

DEVELOPING A MODULE FOR UNDERGRADUATE STUDENTS IN PHARMACY PRACTICE RESEARCH

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INTRODUCTION

Pharmacy Practice Research has an impact in skills development at undergraduate level and strengthens the healthcare services through evidenced-based management models to improve patient care. The need to prepare students both on a personal and professional level assists in the needs and demands of the healthcare system.

AIM

- To introduce students following courses in pharmacy and pharmaceutical technology to research methodology through a systematic way of answering a research question by evaluating evidenced-based literature, and adopting the appropriate skills to undertake research.

METHOD

- Five European Credit Transfer and Accumulation System (ECTS) credits were allotted for this study unit.
- The theoretical-based lectures (20 hours) lead to the practical tutorial sessions (15 hours) where the student is allowed to master the research tools with the main focus being:
 - Quantitative and qualitative methodology
 - Informed consent and ethics
 - Protocol writing
 - Data analysis

- Interpretation of analysis of findings
- Presentation skills

Implementation

- The students are able to select the appropriate methodology and write clear concise research questions to formalise a research protocol.
- Decisions and choices are justified in designing the research by identifying the goals, the structure, the strengths and limitations of the title, literature review, objectives of the study, methods, results expected and discussion.

RESULTS

- A robust research is identified by concise questions and an adequate conclusion. Design of the study includes: choice of the tools used, probability and non-probability sampling, coding, parametric tests, validity, reliability and applicability of the tool. Assumptions are made to obtain main outcome measures according to the null hypothesis.
- The data is analysed for statistical significance and the relevant interpretation is given.
- Statistical biomedical packages are used to analyse data.

Study Unit	Hours
Theoretical-Based Lectures	20
Practical Tutorial Sessions	14.85
Presentation by each student	0.15
Total Hours for teaching	35
Examination	3

Table 1: Structure for the 5 ECTS Study Unit in Research Methodology

The total hours for this study unit are of 35 hours, which include a seminar organised so that each student gives a 10 minute presentation. The final assessment is a three-hour written examination.

DISCUSSION

This module merges the statistical knowledge with applied research in pharmacy. It provides the students with an exposure to the concepts of research.

Reference

1. Jones D. Pharmaceutical Statistics. UK: Pharmaceutical Press, 2002.