools listed either recently completed, planned, or were in the middle of a curriculum change. Curriculum changes were related to having earlier clinical encounters through either shortening the preclinical period or incorporating earlier clinical experience into the preclinical curriculum.

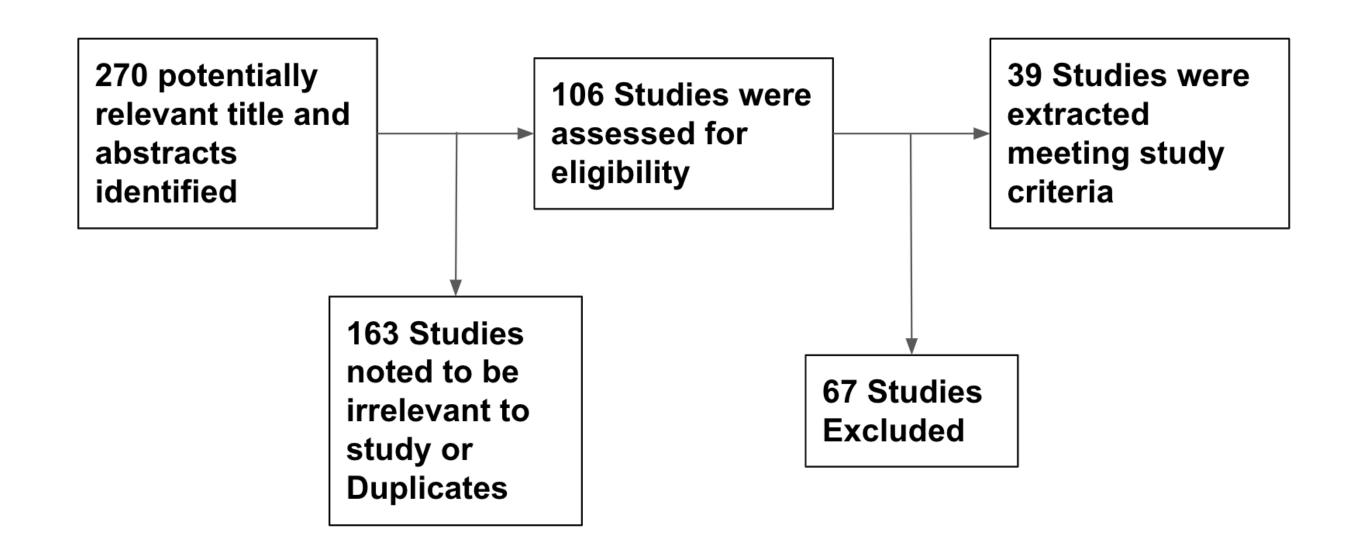


Figure 1: PRISMA Article Screening Diagram

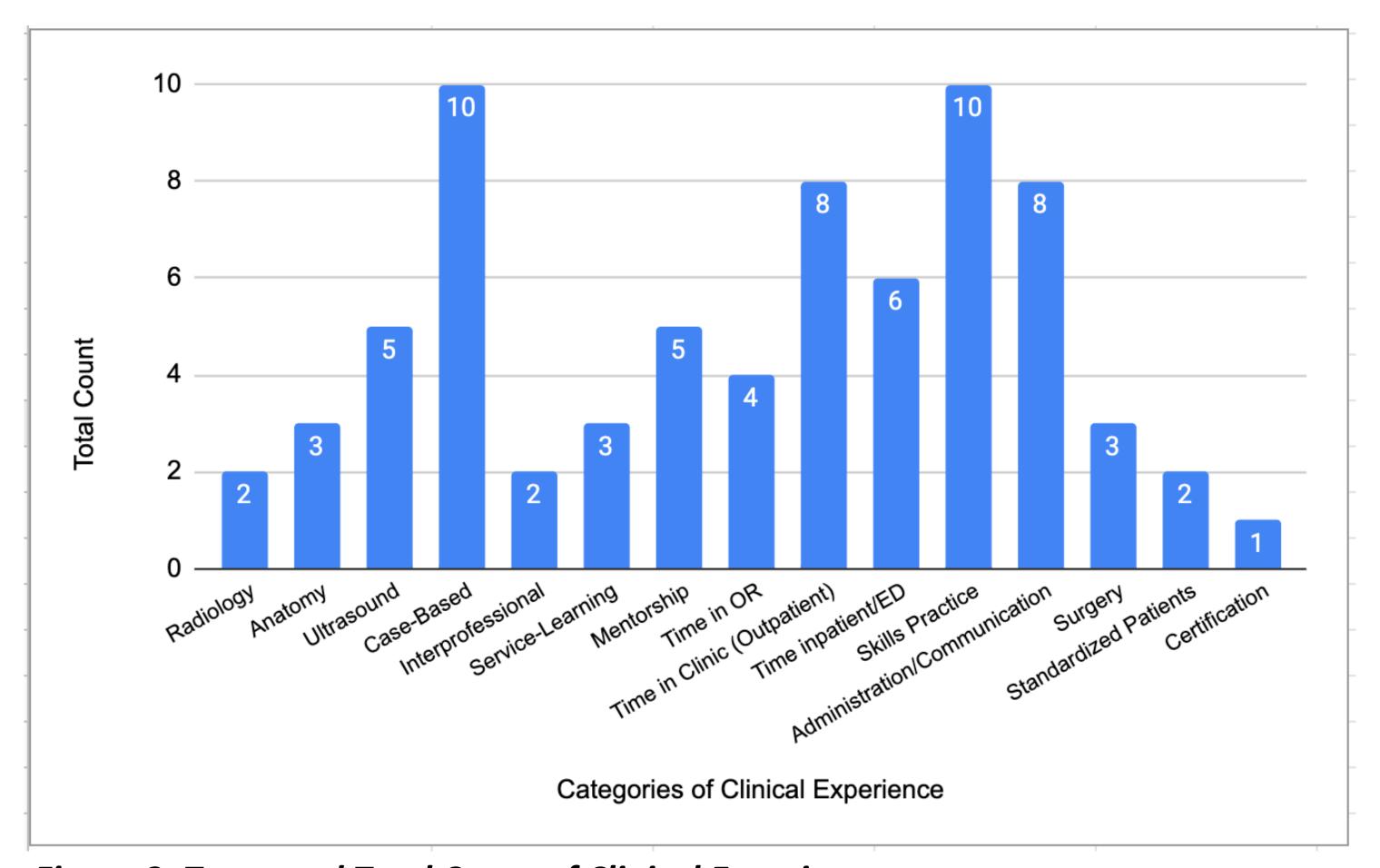


Figure 2: Types and Total Count of Clinical Experiences

Areas of Benefit

Improved Preparedness of Clerkships

Better Understanding of Preclinical Content

Improved Knowledge and Quiz Scores

Specialty Experience

Figure 3: Areas of Benefit Seen

Conclusions

Undergraduate Medical Education is trending towards including more clinical experience prior to the start of clerkships. Common ways of introducing clinical education included, skills practice, casebased learning, and direct interaction with patients. Introducing clinical experience early showed four areas of benefit for students that could positively affect their experience in the clinical portion of their education. Further studies could measure quantifiable outcomes, such as clinical shelf scores, board exam scores, and residency match results, compared before and after curriculum changes to obtain measurable outcomes.

References

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