STUDY OF NURSES' ATTITUDES CONCERNING MEDICATION ERRORS IN AL-HILLA TEACHING HOSPITALS

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Abstract:

Background.

Mistakes with medication are common in the healthcare setting Is very often cause of needless harm to patients. Nurses are key to managing medicines and are the last line of defence against errors. How staff perceive medical errors influences how they identify, prevent, and report error – activities that are key to patient safety. In developing nations, including Iraq, low resources and heavy workloads are compounded by weak protection mechanisms.

Objective.

The purpose of this study is to analyze the attitudes and beliefs of nurses in Al-Hilla Teaching Hospitals towards medication errors and to identify socio-demographic and employment variables that affect error reporting barrier.

Methods.

A cross-sectional design was used for the study. A sample of 170 nurses from the critical care units of Al-Hilla and Al-Imam Al-Sadiq Teaching Hospitals was selected using a purposive sampling technique. A validated questionnaire (reliability $r = 0.82$) was used to collect data on demographic, perception and attitudes toward medication error and reporting. Scorings were delimited into a three-point likert scale, where agrees get three points and neutrals get two points and disagreeing gets one-point. Data analysis included descriptive statistics of frequencies, percentages, means and standard deviations.

Results.

A majority of participants were female (57.6%), aged between 20 -30 years (75.9%), and bachelor's degree holders (52.4%). The overall average score obtained from the responses of the subjects regarding the perception of medication errors was 2.70 (SD = 0.506). In addition, the average score towards reporting errors received was 2.48 (SD = 0.657). Nevertheless, fear of punishment, heavy workload, inadequate managerial support, and limited training impeded nurses from reporting. Less-experienced nurses were particularly affected.

Conclusion.

Nurses at Al-Hilla Teaching Hospitals have a positive attitude toward medication error reporting. But organizational and cultural barriers prevent nurses from consistently reporting medication errors. Policies that do not punish when harm events take place, supportive supervision, ongoing training, and easier access to reporting are recommended for patient safety.

Keywords: Medication errors, nurses' attitudes, error reporting, patient safety, critical care, Iraq.

Introduction

Introduction

According to the World Health Organization (WHO), drug errors is one of the most important causes of patient harm or any harm to the medical staff globally. Errors can occur at any stage of the medication process: prescribing, transcribing, dispensing, administering, and monitoring. These can result in considerable adverse effects such as patient harm, prolonged hospitalization and death (Rodziewicz & Hipskind, 2023). Nurses are healthcare professionals directly involved in drug administration. They are the last line of defence between an error in prescribing and the patient (AbuRuz et al., 2021). Thus, their views of medication errors affect their chances of identifying, preventing and reporting these events.

A nurse's way of thinking close to medicine errors refers to the personal beliefs, emotional responses, and professional judgments about the reasons and effects of errors (Kim & Choi, 2020). A positive attitude promotes the actual transparency of gadgets, acknowledgement of usage errors, and proactive gadget enhancement. In contrast, a negative attitude usually arises from fears of blame or punishment that tend to discourage reporting. According to Alshammari et al. (2023), it is thereby paramount to create a non-punitive ethos that encourages speaking up about errors in medication safety and nursing practice.

Studies from various countries have indicated that organizational culture, workload, staffing levels, education opportunities, and perceived fairness of the health facility's reporting system (Mohammed et al., 2022) are factors that influence nurses' perceptions. Other issues such as obstacles to assistance, lack of group worker support, and poor patient protection systems intensified the risk of errors and influenced the occurrence of errors committed by nurses (Hassan & Jasim, 2021). To promote Iraq hospitals safety culture, it is imperative to understand these attitudes for designing effective interventions.

The study looks at nurses' attitudes on pharmaceutical errors at Al-Hilla Teaching Hospitals and aims to analyze their patterns of belief, contributing variables and barriers to reporting errors. The outcomes are aimed to give information for health execs, nursing mentors and politicians to invest in proof-based strategies to encourage an open-for-learning environment which will further improve patient safety with medical practice in the longer term.

