

Self-Medication among Nurses working in Basra Teaching Hospitals, Iraq

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Abstract

Background: Self-medication (SM) is a common practice worldwide and considers a significant problem in relation to the proper use of medicines and unwanted adverse effects.

Objectives: Evaluate and determine the extent of self-medication practices and its associated factors among nurses.

Methods: Descriptive, across-sectional questionnaire-based study that included 200 nurses working at different departments in three Basra Teaching Hospitals.

Results: Present study revealed that SM is a common practice by the nurses (66%). Nurses who graduated from secondary school(80%) and from institute of nursing (67%) were more likely to practiced SM compared to nurses graduated from college of nursing (40%). Nurses who had less than 20 years of employment (69%) are more likely to practiced SM compared to nurses who had worked more than 21 years(33%). The major reasons for practiced SM among studied nurses, (37%) of them said that they had experience from previous similar symptoms, and (24%) minor illnesses and didn't require doctor's advice. The most common health conditions for nurses to practice self-medication are (62%) headache, (53%) tonsillitis, (49%) common cold and fever, and (45%) pain. Antibiotics accounted for (72%) of medicines used, followed by (65%) paracetamol, (53%) pain relievers – NSAIDs, and (42%) cold remedies and cough syrup. (61%) of nurses depended on their knowledge as the source of information for SM while (45%) of them depended on the advice given by the physician from previous prescription and (23%) depended on the advice given by the pharmacist. (29%)of nurses consider SM as a safe practice and devoid from any adverse effect and believe that the SM cannot cause any harm to health. While (71%) of them realize that SM can cause adverse effects.

Conclusion: Self-medication is a common practice among nurses

Key words: Self-medication, Practices, Nurse, Medicines

Introduction

Self-medication (SM) is a common practice worldwide and is a part of self-care and as an essential public health resource in the healthcare system. SM referred to "the use of medications to treat self-diagnosed illnesses or symptoms, or the recurrent or continues use of prescribed medications for chronic or recurrent disorders or symptoms" i.e., taking medications without a doctor's prescription⁽¹⁾.

Medications today can restore the health and improve the quality of life and using them incorrectly can cause dangerous harm to the body. Many people are hospitalized and fail or unable to get better because they have not taken or used their medications correctly⁽²⁾.

In developed countries, SM is common, but the practice is guided since persons are enlightened and could obtain adequate knowledge from different sources⁽³⁾.

In developing countries, the condition is frightening, where there is poor clinical or medical service and no professional control of pharmaceutical products⁽⁴⁾. Consequently, patients forced to self-medication and often used different forms of substances and herbs to treat various medical problems^(5,6). Although the practice is common, there is inadequate data on its effect on the patients^(7,8).

Responsible SM has many benefits and needs a certain level of health knowledge and orientation. It reduces the burden on the medical services, reduces the time consume in waiting to see the physician, and contributes to reduce prescribe medicine costs, especially in low economical countries with limited health care resources⁽⁹⁾.

In contrast, SM practices have many potential risks such as improper self-diagnosis, delays in seeking medical advice when required, severe and rare adverse effects, serious medicine interactions, incorrect routes of administration, improper dosage, improper choice of treatment, masking of severe disorders, and risk of dependence and abuse.^(10,11)

World Health Organization acknowledges the presence of an effective role of SM⁽²⁾ and stated that, "It has become widely accepted that SM has an important place in healthcare system". Recognition of people's responsibility for their own health and awareness that professional care for mild illnesses is often unnecessary has contributed to this view⁽¹²⁾. Improvements in individual knowledge, education, and socioeconomic status in many countries form a reasonable foundation for successful SM⁽¹³⁾.

Objectives

In Iraq, nurses have access to all types of medications, which makes SM an easy practice. Therefore, the objective of the current study is to assess and determine the extent of SM practice and its associated factors among nurses working at Basra teaching hospitals

Methodology

Study Design: A descriptive, cross-sectional, questionnaire-based survey

Setting: Basra teaching hospitals in Basra governorate, Iraq.

