

Introduction

In recent years, simulation's growing significance in medical education underscores its transformative role as a pivotal pedagogical tool. Mainly used in medical (paramedic) and nursing education, it is an innovative component of palliative medicine programs.

Beyond traditional methods, it creates a dynamic, immersive environment, engaging students in lifelike scenarios mirroring real-world challenges.

This study explores simulation's efficacy in shaping palliative medicine students' competencies, contributing to the ongoing discourse on innovative pedagogical approaches.

The primary aim of the study is to assess the effectiveness of simulation-based teaching in developing essential skills for future professional work among medical students.

Methods

We conducted voluntary survey studies with the participation of fifth-year medical students enrolled at the University of Opole, all of whom engaged in simulation-based educational sessions.

The study consists of two parts: general information and an evaluation of the simulation method's effectiveness using a 5-point Likert scale.

Participation in the study was entirely anonymous. Students were asked to complete the survey immediately after the simulation session.

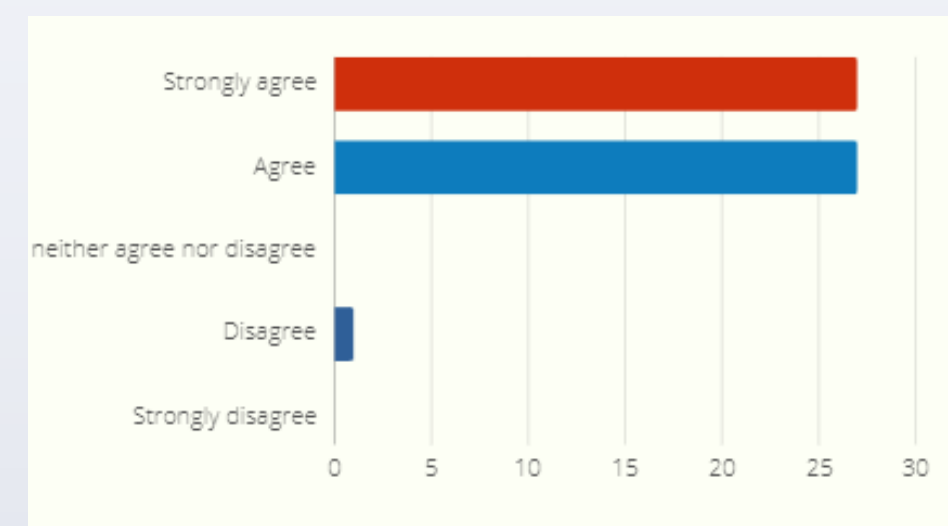
In total, 98 medical students (out of 99) participated in the study. Only properly completed surveys, where students answered each question without omission and provided unequivocal responses, were considered in the result's analysis. Consequently, 55 surveys from medical students were analyzed.

Ethical Considerations

The study received approval from the University of Opole Institute of Medical Sciences (Ref. No. EZD/197915/2023) and the Ethics Committee of the Law Institute of SWPS University.

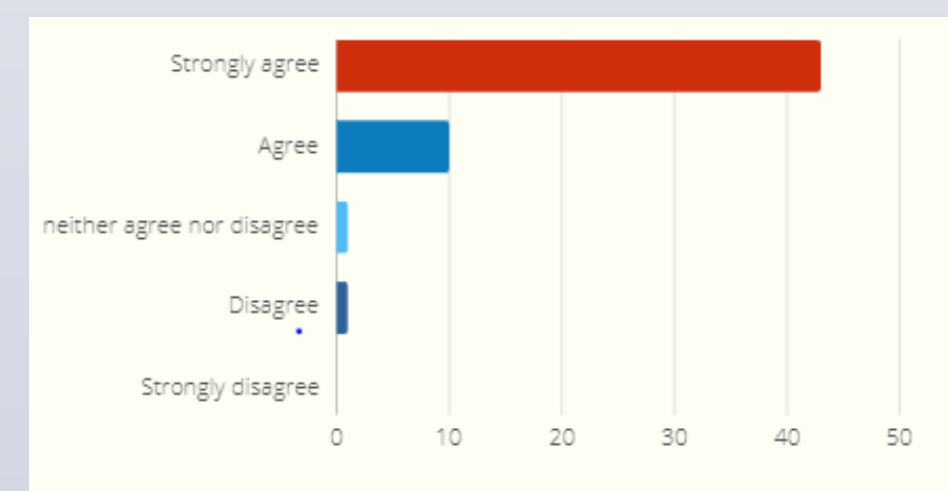
Results

Figure 1. Engagement in simulation activities requires thorough preparation, including familiarizing yourself with materials, regulations, procedures, and other relevant content.



