

NATIONAL SURVEY OF CLINICAL PHARMACY PRACTICE IN SAUDI ARABIA: PERFORMANCES AND ACTIVITIES

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Introduction

The new vision of Saudi Arabia 2030 has launched in late 2016 and to achieve it the Ministry of Health (MOH) started to change the pharmacy model in Saudi Arabia. Enhancing service specification of clinical pharmacy is one of the objectives as well as ensuring the implementation of clinical pharmacy services in all required aspects such as hospital programs, pharmacy units aiming toward the new pharmacy model. The aim of this study to explore the National Survey of Clinical Pharmacy Practice in Saudi Arabia 2017-2018 with emphasis on the Performances and Activities

Methods

It is a 4-months cross-sectional National Survey of Clinical Pharmacy Practice in Saudi Arabia. The survey consisted of two parts; the demographic information and the second part contained fifty-one questions divided into four domains derived from American Society of Health-System Pharmacists (ASHP) and Saudi Pharmaceutical Society (SPS) survey, the international standard of Joint Commission of Hospital Accreditation in addition to the local standards of Saudi Center of healthcare accreditation. The four domains were clinical pharmacy administration, and management, performances and activities, education and training, and workload documentation. The 5-point Likert response scale system with closed and ended questions was used. An electronic questionnaire distributed to the thirty-one directors of pharmacies at MOH hospitals. The study discussed and analyzed National Survey of Clinical Pharmacy Practice at MOH hospitals in Saudi Arabia: Performances and activities. All analyses are done through survey monkey system.

Results

The survey questionnaire distributed to 31 hospitals. The most specifications of clinical pharmacy services provided were Concurrent, routine monitoring of drug therapy of the patients 17 (54.84%) and written of medication history 16 (51.61%). The most clinical services existed was answering drug information inquiries (74.19%), Error and adverse drug event reporting (70.97%), and Medication administration (70.97%). The most pharmacy units had clinical pharmacy services was Control and Narcotics system 4.13 (82.60%), Unit dose system 4.07 (81.40%) and Adults emergency medication 3.45 (69%). The most hospital programs had clinical services existed was Stewardship Antimicrobial (64.52%), Medication safety (61.29%), and Medication reconciliation/history-taking (54.84%). The most method of Clinical pharmacist prescribing privileges in relevant hospital programs was Prescribing under physician supervision (66), followed by Independent Prescribing (49) and Refill Prescribing (20).

Conclusion

The performances of clinical pharmacy services are inadequate in Saudi Arabia and the clinical pharmacist had inadequate prescribing privilege. Upgrading the clinical pharmacy performances and prescribing privilege is highly recommended to cope with Saudi vision 2030 to improve patient clinical outcome and avoid any economic burden of the healthcare system in Saudi Arabia.

Reference:

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Table 3: Type of patient served by the clinical Activities

Answer Options	Adults		Pediatrics		Neonates		We do not have it		Services existed	Response N
Drug compatibility investigation	15	48.39%	7	22.58%	4	12.90%	16	51.61%	48.39%	31
Bedside response for high-priority patients	13	41.94%	5	16.13%	3	9.68%	17	54.84%	45.16%	31
Drug dosing based on organ dysfunction	16	51.61%	9	29.03%	6	19.35%	15	48.39%	51.61%	31
Drug interaction analysis	17	54.84%	10	32.26%	8	25.81%	14	45.16%	54.84%	31
Drug identification	17	56.67%	8	26.67%	6	20.00%	13	43.33%	56.67%	30
Medication selection based on diagnosis	15	50.00%	7	23.33%	5	16.67%	15	50.00%	50.00%	30
Monitoring of medication therapy	18	58.06%	11	35.48%	11	35.48%	13	41.94%	58.06%	31
Medication therapy management	17	54.84%	10	32.26%	8	25.81%	14	45.16%	54.84%	31
Medication reconciliation/history-taking	17	54.84%	11	35.48%	6	19.35%	14	45.16%	54.84%	31
Error and adverse drug event reporting	22	70.97%	16	51.61%	12	38.71%	9	29.03%	70.97%	31
Bedside toxicology management	11	35.48%	8	25.81%	7	22.58%	20	64.52%	35.48%	31
Targeted disease state counseling	11	35.48%	7	22.58%	5	16.13%	20	64.52%	35.48%	31
Culture and sensitivity testing follow-up	16	53.33%	8	26.67%	5	16.67%	14	46.67%	53.33%	30
Medication administration	20	64.52%	13	41.94%	10	32.26%	9	29.03%	70.97%	31
Vaccine administration	14	45.16%	7	22.58%	8	25.81%	16	51.61%	48.39%	31
Answering drug information inquiries	23	74.19%	15	48.39%	12	38.71%	8	25.81%	74.19%	31
Pharmacoeconomics services	9	29.03%	4	12.90%	2	6.45%	22	70.97%	29.03%	31
Pharmacogenomics services	8	25.81%	3	9.68%	2	6.45%	23	74.19%	25.81%	31
Answering poisoning inquiries	19	61.29%	13	41.94%	10	32.26%	12	38.71%	61.29%	31
There is no Clinical Activities of Pharmacists	10	38.46%	5	19.23%	4	15.38%	16	61.54%		26
Answered										31
Skipped										0

Discussion

Enhance service specification of clinical pharmacy can benefit the patients as they get the best use of their medications and resolving medications related issues also the reliance on pharmacists qualification for independent prescribing can boost the time for the needed medications by the patients in another hand will reduce the general practice workload and ensure the safer prescribing and quality of care. Unfortunately, the result of this study says that pharmacists qualification for independent prescribing not implemented as it should be and need to be improved. Looking at the result of other specifications; the concurrent, routine monitoring of drug therapy of the patients and written of medication history are the specifications that stand out compared to counseling of patients on their medications, rounds with medical staff, and pharmacokinetic or nutritional support consultations, which can be improved by enhancing the service specifications in order to reduce the general practice workload. On another hand, the stewardship antimicrobial program, medication safety program, and medication reconciliation/history-taking programs are the most hospital programs that had clinical pharmacy services and well implemented. Contrary, the pain management program considers the least program among other hospital programs that had clinical pharmacy services and least implemented. The reason behind this is that the absence of a complete structural pain management program and inadequate close monitoring to patients.