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# Knowledge, Perception, Attitude, and Experience of Pharmacist in Qatar towards Drug Use in Pregnancy: A Cross-Sectional Study

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## Background

- Pregnancy is a state of altered physiology and medication use during this period is remarkably challenging
- Pharmacists are medication experts with great knowledge of pharmacology, pharmacokinetics and are trained to apply evidence based clinical knowledge
- In a study done in the USA Mitchell et al found that use of medications, either prescribed or purchased over the counter (OTC), occurred in 88.8% of all pregnancies
- Whereas, in Europe, prevalence estimates of prescribed medication use vary considerably across countries, ranging from 26% in Serbia to 93% in France
- Given their central role to provide medication related advice to patients we conducted a questionnaire based survey to identify the knowledge, attitude, perception and experience of pharmacist in Qatar towards drug use in pregnancy

## Objectives

- Primary objective was to determine the knowledge, perception, attitude, and experience of pharmacist in Qatar regarding risk benefits ratio, concerns, advice, and source of information about drug use in pregnancy
- Secondary objective aimed to correlate knowledge with different variables

## Method

- A descriptive questionnaire, based cross sectional study, was conducted in Qatar
- The questionnaire was distributed to 400 licensed pharmacists in Qatar using a convenient sampling technique
- The questionnaire was classified into 4 sections:
  - 1) Section 1, about their practice
  - 2) Section 2, about knowledge and perception of medication use in pregnancy
  - 3) Section 3, about pharmacist's level of confidence while dealing with patient and physician
  - 4) Section 4, about source of drug information and certain general statements regarding their beliefs
- Descriptive statistics was applied for all the collected variables. Chi-square was used to test association between knowledge levels and variables
- P value of 0.05 was considered as statistical significant

## Results

- Response rate was 51.75% (207/400), and majority of them were male hospital pharmacist with bachelor degree in pharmacy
- More than 50 % of pharmacists responded to have no continuous education or received any CE points in last 12 months. 66% of these respondents reasoned work related issues (time, workload) for not attending educational activities
- 86% of the respondents were aware of the risk and benefits associated with the medication use in pregnancy
- Approximately (65%) of pharmacist possessed 'average knowledge levels' and only 33.3 % were comfortable giving advices/counselling to pregnant women
- Respondents with experience of 5 years and above had better knowledge levels than others
- There was a significant positive association between respondents having Continuous Education and their knowledge levels

Table.1 Demographic and Practice Characteristics

Variables	Percentage	Number
<b>Gender</b>		
Male	55.1	114
Female	44.9	93
<b>Practicing as</b>		
Hospital pharmacy	46.8	97
Health centre	13.0	27
Poly-clinic pharmacy	4.9	10
Community pharmacy	35.3	73
<b>Area of practice</b>		
Women's Hospital	17.4	36
Al Amal Hospital	3.9	8
Al Rumailah Hospital	6.3	13
Hamad General Hospital	15.9	33
Community setting	35.3	73
Polyclinic	4.8	10
NHC	13.0	27
Al Khor Hospital	3.4	7
<b>Qualification</b>		
Bachelor's degree	95.7	198
Master's degree	3.9	8
Others	0.5	1
<b>Years of experience as registered pharmacist</b>		
< 5 years	20.8	43
5 – 9 years	41.5	86
> 10 years	37.7	78
<b>Hours of work per week</b>		
Less than equal to 40 hrs	45.9	95
48 hrs	28.5	59
Greater than or equal to 50hrs	25.1	52
<b>Dispensing workload for pregnant population</b>		
< 10%	48.3	100
11 - 20%	18.4	38
>20%	25.1	52
Don't know	8.2	17
<b>Hours of continuous education (CE) in the last 12 months</b>		
<20 hrs	26.6	55
21-30 hrs	18.8	39
31 - 40 hrs	12.6	26
more than 40 hrs	14.5	30
No CE	27.5	57

## Conclusion

- The study provided a baseline data regarding knowledge, perception and experience of pharmacist in Qatar regarding drug use in pregnancy
- With majority of respondents lacking educational activities, there is an urgent need to stress on the importance of continuous pharmacy education tailored to meet the requirements of specialized areas
- Pharmacist should be aware of medications used during pregnancy and should be familiar regarding risks and benefits of the medication used and to provide appropriate drug related information to pregnant women and healthcare professionals taking care of pregnant women

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- We would like to thank all respondents who filled the questionnaire

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