Objectives

1. To assess nurses attitude regarding medication error
2. To identify the socio demographic characteristics for the study sample
3. To assess nurses perception regarding medication error Methodology

Methodology

Study design

The study was conducted using a quantitative descriptive cross-sectional design with the goal of evaluating nursing knowledge about dialysis that takes into account a scientific framework to address nurses' issues between September 1, 2024, and January 8, 2025.

Setting

AL. Imam Sadeq Teaching Hospital was chosen as the primary field to gather data in order to meet the study's goals.

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Sample of the study

170 nurses were selected using a non-probability purposive sampling technique from two public governmental hospitals in Babylon City (Al-Imam Al-Sadiq hospital and AL. Hilla Teaching Hospital) in critical care unit. Nurse picked as special sample because they are assign to offer direct care to patients. One hundred and seventy nurses are chosen for this reason.

Data collection:

The questionnaire is broken down into three sections in order to assess the nurses' attitude of medication error who work in the critical care unit: demographics, general information, and 5 items about perception regarding medication error, first section. Six experts determined the validity, and reliability (r: 0.82), which is statistically acceptable, was found: agree = 3, neutral = 2 and disagree =1 is the chosen scoring system that is being employed.

Results :

Table 1: Distribution of study sample related to demographical characteristics:

Categories		Frequency	Percent
Sex	female	98	57.6
	male	72	42.4
	Total	170	100.0
Age	20-30 years	129	75.9
	31-40 years	30	17.6
	41-50 years	11	6.5
	Total	170	100.0
Educational qualification	secondary school nursing	13	7.6
	diploma	67	39.4
	bachelor	89	52.4
	post graduate	1	.6
	Total	170	100.0
Residents	Urban	163	95.9
	Rural	7	4.1
	Total	170	100.0

Table 2: classification of the employment data of the participants

Employment characteristics		Frequency	Percent
Years of employment in nursing field	> 1 year	21	12.4
	1-5 years	93	54.7
	6- 10 years	36	21.2
	11-15 years	20	11.8
	Total	170	100.0
Years of experience in oncology	> 1 year	19	11.2
	1-5 years	120	70.6
	6- 10 years	24	14.1
	11-15 years	7	4.1
	Total	170	100.0
Participant in training session related to patient nutrition	no	125	73.5
	yes	45	26.5
	Total	170	100.0

Table 3: Distribution of study sample related to Perception about Medication Errors

No	Items	Disagree		neutral		Agree		Mean	St.d	Level
		F	%	F	%	F	%			
1	Medication errors are inevitable in nursing practice.	1	.6	14	8.2	155	91.2	2.91	.312	Positive
2	Reporting medication errors improves patient safety.	4	2.4	26	15.3	140	82.4	2.80	.456	Positive
3	Most medication errors are caused by system problems rather than individual negligence.	21	12.4	65	38.2	84	49.4	2.37	.695	Neutral
4	Fear of punishment prevents nurses from reporting medication errors.	6	3.5	29	17.1	135	79.4	2.76	.505	Positive
5	Fatigue and workload increase the likelihood of medication errors.	8	4.7	40	23.5	122	71.8	2.67	.563	Positive
General mean								2.702	0.5062	Positive

Table 4: Distribution of study sample related to Attitude Toward Reporting Medication Errors

No	Items	Disagree		neutral		Agree		Mean	St.d	Level
		F	%	F	%	F	%			
	Reporting medication errors should be mandatory for all nurses.	11	6.5	45	26.5	114	67.1	2.61	.609	Positive

	I feel comfortable reporting my own medication errors.	11	6.5	43	25.3	116	68.2	2.62	.606	Positive
	I would report an error even if it did not cause harm to the patient.	16	9.4	53	31.2	101	59.4	2.50	.664	Positive
	Supervisors provide a supportive environment for error reporting.	34	20.0	74	43.5	62	36.5	2.16	.735	Neutral
	I believe that reporting errors can improve nursing practice.	17	10.0	50	29.4	103	60.6	2.51	.673	Positive
General mean								2.48	0.6574	Positive