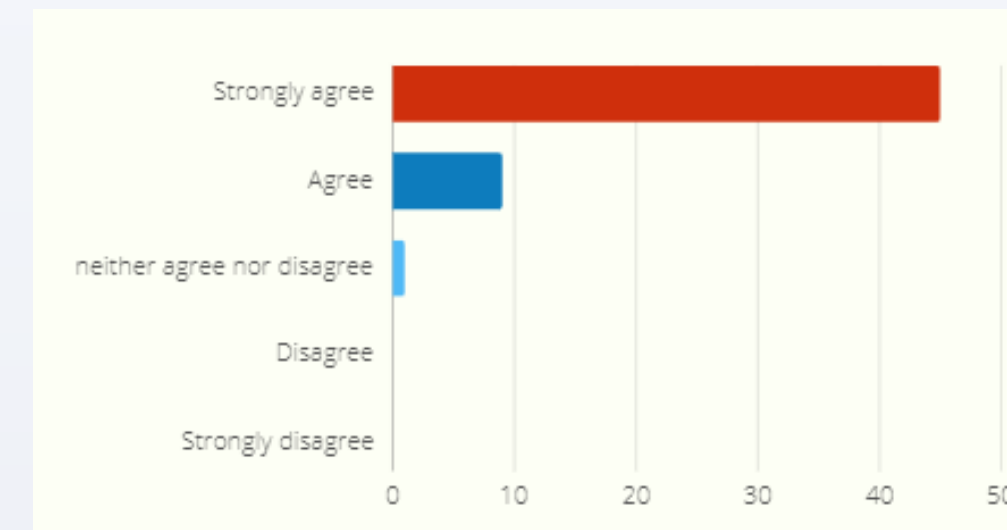
Results among medical students: 27 responses - strongly agree (49% of medical students), 27 responses - agree (49% of medical students), 1 response - disagree (2% of medical students).

Figure 2. Significance of prebriefing



The majority of students (43) strongly agree with the importance of the prebriefing phase in the simulation process, while an additional 10 students agree. Only one student neither agrees nor disagrees, and one student disagrees.

Figure 3. Debriefing importance



The survey results indicate that the debriefing phase is considered crucial by the vast majority of students, with 45 students strongly agreeing and 9 students agreeing on its importance. Only one student neither agreed nor disagreed, underscoring the widespread recognition of debriefing as a vital component of the simulation process.