Study sample: 200 nurses working at different departments in three Basra teaching hospitals.

Study instrument and Data Collection: A structured questionnaire was distributed randomly to the nurses. Participation in the study was voluntary and anonymous. Data were collected through direct interviews by two senior nursing students. The study was conducted between November 2016 and May 2017. Approval was obtained from the College Ethical Committee and the general directorate of health in Basra.

The questionnaire contained five sections. The demographic section was the first one and contained information regarding age, gender, level of education, and duration of employment. The second section consisted of questions related to the reasons for self-medication among nurses. The third pertained to the health conditions that lead to self-medication. The fourth consists of questions related to the types of medications used by nurses. The last section consists of questions related to the source of information about medicines used; awareness of nurses about adverse effects associated with SM and beliefs about the SM practice.

Statistical analysis: The collected data were coded, entered, and analyzed using statistical package for social sciences program (SPSS). Descriptive results were expressed as frequency and percentages.

Results

Table (1) Socio-demographic characteristics of participants (N = 200)

Demographic Variable		TOTAL 200		Practicing SM 132(66%)		Not practicing SM 68(34%)	
		F	%	F	%	F	%
Age	19 –34 years	140	70	82	62	58	85
	35 – 61 years	60	30	50	38	10	15
Gender	Male	112	56	78	59	40	59
	Female	88	44	54	41	28	41
Level of education	Secondary school of nursing	90	45%	72	80%	18	20%
	Institute of nursing	60	30%	40	67%	20	33%
	College of nursing	50	25%	20	40%	30	60%
Duration of employment	10 years and less	78	39	54	69%	24	31%
	11– 20 years	62	31	42	68%	20	32%
	21 years and more	60	30	20	33%	40	67%

Table (1) describes the socio-demographic characteristics of nurses who participate in present study. Out of the 200 nurses included in study, 132 (66%) of them practiced SM. Table (1) also showed (80%) of nurses who graduated from secondary school of nursing and (67%)of nurses who graduated from the institute of nursing were practiced SM. While only (40%)of nurses who graduated from college of nursing were practiced SM. (69%) of nurses who had10 years of employment or less and (33%) who had 21 years of employment and more were practiced SM

Table (2) Distribution of nurses according to the reasons for self-medication practice (N = 132)

Reasons for self-medication	Frequency	Percentage %
Previous experience of similar symptoms	49	37%
Minor illness (not serious)	32	24%
Quicker relief	22	17%
Self confidence	15	11%
Need to save time and money	10	8%
The doctor prescribe the same medication	4	3%
Total	132	100%

Table (2) shows reasons mentioned by nurses who practice self-medication. (37%) of them said that they had experience from previous similar symptoms, (24%) minor illnesses and didn't require a doctor's advice, (17%) reported that practicing self-medication could help them to get better more quickly and (11%) of them want to manage their own health problems (self-confidence) followed by saving time and money (8%).

Table (3): Common health conditions and symptoms self-medicated by nurses (N= 132)

Health conditions	Frequency	Percentage %
Headache	82	62%
Tonsillitis	70	53%
Fever and common cold	65	49%
Pain	60	45%
Gastrointestinal problems	36	27%
Asthma	24	18%
Chest Infection	22	17%
Hypertension	16	12%
Allergy	6	5%
Anemia	6	5%

Table (3) indicates that the most common health conditions for nurses to practice self-medication are (62%) to relieve headache, (53%) tonsillitis, (49%) common cold and fever, (45%) pain, (27%) gastrointestinal problems, (18%) asthma, (17%) chest infection, (12%) hypertension.