Discussion

The research done at the Al-Hilla Teaching Hospitals present valuable information on the demographic and employment characteristics, perceptions, and attitudes of nurses related to HES and reporting. The subjects of the study were 170 nurses, whose gender mostly consisted of females (57.6%), which is also similar to the global trend. Most of the participants were aged 20–30 years (75.9%), indicating a relatively inexperienced group. More than half held a bachelor's degree (52.4%), followed by diploma holders (39.4%). This indicates that most nurses are educated sufficiently to practice safely. Most of the people were urban (95.9%) since teaching hospitals are located in cities only.

Among the employment characteristics, more than half of the nurses had 1–5 years of nursing and 1–5 years of oncology experience (54.7%, 70.6%, respectively). Thus, many of the participants were early-career nurses still developing with their competence and confidence in error prevention and reporting. Of the participants, 73.5% have undergone training related to patient safety or nutrition.

The overall mean score of 2.70 indicates a good perception by nurses on medication errors. Most participants acknowledged that medication error is unavoidable (91.2%) and the importance of reporting error for improving patient safety (82.4%). Yet, 79.4% agreed that fear of punishment inhibits the reporting of errors by nurses. Thus, the blame culture still exists. Moreover, 71.8% of participants were of the opinion that fatigue and workload contribute to error occurrence. This finding is also consistent with WHO (2022) and Alshammari et al. (2023), which have also established that greater workloads affect vigilance negatively. The finding that some nurses responded neutrally (neither agreeing nor disagreeing) to system-related causes of error suggests that some nurses still believe errors occur because of the individual rather than the system. Thus, education on the safety systems in their organizations is needed.

The attitudes toward reporting medication errors showed a positive attitude with a mean score of 2.48. The majority of nurses (67.1%) acknowledged that it is necessary to report and expressed comfort level with the reporting of their errors (68.2%). However, just over one third (36.5%) agreed that supervisors create an environment that supports reporting. Showing limited managerial support and a gap in creating a just safety culture. Most respondents, 60.6% agreed that reporting improves nursing practice. Likely due to the fact that reports provide structured feedback which leads to learning and system (process) improvement (AbuRuz et al., 2021).

This is in line with the latest findings from the geographical region and global findings. Braiki et al. (2024) and Alrasheeday et al. (2024) claimed that fear of being blamed and not knowing how to report were key barriers of error reporting. Yang (2025) found that nurses are much less likely to report mistakes because of fears about penalties for reporting. The results emphasize the need to enhance drug error reporting practices by addressing individual and organizational factors. According to the study, nurses at Al-Hilla Teaching Hospital have pleasant opinions and attitudes about medication errors. But communicating openly about medication errors is still hampered by institutional and cultural obstacles, such as fear of punishment and a lack of administrative backing. Ongoing safety education with supportive supervision, as well as establishing a non-punitive reporting culture, are essential to enhancing patient safety and nursing accountability in the Iraqi healthcare system.

Conclusion

The findings indicated that nurses employed at Al-Hilla Teaching Hospitals have generally positive attitudes about the imposition of medication errors and reporting. The mean belief score was (M = 2.70), while the mean mindset score was (M = 2.48). Even so, awareness of boundary and fear of punishment, workload, limited management support and training are barriers to reporting. This has impacted younger less experienced nurses, providing an impetus for training and mentoring. For improving reporting procedures and enhancing patient safety in general developing certain accommodating non-punitive environments pretty pivotal.

Recommendations

1. Foster a non-punitive reporting culture for greater openness.

2. Provide ongoing training on pharmaceutical safety, error prevention, and ethical reporting.

3. Improve supervisory support to turn error reporting into a learning opportunity.

4. Implement error reporting systems for anonymous documentation.

5. Address workload and staffing difficulties to prevent fatigue-related errors.

6. Promote research and policy development on error reporting and management.

7. Integrate patient safety into nursing education to promote early awareness and competency.

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