

BRIDGING GENERATIONS THROUGH INTEGRATIVE LEARNING, RESEARCH, AND COMMUNITY CARE – THE ESPIEM PROJECT

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ABSTRACT

Introduction: Integrating research and community outreach into pharmaceutical education empowers students to tackle real-world challenges. As healthcare and technology evolve, adapting educational frameworks is essential. The Healthy Aging – Egas Moniz Interdisciplinary Project (ESPIEM) fosters active learning, interdisciplinary collaboration, and societal impact, bridging theory and practice.

Methodology: ESPIEM is multidisciplinary, including Pharmacology, Pharmacokinetics, Pharmaceutical Technology, Drug Design, Public Health, and Biostatistics (3rd year of the Integrated Master in Pharmaceutical Sciences). Through experiential learning and social engagement, students identify elderly individuals based on predefined criteria, analyze medication use and health habits. Under faculty supervision, they conduct fieldwork, process data, and engage in peer review to develop critical skills.

Results: A SWOT analysis highlighted ESPIEM's strengths in interdisciplinary collaboration, real-world application, and research skill development, with students recognizing its role in elderly care awareness and pharmaceutical knowledge integration. Areas for improvement include extended student engagement and enhanced feedback mechanisms, while workload distribution, technical challenges, and time constraints remain weaknesses.

Survey results (83% response rate, 148/179) showed that 86% of students valued ESPIEM for learning and competency acquisition, while 91.2% recognized its positive impact on elderly health.

Beyond academia, ESPIEM has made a significant societal impact, monitored 359 elderly individuals and identified serious drug interactions, incorrect dosages, and other medication risks, directly improving patient safety, reinforcing the project's relevance and social responsibility.

Piloted in 2022/23 and fully implemented in 2023/24, ESPIEM is ongoing, further expanding its academic and societal reach. To date, it has resulted in nine national and

four international conference presentations and received the 2022 Pedagogical Innovation Award.

Conclusions: This pedagogical model enhances motivation, fosters patient-centered care awareness, and reinforces a systematic approach to pharmaceutical education. ESPIEM offers a unique opportunity to acquire knowledge and competencies within an integrated, socially engaged framework, serving as a model for innovation in pharmaceutical education.