

A multi-institutional study of Yemeni final year undergraduate pharmacy students' understanding, attitudes, and perceived barriers toward provision of pharmaceutical care: A Cross-sectional Study

Dear Pharmacy Student,

Welcome to the survey of Yemen Pharmacy Students' Understanding and Attitudes toward provision of Pharmaceutical Care (PC). This simple survey is part of a project done by fifth year Hodeidah University clinical pharmacy students as part of their Pharmacy course (Research Project).

The objectives of the project are:

- 1. To establish Yemen pharmacy students' levels of understanding of pharmaceutical care***
- 2. Assess the level of Yemen pharmacy students' attitudes about the provision of pharmaceutical care.***
- 3. To identify the most common barriers that hinder the provision pharmaceutical care***

The study results will be used to improve pharmaceutical care practice in the different pharmacy settings in Yemen.

As a pharmacy student in Yemen, your opinion is important to us.

Would you please take the 10-15 minutes required to complete the survey questions.

There are no harms or risks associated with filling the survey.

Your participation is voluntary and will be ANONYMOUS.

Thank you very much for you contribution in this survey.

If you would like to discuss this survey, please do not hesitate to call us at +967 775040472. Alternatively, email us at : clin.pharm.najmaddin@gmail.com

Najmaddin A. H. Hatem

Clinical pharmacy student

Hodeidah University

Preferred career after graduation

Community pharmacy

Hospital pharmacy

Pharmaceutical industry

Pharmaceutical marketing

Others.

Part Two

No.	<i>Students' knowledge toward pharmaceutical care</i>	Correct	Incorrect
1	pharmaceutical care providers are directly responsible for patients' clinical outcomes.		
2	The primary goal of pharmaceutical care is to maintain and improve patients' quality of life.		
3	The main contents of pharmaceutical care are the provision of drug information. [F]		
4	The term "clinical pharmacy" can be replaced with "pharmaceutical care". [F]		
5	pharmaceutical care is an extension of present community pharmacy services. [F]		
6	In pharmaceutical care, providers identify and deal with patients' existing and potential drug-treatment problem.		
7	pharmaceutical care involves a defined process of activities, in which all steps must be completed to provide this service.		
8	All patients who are treated with drug therapy need PC. [F]		
9	Carrying out pharmaceutical care necessitates drug information support.		
10	pharmaceutical care providers need counseling rooms or other private areas to provide pharmaceutical care. [F]		
11	Drug use can be monitored in pharmaceutical care to improve drug treatment.		
12	Patients do not need to actively receive pharmaceutical care. [F]		

Part Three

No.	<i>Students' attitudes toward Pharmaceutical care</i>	Strongly Agree	Agree	Neutra l	Disagre e	Strongly Disagree
1	All pharmacists should perform pharmaceutical care.					
2	The primary responsibility of pharmacists in all health care settings should be to prevent and solve medication-related problems.					
3	Pharmacists' primary responsibility should be to practise pharmaceutical care.					
4	Pharmacy students can perform pharmaceutical care during their experiential training (placements).					
5	I think the practice of pharmaceutical care is valuable.					
6	Providing pharmaceutical care takes too much time and effort.					
7	I would like to perform pharmaceutical care as a pharmacist practitioner.					
8	Providing pharmaceutical care is professionally rewarding.					
9	I feel that pharmaceutical care is the right direction for the profession to be headed.					
10	I feel that the pharmaceutical care movement will benefit pharmacists.					
11	I feel that the pharmaceutical care movement will improve patients' health.					
12	I feel that practicing pharmaceutical care would benefit my professional career as a pharmacy practitioner.					
13	Providing pharmaceutical care is not worth the additional work load that it places on the pharmacist.					

Part four

No.	<i>Barriers toward provision of Pharmaceutical Care</i>	Strongly Agree	Agree	Nutral	Disagree	Strongly Disagree
1	Inadequate drug information resources in the pharmacy					
2	Lack of access to the patient medical record in the pharmacy					
3	Lack of therapeutic knowledge and clinical problem-solving skills					
4	Lack of understanding of pharmaceutical care					
5	Inadequate training in pharmaceutical care					
6	Lack of private counseling area, space, or in appropriate pharmacy layout.					
7	Inadequate technology in the pharmacy					
8	Lack of self confidence					
9	Lack of pharmacist time to provide pharmaceutical care					
10	Poor image of pharmacist's role in society					
11	Inadequate (hospital and community pharmacy) internship period.					