Figure 4. Role in Developing Practical Skills

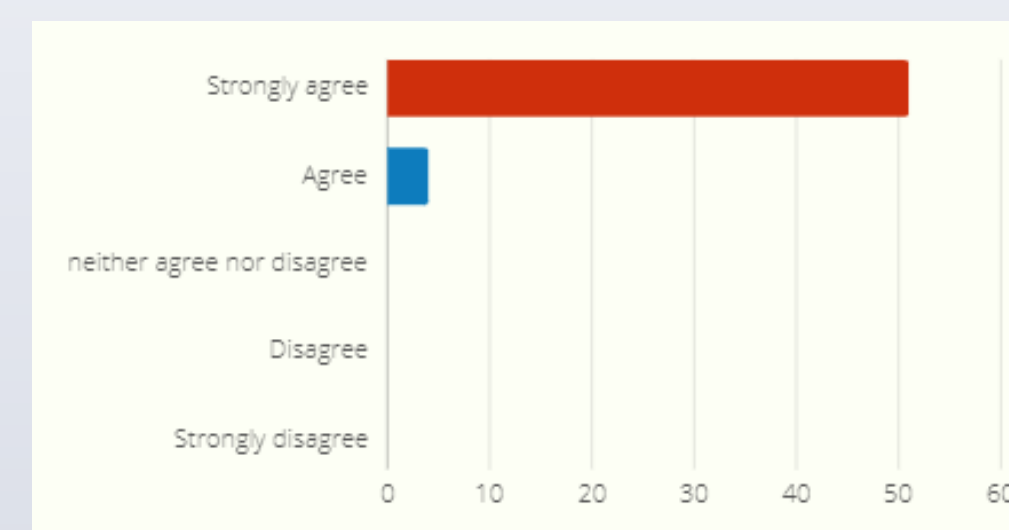
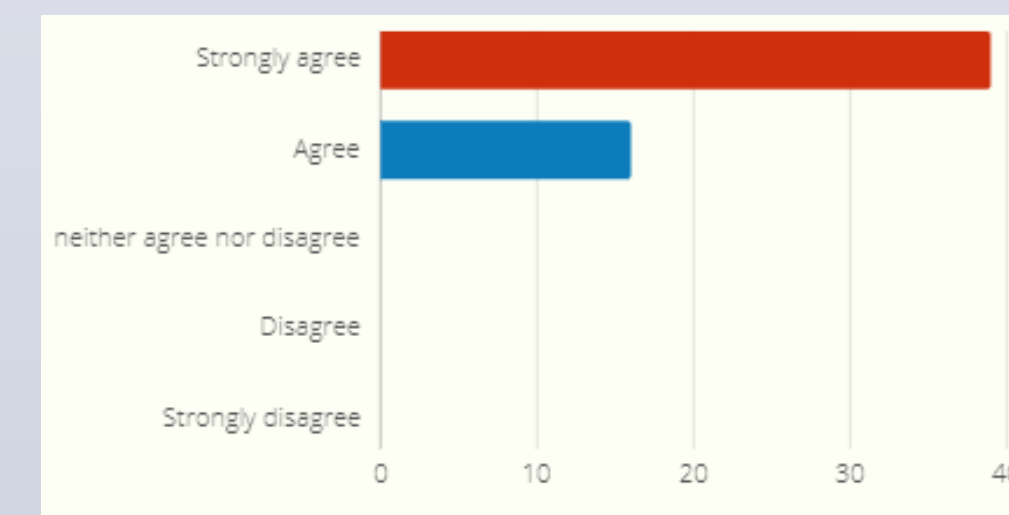


Figure 5. Impact on Future Career Readiness



The results demonstrate a strong consensus among students on the role of simulation in developing practical skills, with 51 students strongly agreeing and 4 students agreeing. This highlights the perceived effectiveness of simulations in enhancing practical competencies. Additionally, the impact of simulation on future career readiness is also highly regarded, with 39 students strongly agreeing and 16 students agreeing. These findings suggest that students believe simulation-based learning significantly prepares them for their future professional roles.



Discussion

Realistic Practice Environment: Simulations provide a controlled yet realistic setting for students to test their knowledge and skills, bridging the gap between theory and practice. This environment allows for practical skill development crucial for medical professions.

Immediate Feedback: The opportunity to receive immediate feedback from instructors and standardized patients enhances the learning experience, enabling students to understand their mistakes and improve continuously.

Safe Learning Space: Simulations offer a safe space for students to make and learn from mistakes without real-world consequences. This safety net encourages active participation and experimentation, fostering deeper learning.

Experienced Instructors: The presence of instructors with extensive practical backgrounds adds credibility and authenticity to the simulations, making the learning experience more impactful and relevant.

Conclusions

1. The study illuminates its positive influence on student preparation, practical skill development, and readiness for future careers.
2. These findings contribute substantively to the ongoing discourse on the transformative potential of simulation in shaping the educational landscape for medical students.
3. This approach prepares medical students for their professional roles, ensuring they possess necessary theoretical knowledge and practical skills.
4. The study underscores the need for broader simulation use in medical education to meet modern healthcare training demands.
5. Aligning with Bandura's theory, simulation allows observation, practice, and skill refinement in a controlled setting, enhancing theoretical knowledge application and increasing self-efficacy.