## World Academy of Science, Engineering and Technology International Journal of Pharmacological and Pharmaceutical Sciences Vol:17, No:01, 2023

## Pharmaceutical Innovation in Jordan: KAP Analysis

Authors: Abdel Qader Al Bawab, Mohannad Odeh, Rami Amer

Abstract: Recently, there has been an increasing interest in innovative business development. Nevertheless, in the pharmacy practice field, there seems to be a gap in perceptions, attitudes, and knowledge about innovation between practicing pharmacists and academia. This study explores this gap and aspects of pharmaceutical innovation in Jordan, comparing pharmacists and last-year pharmacy students. A validated (r2 = 0.74) and reliable (Pearson's r = 0.88) online questionnaire was designed to assess and compare knowledge, attitude, and perceptions about pharmaceutical innovation. A total of 397 participants (215 pharmacy students and 182 pharmaceutical professionals) responded. Compared with 50% of the pharmacists, only 32.1% of the students claimed that they knew the differences between pharmaceutical innovation, discovery, invention, and entrepreneurship [x2 (2) = 14.238, p = 0.001; Cramer's V = 0.189]. Pharmacists demonstrated a higher level of trust in the innovative website design for their institution compared with students (25.3% vs. 16.3%, p < 0.001, Cramer's V = 0.0010.327). However, 60% of the students did not know the innovative design standards for websites, while the corresponding percentage was 37% for the pharmacists (p < 0.001; Cramer's V = 0.327). The majority of the students were interested in pharmaceutical innovation (81.9%). Unfortunately, 76.3% never studied innovation in their pharmacy curricula. Similarly, most pharmacists (76.4%) considered adopting innovation, but only 30% had a concrete plan. For the field where pharmacists aim to innovate in the next 5 years, new pharmaceutical services were the dominant field (34.6%). Despite a positive attitude and perception, pharmacists and pharmacy students expressed poor knowledge about innovation. Policies to enhance awareness about innovation and professional educational tools should be implemented.

Keywords: pharmacy, innovation, knowledge, attitude, practice

Conference Title: ICDFBP 2023: International Conference on Drug Formulation, Bioavailability and Pharmacy

Conference Location: London, United Kingdom

Conference Dates: January 23-24, 2023