

Student's corner

Towards a Meaningful Role for Medical Students in Healthcare: Longitudinal Integrated Clerkship at Witten/Herdecke University

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Abstract

Medical students globally experience high burnout rates and dissatisfaction with their passive roles in healthcare. This article outlines issues in Germany's medical education system and proposes a solution: the longitudinal integrated clerkship (LIC). LICs seek to better integrate students into patient care, foster a meaningful role in healthcare teams and improve the clinical training phase. A pilot LIC is currently underway at Witten/Herdecke University (UWH).

Subject

A 2018 study among 597 medical students in Germany found that 35% showed symptoms of burnout (Erschens et al., 2018). Burnout is more common among medical students compared to other academic fields, where the prevalence of exhaustion (a burnout dimension) is 24.4% (Grützmacher et al., 2018). Burnout is defined as a syndrome "resulting from chronic workplace stress that has not been successfully managed" (Di Vincenzo et al., 2024). The study included students in semesters 3, 6, and 9, revealing that: "Concerning academic efficacy, there was a trend towards less efficient perception among students in higher education" (Erschens et al., 2018, p. 6). The clinical phase of medical education (semesters 5-12) appears

to be a significant contributor to burnout: during the clinical phase, empathy decreased as cynicism increased (Hershey & Stoddard, 2021); this affects professional effectiveness (Di Vincenzo et al., 2024). Therefore, addressing the conditions in the clinical training phase is critical for preventing these outcomes.

The clinical phase of medical education in Germany lasts four years, during which students apply and deepen their medical knowledge. In the first three years, students complete internships and rotations each lasting up to four weeks in various hospital departments. During these short intervals, students are exposed to different aspects of patient care, including diagnostics, treatments, and surgeries which are complemented by lectures and seminars. The final year consists of three clinical rotations where students work full-time in clinical practice.

Thesis

We believe that the current short-term clinical experiences do not adequately prepare students for their future roles. These brief exposures provide limited insight into the full trajectory of patient care, thus hindering students' ability to understand comprehensive therapy goals. In our view, a consequence of this is loss of empathy due to a lack of patient-centeredness and

emotional exhaustion (Neumann et al., 2011). This, in turn, has the possibility to negatively affect patients (Di Vincenzo et al., 2024).

LIC - a possible solution

The first LIC-type program commenced in 1971 with a focus on outpatient care and was accelerated through integration into an academic, specialist-based clinical environment with in- and outpatient care (Hirsh et al., 2007; Worley et al., 2016). The global number of medical schools with LIC programs has increased significantly since the turn of the century (Worley et al., 2016).

LICs aim to provide students with a more integrated and patient-centered approach to clinical training. Instead of rotating through different specialties, students follow patients through various stages of treatment: students seek out patients in the emergency room and accompany them throughout the different stages of therapy, including follow-ups with nearby general practitioners. Studies show that LIC students achieve similar or better academic outcomes compared to traditionally trained students (Hirsh et al., 2012). Importantly, LIC students were more likely to feel that they had made real differences in their patients' well-being, indicating that the model benefits both students and patients (Hirsh et al., 2012).

LICs specifically target areas where new doctors often feel unprepared, such as medical counseling, patient management, treatment planning, and communication (Ochsmann et al., 2011). Studies validated that LIC cohorts felt better prepared for practice in ambulatory settings and felt like they had a better knowledge base which is necessary for being a competent practitioner (Gaufberg et al., 2014). This feeling of preparedness, due to being actively involved in patient care, can lead to a higher sense of accomplishment, which may in turn have positive effects on burnout-prevention; indeed, a low sense of accomplishment has been identified as a contributing factor to burnout (Di Vincenzo et al., 2024; Dyrbye et al., 2006).

Conclusions

Over the past 20 years, studies have demonstrated that LICs not only provide medical students with expertise comparable to or higher than traditional models, but also improve their wellbeing (Hirsh et al., 2012). Although LIC students report their experience as more hectic and stressful, they ultimately feel greater satisfaction, fulfillment, and reward (Hirsh et al., 2012). Importantly, patient-centeredness increased significantly over the course of LICs but declined among those who followed a traditional course of study (Gaufberg et al., 2014; Hirsh et al., 2012).

UWH LIC

The UWH LIC will begin in October 2024 with 11 medical students in their first clinical year. These students will train at Gemeinschaftskrankenhaus Herdecke and with nearby general practitioners. The longitudinal co-provision of patient care under supervision by senior physicians will be supplemented and deepened through case discussions and formal teaching. In structured health conversations, students will learn to adopt a resource-oriented and preventive approach with their patients. A key component of the curriculum is the acquisition of systemic knowledge and the development of practical skills, enabling students to advise and assist patients in their healing process.

Two distinctive features of the UWH LIC are its emphasis on the health-promotion within medicine and students' contribution to patient care. Data will be collected to measure academic performance as well as emotional aspects from LIC participants and a control group following traditional training.

Initiative Driven by Students

The UWH LIC, co-designed by students, aims to improve workplace conditions in clinical training. Our goals include enhancing the well-being of students and patients, modernizing medical education, and taking responsibility for the future of our profession and future student

generations. These objectives are supported by the principles of co-creativity and Change-Agency (McCormack et al., 2013), supporting interprofessional collaboration and innovative thinking. Ultimately, this approach has the

potential to pave the way for a new model of medical education in Germany that places the patient at the center of both learning and practice.

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