Rapid Communication

Level of Knowledge and Practices of Self-Medication among Nurses of Public and Private Sector Hospital

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Abstract

Introduction: Self-medication practice is highly prevalent globally. It has beneficial as well as harmful effects on the health of individuals. Nurses are the key healthcare professionals who provide the first line care to the patients. Nurses should be very cautious while self-medicating in order to treat the self-diagnosed symptoms or illness.

Purpose: The purpose of this study is to evaluate and compare the level of knowledge and practices of self-medication among nurses of public and private sector hospital.

Methods: Descriptive cross-sectional questionnaire-based study was conducted that included 120 nurses from different departments of public and private sector hospital. Sample was equally distributed to both hospitals. The data were analyzed using SPSS version 26. Results were expressed in frequency and percentages.

Results: Study findings show that both public and private sectors' nurses (95%) have equal level of knowledge about self-medication. Out of 120 nurses included in this study 63.3% (38/60) of public sector and 90% (54/60) of private hospital nurses practiced self-medication. Antibiotics accounted for 63.3% of public and 83.3% of private sector followed by paracetamol 63.3% and 90%, anti-allergic 58.3% and 83.3%, antacids 63.3% and 90% respectively. 28.3% of public and 35% of private hospital nurses have experienced negative consequences or side effects of self-medication. 38.3% nurses of both sectors considered self-medication as safe practice.

Conclusion: Self-medication is a common practice among nurses. It is a serious problem that requires ample attention from the healthcare command.

Keywords: Hospital; Knowledge; Nurses; Practices; Self-medication

Introduction

Self-medication practice is the use of medications, herbs or home remedies on their own or on the advice of another person without the prescription of a healthcare professional in order to treat the symptoms or illness [1]. Self-medication is seen as one of the elements of self-care behavior. World Health Organization's (WHO) categorizes self-medication as, the utilization of pharmaceutical products by the patient or any person in order to relieve self-recognized illness or symptoms, or the periodic or ongoing administration of medicine recommended by a doctor for persistent or chronic ailments or symptoms [2]. Self-medication practice is highly prevalent worldwide. Globally, the prevalence of SM ranges from 11.2% to 93.7%, based on the country being examined and the reference population. According to the latest reports in Pakistan, the prevalence of SM range from 53% to 61.3% [3] with high prevalence in Karachi i.e. 84.8% (males 88.4% and females 81.2%) [4]. However, its prevalence among nurses is not clear. Both in developed and developing nations, the prevalence of self-medication is diverse. SM is prevalent in developed countries as the people are well-educated and have access to sufficient information from various resources. But the situation is alarming in undeveloped countries where there is poverty, illiteracy, lack of access, inadequate health care services and no specialized monitoring of medicinal items. As a result, people are compelled to self-medicate and they frequently use various drugs and plants-based substances to cure the number of various symptoms or illnesses [5]. There are various factors that lead a person to self-medication such as accessibility of medicines, quick approach to drugs without wasting any time,

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financial constraints, availability of different medicines at reasonable prices, and the ease of accessing drugs rather than receiving treatment in medical centers. For healthcare workers, research has revealed that the circumstances and the environment in which they work predispose them to accessing drugs during their routine work. Majority of healthcare professionals find comfort in self-medication although they are well aware of the potential risk associated with it, particularly when dealing with exertion, workload, stress, discomfort and nervousness associated with the jobs [6].

There are numerous advantages of appropriate self-medication and it requires proper medical knowledge and awareness. It lessens the demand on the health care facilities, saves the amount of time that the patient spent in waiting to see a doctor, and helps to keep the prescription drug costs down, especially in the developing countries with minimal resources and little access to the health care services. On the other hand, there are a number of risks associated with self-medication practices including wrong self-diagnosis, failure to seek health care services within time, severe and rare side effects, drug-to-drug interaction, wrong administration route, incorrect dosage, incorrect treatment selection, obscuring major diseases, and the possibility of reliance and misuse [5]. In Pakistan, there are many studies about self-medication on the general population but only one study conducted in Karachi that shows the frequency and factors associated with the self-medication of antibiotics found among practicing nurses. This study aims to evaluate and compare the knowledge and self-medication practices among nurses of public sector hospital and private hospital.

Methods

A descriptive cross-sectional study was conducted in Public sector hospital and Private hospital Islamabad, using a structured questionnaire containing close ended questions. Questionnaire was authenticated by taking guidance from experts. Informed consent was obtained from the participants before data collection. For data collection, questionnaire was allotted arbitrarily to the participants using convenient sampling. Before the final data collection pilot testing was done comprising 50 participants. Final data was collected form 120 nurses working in different departments at public and public sector hospitals. Participation in the study was deliberate. Sample was equally distributed to both public sector and private hospital. The study was conducted from 12 September to 20 November 2023.

The questionnaire consisted of three parts. The demographic part was the first one and contained information regarding age, gender, level of education, and year of nursing experience. The second part consisted of questions related to assessing the knowledge and awareness of self-medication among nurses. The third part contained the practice-based questions, reasons, experience of adverse effects associated with self-medication, beliefs about the self-medication practices and common types of drugs used by the nurses for self-medication. Databases including Google, CINAHL, PubMed and Google Scholar were searched for the research.

Inclusion and Exclusion Criteria

The inclusion criteria for this study was all the nurses working in critical areas (ER, ICU, CCU, and NICU, PICU, L&D i.e. labor and delivery). The nurses with less than one year of experience, Intern nurses, nursing assistants, and paramedical staff were excluded from the study.