Table (4): Common medicines used for self-medication by nurses (N = 132)

Medicines	Frequency	Percentage %
Antibiotics	95	72%
Paracetamol	86	65%
Non-steroidal anti-inflammatory drugs (NSAIDs)	70	53%
Cold remedies and Cough syrup	65	42%
Medications used for Gastrointestinal disorders (Antacids, Omeprazole, Metoclopramide, Lomotil, Laxatives)	38	29%
Anti-hypertension	16	12%
Anti-allergic medication	6	5%
Multivitamin	6	5%

As shown in Table (4) Antibiotics accounted for (72%) of medicines used, (65%) paracetamol, (53%) pain relievers – NSAIDs, (42%) cold remedies and cough syrup and (29%) medications used for Gastrointestinal disorders.

Table (5) Sources of information about the medicines (N= 132)

Sources of information	No	Percentage %
Self-knowledge	80	61
Previous prescription	60	45
Pharmacist	30	23
Drug leaflet insert	25	19
Internet	15	11

In the present study (61%) of nurses depended on self-knowledge, (45%) advice given by the physician from previous prescription, (23%) pharmacist's advice, (19%) drug leaflet insert and (11%) internet information (Table 5)

Table (6): Nurses' awareness of the adverse effects of medicines used in self-medication (N=132).

Variable	No	%
Awareness about adverse effects	38	71%
Unawareness about adverse effects	94	29%
Total	132	100%

Table (6) displayed that (71%) of nurses aware about adverse effects and (29%) of nurses unaware about adverse effects and consider self-medication as a safe practice.

Table (7): Nurses' beliefs toward the practice of self-medication (N=132).

Nurses' beliefs	No	Percentage
Good practice	2	1.5%
Accepted practice	52	39.3%
Wrong practice	78	59.2%
Total	132	100%

Table (7). 59.2% of nurses believe that self-medication is a wrong practice, 39.3% believe it's an acceptable practice and only 1.5% of them believe it's a good practice.

Discussion

Our study indicates that (66%) of the participants had practiced SM. This finding is similar to the finding of study conducted in Malaysia among health care professionals⁽¹⁴⁾, in Pakistan among nursing staff⁽¹⁵⁾, in Nigeria among health care workers⁽¹⁶⁾. Our result is also in agreement with

two studies completed in India one among health care workers⁽¹⁷⁾ and other among nurses and midwives⁽¹⁸⁾ and disagreement with a study done in Brazil among nursing staff⁽¹⁹⁾.

Other similar studies done among different health care providers include physicians and pharmacists^(20,21,22) also revealed that a high rate of SM among them.

Many studies completed among different university students, include nursing, pharmacy, medical non-medical⁽²³⁻²⁹⁾, reported a high percent of SM among the studied students.

In Iraq, SM practice was evaluated by many studies done across population. A study in Al-Najaf province revealed that 65.7% of the studied sample used medicines without prescription. While a study in capital Baghdad noted that 46.5% of people use medicines without a prescription⁽³⁰⁾. Another study done in Erbil-city reported the rate of SM was 52.6%⁽³¹⁾.

The present study showed that nurses who graduated from secondary school and institute of nursing are more likely to practice SM compared to nurses who graduated from college of nursing. This might be due to nurses who graduated from college have a good educational background on medications and their adverse effects and might have a good knowledge about SM and its incorrect practice. Our study also showed that nurses who had less than 20 years of employment are more likely to practiced SM compared to nurses who have worked more than 21 years. This might be due to nurses with more years of work have a good knowledge about medication, on t adverse effects and they also have information about disadvantages of SM and consequence of practicing inappropriate SM and prefer to consult a specialist rather than self-medicate.

The major reasons for practiced SM among studied nurses comprise that they had experience from previous similar symptoms, minor illnesses and didn't need a doctor's advice and they want to manage their own health problems (self-confidence). In fact, most diseases initially seem to be mild and have similar symptoms, but improper diagnosis and treatment may lead to serious health problems. Therefore, caution should be exercised when practicing SM.

