Original Article

Medication Self-Administered behavior among Jordanian Population

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Objective: To identify the medication self-administered practice among a sample of Jordanian population.

Methodology: This descriptive study was carried out to assess the medication self-administered practice among 150 Jordanian subjects who visited our hospital during one month period. The data were collected by a questionnaire that consisted of two parts; socio-demographic information, and a set of questions that measured the self-administered behavior.

Results: The total number of participants who answered the study questionnaire was 136. Fifty one (37.5%) had no medication self-administered behavior, from these 70.6% were non health professionals. 62.5% had medication self-administered behavior and 80% of them did not have chronic illnesses.

Conclusion: The study supports the need for more concern regarding the medication self administration behaviors by public health education and more structured policy for dispensing OTC medication. Guidelines on safe disposal of unwanted medicines must be introduced. (Rawal Med J 2014;39: 35-38).

Key words: Self-medication behavior, structured policy, public health education.

INTRODUCTION

Self medication is strongly driven by the need for receiving initial medical care for an illness without the need for a drug prescription or the hassle of visiting the doctor. Therefore, it can be defined as the use of drugs to treat self diagnosed symptoms or illnesses or the continued or intermittent use of a prescribed drug for chronic or recurrent symptoms or disease.[1] Responsible self-medication can be a helpful in preventing and even treating diseases that do not require medical consultation. The rates of prevalence of self- medication vary among developing and developed countries due to differences in socioeconomic and cultural factors, access to health care and drug dispensing policies.[2] Main reasons to self-medication have been identified; which include the cultural beliefs that herbal medicines cure many illnesses, second are the belief about disadvantages of conventional medicines and their side effects, and finally are the beliefs about reduced advantages health care systems.[3]

An equally important factor in self-medication is medical background, specifically within health practitioners since knowledge of appropriate dosage and scheduling in addition to contraindications and possible side effects is important.[4] Furthermore, medicine retailers are playing an increasingly active role in increasing self-medication in communities, especially in developing countries due to absence of trained pharmacists.[5] Poor adherence to drug regimes and drug resistant bacteria increase morbidity rates.[6] Safe disposal of unwanted medicines has increasingly become a mater of concern due to the increase of self-medication and presence of medicines in the household.[7] Therefore, the purpose of this study was to identify the medication self-administered practice among a sample of Jordanian population.

METHODOLOGY

A cross section descriptive design was used to assess the medication self-administered practice among a convenience sample of 150 Jordanian subjects who visited AL-Hussein Medical Hospital. However, 14 participants refused to complete the study questionnaire. The inclusion criteria were all adult persons who met on the data collection setting regardless of their age, education, or health status, and able to talk and hear. Those who had mental disability were excluded from the study.

The data were collected by a questionnaire that

consists of two parts; socio-demographic information, and a set of questions that measured the self-administered behavior. The data were collected through interviewing of the participants on the waiting area of specialized clinic. The duration of data collection was over one month duration where the researcher attended the setting of data collection for 3 hours a day for two days a week.

RESULTS

The total number of participants who answered the questionnaire was 136. Fifty-one (37.5%) had no medication self-administered behavior. The participants who did not have medication self-administered behavior were 68.6% male, 58.8% married, 45.1% secondary education, and most of them (70.6%) were non health professionals (Table 1).

Table 1. Characteristics of the participants who had no medication self administration behavior.

Characteristic		Number	Percentage
Gender	Male	35	68.6
	Female	16	31.4
Residence area	Amman	22	43.1
	Irbid	12	23.5
	Other	17	33.4
Social status	Single	18	35.3
	Married	30	58.8
	Divorce	3	5.9
Education	Illiterate	5	9.8
	Primary	2	3.9
	Secondary	23	45.1
	University	21	41.2
Employment status	Employed	30	58.8
	Unemployed	11	21.6
	Retired	10	19.6
Work type	Health Profession	15	29.4
	Nonhealth Profession	36	70.6
Chronic Illness	Yes	19	37.3
	No	32	62.7

Those participants who had medication self-administered behavior were 62.5% of total study sample. The characteristics of those participants were 55.3% female, 63.5 % had university education, 72.9 % employed, and 48.2 % were health professionals. However, 80 % of them hadn't chronic illnesses (Table 2).