Statistical Analysis

The data were analyzed using a statistical package for the social sciences program (SPSS) version 26. Results were expressed in frequency and percentages.

Ethical Consideration

Ethical codes of conduct are to be strictly adhered to all the stages of the project, all the information which was taken from the participants in the study remained strictly anonymity and confidential.

Results

Out of 120 nurses included in this study 63.3% (38/60) of public and 90% (54/60) of private sector nurses practiced self-medication.

As shown in table (1) Public sector and private hospital nurses (95%) have equal level of knowledge about self-medication. While only 5% do not have knowledge about SM. 88.3% of public and 61.7% of private sector nurses were confident in their knowledge of SM and their appropriate usage.

Table (2) shows that public sector nurses mostly practiced self-medication due to lack of time and minor health issues (e.g. headache, cold, mild pain). While most of the private sector nurses practiced self-medication because of their familiarity with medications and dosage and previous experience of similar symptoms.

Table 1: Nurses' awareness regarding self-medication and their potential risks (n=120).

Variable	Public Sector		Private Sector	
	Frequency	%	Frequency	%
Awareness about self-medication using OTC medications.	57	95%	57	95%
Awareness about potential risks and adverse effects.	60	100%	57	95%
Awareness about appropriate dosage and administration.	60	100%	50	83.3%
Confidence in the knowledge of self-medication using OTC and their appropriate use.	53	88.3%	37	61.7%

Table 2: Distribution of nurses according to the reasons for self-medication practice (n=120).

Reasons for self-medication	Public Sector		Private Sector	
	Frequency	%	Frequency	%
Previous experience of similar symptoms	35	58.3%	55	91.7%
Minor health issues (e.g. headache, cold, mild pain)	60	100%	54	90%
Familiarity with medications and dosages	32	53.3%	56	93.3%
Lack of time	28	46.7%	31	51.7%

Table 3: Common medicines used by the nurses for self-medication (n=120).

Medicines	Public Sector		Private Sector	
	Frequency	%	Frequency	%
Antibiotics	38	63.3%	50	83.3%
Paracetamol	38	63.3%	54	90%
Antacids omeprazole	38	63.3%	54	90%
Anti-allergic	35	58.3%	50	83.3%

Table 4: Nurses' belief about self-medication practice (n=120).

Nurses' belief	Public Sector		Private Sector	
	Frequency	%	Frequency	%
Self-medication practice among nurses is safe	23	38.3%	23	38.3%

As shown in table (3) 63.3% of public and 83.3% of private sector nurses were practicing antibiotics, 63.3% and 90% paracetamol, antacids and 58.3% and 83.3% respectively were practicing anti-allergic for self-medication.

28.3% of public and 35% of private sector nurses had experienced negative consequences or side effects of self-medication.

As shown in table (4) 38.3% nurses of both sectors believe that self-medication practice among nurses is safe while 61.7% consider that it is not a safe practice among nurses.

Discussion

This study is distinctive as it examined and compare the level of knowledge and practices of self-medication among nurses of two different hospitals. The results show that both the public and private sector nurses have equal level of knowledge about self-medication. But private hospital nurses do self-medication more likely than the public ones because of expenses, they have to pay in seeking appointments, organizational polices, privacy, lack of time, previous experience of similar symptoms, and familiarity with medicines. On the other hand, public sector nurses do self-medication less likely than private ones because they have their free checkups, they neither have to pay for appointments nor for medicines. They don't have any specific policies or standards.

In the present study both public and private sector nurses were taking self-medication for their minor disorders like headache, cold, and mild pain. They were mostly practicing SM due to their familiarity and experience of similar symptoms. These finding are similar to the study conducted in India where majority of the nurse were using self-medication in order to treat their minor illnesses or they have knowledge for their symptoms and treatment [7]. Another study done in Malaysia showed that familiarity with medicines, treatment regimen and mild illness were the main causes for using self-medication [8].

Antibiotics, paracetamol, antacids, and anti-allergy are most commonly used by the nurses in the present study. This finding is similar to the findings of study conducted in Basra teaching hospital where the most of nurses were practicing antibiotics, paracetamol, antacids and anti-allergic for self-medication [5]. Another study was conducted in Najaf province where the most of the study sample used antibiotics for self-medication [9]. Two studies conducted in India noted that many of the nurses practiced antibiotics and analgesics [7,10] Another study done in Karachi, Pakistan showed that antibiotics were commonly practiced by the practicing nurses [11].

28.3% of public sector and 35% of private hospital nurses had experienced harmful or adverse effects of self-medication. But it is still a common practice among nurses of both sectors public (63.3%) and private (95%).

This study has some limitations. Time constraints, accessibility of nursing personnel, limited resources, and small sample size due to inclusion and exclusion criteria. Because of small sample size the results are not applicable to the larger population. Further studies with large sample size on a large platform will be required to evaluate the nurses' attitude regarding self-medication practices.

Conclusion

Self-medication is a common practice by the nurses of both public and private sector hospital. Majority of the participants believe that self-medication is not a safe practice. Despite this they always do self-medication for their minor disorders or illness. Majority of the nurses practiced antibiotics followed by the paracetamol, anti-allergic and antacids. Most of the nurses of both sectors practice the self-medication due to lack of time, awareness, and previous experience of similar symptoms but private sector nurses do self-medication more likely due to high costs (appointments and medicines) than public ones. So there should be proper polices or panels for the private hospital nurses for their regular checkups in order to maintain their health as well as the quality of patient care.

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