Our findings are differing completely from findings revealed by study done in India in which majority of nursing staff were practicing SM for minor illnesses, or they are aware to the symptoms and their treatment⁽²⁾. A study done in United Arab Emirates(UAE) indicated that majority of the participants practicing SM because 'health problem is not serious'⁽²¹⁾. Another study completed in Malaysia revealed that familiar with treatment options and mild illness were the reasons for practicing SM⁽¹⁴⁾.

According to the results of the present study, the most common health conditions for nurses to practice SM include headache, tonsillitis, common cold and fever, and pain. The results are in agreement with studies conducted in UAE⁽²¹⁾, in North India in which headache and fever were the most common symptoms for practicing SM⁽³²⁾, and in Nigeria, in which headache and fever among the main reason for SM practice⁽¹⁶⁾ and disagreement with results of the studies conducted in India, in which pain was the most common condition; followed by fever and headache⁽²⁾ while a study in Southern India reveals that, the common cold and fever followed by pain and gastrointestinal conditions are the most common reasons for SM practice⁽²⁾. A study in Malaysia showed headache, and cough and cold among illness for practicing SM⁽¹⁴⁾.

Antibiotics was the most common medicines self-medicated by the majority of the nurses followed by paracetamol, analgesics– NSAIDs, and cold remedies and cough syrup. This result similar to a study done in Najaf province revealed that the majority of the study sample used antibiotics⁽³⁰⁾. A study in Malaysia showed analgesics and antipyretics induced most healthcare professionals to practice SM⁽¹⁴⁾ while two studies done in India noted that the majority of nurses used analgesics followed by antibiotics, and vitamins^(2,17). Another study also done in India reported that the majority of nursing students used antipyretics followed by analgesics and antibiotics⁽¹²⁾. Whereas a study done in Nigeria reported the majority of participants used antimalarials, analgesics, and antibiotics⁽¹⁶⁾.

Antibiotics are the most frequent drugs used in present study because many nurses used antibiotics routinely even with mild symptoms like common cold, fever, chest infection, tonsillitis and gastrointestinal disorders. This practice may result in the misuse of antibiotics because most of these illnesses are viral infections. Therefore, antibiotics not become useless only, but they become less effective against the bacteria they are intended to treat them - Antibiotics resistant bacteria.

Based on the finding of our study most nurses(61%) depend on their self-knowledge as a source of information for SM. This action may lead to misdiagnosis and wrong treatment and then to serious health problems while (45%) of them depended on the advice given by the physician from previous prescription and (23%) depended on the advice given by the pharmacist. These results different from findings in a study conducted in India, which reveals that 59.52/% of participants depended on previous prescription as the sources of information⁽¹²⁾.

Our study presented that (29%)of nurses consider SM as a safe practice and devoid from any adverse effects and believe that the SM cannot cause any harm to health. While (71%) of them realize that SM can cause adverse effects. Unlike a study done in Shivamogga, India showed that most of nursing staff(88.7%) believed that SM is entirely safe⁽¹⁷⁾.

(59.2%) of studied nurses believe that SM is a wrong practice and only(1.5%) of them believe it's a good practice. Despite of these results, most nurses(66%) still practice SM. This may be due to lack of knowledge about responsible and informed SM among studied nurses

Conclusion

The findings of present study showed that SM is a common practice by the nurses (66%). SM practice was more likely in nurses who graduated from secondary school and institute of nursing and in nurses who had less than 20 years of employment. The most common health conditions for SM practice are to relieve headache, tonsillitis, common cold and fever, and pain. Antibiotics the most common medicines self-medicated by the majority of nurses followed by paracetamol, analgesics, and cold remedies and cough syrup. Most of the nurses depended on self-knowledge, and advice given by the physician as a source of information about the medications used for SM. The majority of nurses realize that SM can cause adverse effects and

small percent of them consider SM as a safe practice and devoid from any adverse effects and believe that the SM cannot cause any harm to health. Most of the nurses believe that SM is a wrong practice.

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