Impact of Educational Intervention on Knowledge and Attitude Toward Pharmaceutical Care and Identification of Barriers Among Undergraduate Pharmacy Students

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Background: Providing undergraduate pharmacy students with knowledge on early pharmaceutical care services will help and empower them to establish confidence in their future practice.

Objective: To assess the impact of the educational intervention on knowledge & attitude towards pharmaceutical care services among pharmacy undergraduate students and identify the barriers.

Method: A prospective interventional study was carried out for six months (January 2021 – June 2021) among final year B. Pharmacy students of two different colleges in Belagavi city. A self-administered pre-validated modified 14-item standard pharmaceutical care attitudes survey (PCAS) and 12-item barriers questionnaires were administered. Paired t-test was used to estimate the mean difference in knowledge score between the groups. Ethical approval was obtained, and written informed consent was obtained from all the final year students before participating in the study. The intervention was a one-hour presentation on pharmaceutical care services developed with an adequate primary, secondary and tertiary literature review and then validated by a group of experienced academic pharmacists. After an hour session, there will be a question-answer session where the participant can clear their doubts. Due to the unprecedented COVID-19 pandemic, the intervention was done online.

Results: 202 students from two Pharmacy Colleges participated in this study. There was a significant difference between the pre (4.85±3.96) and post (9.30±2.59) knowledge scores among undergraduate pharmacy students (t=13.36, P-value = 0.001*). Overall, 90-95% of participants showed a positive attitude towards pharmaceutical care services after the intervention, and around 97% of students agreed or strongly agreed to provide pharmaceutical care services after the intervention. Almost all students agree or strongly agree that the exercise of pharmaceutical care is valuable (pre response rate=59.9%) and after intervention (post response rate=94.6%). Time constraints (66.8%), lack of workplace (63.9%), lack of knowledge (63.4%), lack of pharmacists in the hospital (57.9%), and inadequate training (56.9%) are the perceived barriers by pharmacy undergraduates towards pharmaceutical care.

Conclusion: The study concludes that the post-educational interventions in pharmaceutical care have significantly improved the knowledge and attitudes of pharmacists.