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Table 2. Characteristics of participants who had medication self administered behavior.

Characteristic		Number	Percentage
Gender	Male	38	44.7
	Female	47	55.3
Residence area	Amman	44	51.8
	Irbid	15	17.6
	Other	26	30.6
Social status	Single	36	42.4
	Married	48	56.3
	Divorce	1	1.2
Education	Illiterate	4	4.7
	Primary	7	8.2
	Secondary	20	23.5
	University	54	63.5
Employment status	Employed	62	72.9
	Unemployed	16	18.8
	Retired	7	8.2
Work type	Health Profession	41	48.2
	Nonhealth Profession	30	35.3
Chronic Illness	Yes	17	20
	No	65	80

Analgesic, antipyretic and antibiotic were the most common types of medication administered (77.6 %, 75.3%, and 71.8%, respectively). Headache (81.2%) and toothache (52.9 %) were the most common complains requiring medication administration. 36.5 % of the participants reported that they administered the medication one time per

day, and 48.2% perform this behavior more than three times in the last 6 months.

Table 3. Description of self administered behavior.

Variable	Number	Percentage
Type of medication		
Antipyretic	64	75.3
Antibiotic	61	71.8
Analgesic	66	77.6
Muscle pain relive	41	48.2
Vitamins	41	48.2
Medical Complain		
Tooth ache	45	52.9
Headache	69	81.2
Fever	40	47.1
Stomach ache	23	27.1
Joint or bone ache	23	27.1
Muscle Spasm	31	36.5
Number of dosage administered		
One time per day	31	36.5
One time per week	15	17.6
One time per month	18	21.2
Other	21	24.7
Administration of medication in the last 6 months		
One time	15	17.6
Two times	12	14.1
Three times	5	5.9
More than three times	41	48.2
Not sure	12	14.1
Source of information of self administration		
Pharmacist	22	25.9
Friends and family	11	12.9
Previous medical prescription	17	20.0
Self information	35	41.2
Source of medication		
Pharmacy	67	78.8
Friends and family	8	9.4
Available at home	10	11.8

Nearly half of the participants (41.2%) based their decision of self medication on self-information, while the source of medication prescription was pharmacy (78.8%) (Table 3).

DISCUSSION

The study presents the medication self administered behavior among a sample of Jordanian population which supports that those who have higher education and they have medical background, as a health care professionals, were more likely to practice this behavior. These results confirm that having information about medication or increase ability to access to this information will increase the possibility to practice the behavior of medication self administration. The same results confirm by a study on medical students on India since the prevalence of self medication among medical students is high, facilitated by the easy availability of drugs and information from textbooks or seniors.[8] Also, the study revealed that those who had chronic illness were less likely to practice medication self administered behavior, which could be interpreted as those patients followed a scheduled treatment regimen and they are regularly supply with the needed dosage of their medications.

As in the other studies,[1,2] analgesic, antipyretic and antibiotics were the most common medication administered without physician prescription. Availability of those medications in pharmacy and the severity or acuity of symptoms could be the reasons behind rising the percentage of administration. However, those types of medications could increase the possibility of adverse effect.

Since the study showed that the most common source of medication prescription was pharmacy, advocating for a proper pharmaco vigilance system should be implemented to provide advice for patients regarding OTC drugs.[9] Moreover, due to presence of medicines in the household the disposal of unwanted medicines from households is becoming an increasing problem for local and national health and environmental authorities. Hence, guidelines on safe disposal of unwanted medicines are required and an organized method of collecting unused medication needs to be introduced.

CONCLUSION

Although, selection of participants from one setting and small sample size considered as limitations of the study, but the study supports the need for more concern regarding the medication self administration behaviors by public health education and awareness as well as more instruction and structured policy for dispensing of OTC medication.

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