[ID-P#110] Exploring the Role of Wilderness Medicine in Undergraduate Medical Education: Impact on Student Motivation and Self-Directed Learning

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Background: Wilderness medicine, a subspecialty of emergency medicine overlaps with other medical specialties including Toxicology in terms of knowledge base and scope of practice, is gaining recognition for its potential to impart essential life-saving skills applicable in both clinical and non- clinical settings. Despite its importance, it remains an unfamiliar concept in the Indian medical education landscape. This study explores the impact of a wilderness medicine elective module on medical student motivation, self-directed learning, and overall curriculum satisfaction within the framework of the Competency Based Medical Curriculum.

Methods: A mixed-methods study was conducted involving undergraduate medical students who participated in the "SAFETi: Skills and Awareness for First aid, Emergency response, and wilderness Training" module. Pre- and post-tests, surveys, focus group discussions, and semi-structured interviews were utilised to assess changes in knowledge, attitudes, and practices, as well as student motivation and engagement in self-directed learning activities.

Results and Discussion: Thirty undergraduate medical students participated in the wilderness medicine module with a balanced mix of genders and various years of study. The average pre-test score was 68%, which increased to 84% in the post- test ($p < 0.01$).The average student satisfaction score, measured using the DREEM scale, was 4.2 out of 5, indicating high satisfaction with the teaching methods and module content.The intrinsic motivation scores, measured using the SDTIMI, showed an average of
6.2 out of 7, reflecting strong student motivation to learn the material. The self-directed learning scores, measured using the SDLI, averaged 4.2 out of 5, suggesting that students frequently engaged in self- directed learning activities beyond the structured curriculum. Qualitative data revealed themes such as the relevance and applicability of skills, engaging hands-on activities, and benefits of peer learning. Students valued the real-world focus and practical application opportunities.

Conclusions: Integrating wilderness medicine with emphasis on toxicological aspects into the undergraduate medical curriculum enhances student motivation and promotes self-directed learning. This approach not only prepares future healthcare professionals for emergency scenarios but also equips them with versatile skills applicable in various contexts, thereby broadening the scope of medical education in India.