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THE PREVALENCE OF SELF-MEDICATION AMONG MOTHERS IN BURRI DISTRICT, SUDAN

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ABSTRACT
Self-medication is the use of drugs to treat self-diagnosed disorders or symptoms, or the intermittent or continued use of a prescribed drug for chronic or recurrent diseases or symptoms. The practice is more frequent particularly in developing countries. Many side effects of self-medication practice are expected to occur. A study was carried out in Burri district in the capital of Sudan to measure the prevalence of self-medication among mothers. A total of 287 mothers were selected from the district using systemic random sampling. Relevant data were collected using a pre-coded and close-ended questionnaire. The prevalence of self-medication among mothers in Burri district, Sudan was found to be 16.4%. About 88.5% of mothers were taking their treatment regularly. Approximately 72.5% of the mothers took medicines from the nearest pharmacy, 25.1% of the mothers took medicines from health centers' pharmacy and 2.4% of the mothers take them from both pharmacies. There was statistical association between medication method and age of mothers ($\chi 2 = 6.319$, $P = 0.0424$) as well as with educational level of mothers ($\chi 2 = 6.023$, $P = 0.0141$). The study concluded that the prevalence of self-medication is high and expected to reduce the quality of medical care and leads to a waste of resources.

KEYWORDS: prevalence, self-medication, mothers, pharmacy, Sudan.

INTRODUCTION
Prescription of medicines by anybody other than doctors may lead to inefficient use of medicines which has been reported widely.[1] Self-medication reduces the quality of medical care and also affects economically due to loss of considerable resources.[2]

WHO defined "self-medication" as the use of drugs to treat self-diagnosed disorders or symptoms, or the intermittent or continued use of a prescribed drug for chronic or recurrent diseases or symptoms.[3]

Self-medication is defined as “the taking of drugs, herbs or home remedies on one’s own initiative, or on the advice of another person, without consulting a doctor.[4] Layz et al (2011) mentioned the definition of as Self-medication is the use of manufactured or homemade drugs without a medical prescription seeking to treat symptoms or self-diagnosed health conditions.[5] The practice of self-medication is found mostly in developing countries particularly antibiotic drugs which are not well-regulated.[6]

In a study in makkah, Saudi Arabia, it was found that the prevalence of self-medication among mothers who use antibiotic for children was 39.3% [7]. B. N. Joseph et al (2016) found that Self-medication was prevalent in 62.9% of pregnant women attending ante-natal clinics.[8]

The practice of self-medication is prevailing among medical students Layz et al (2011) measured the prevalence of self-medication among undergraduate nursing students in Brazil which was found to be 38.8%.[5]

MATERIALS AND METHODS
A descriptive cross-sectional community based study was conducted with an objective to study handling of medicines among the mothers in Burri District, Sudan.

The study was carried out in Burri District which is located in Khartoum Locality surrounded by the Blue Nile from the North and by Omak Street from the South, from the East surrounded by Algirif Garab and from the West surrounded by Khartoum Airport. A total of 287 mothers were obtained using the following statistical formula. They selected from the district using systemic random sampling. Data was collected using a pre-coded and close-ended questionnaire which was carefully

prepared, tested and then directed to the mothers to obtain data regarding self medication.

RESULTS

The findings of this study reported that the prevalence of self-medication among mothers in Burri district, Sudan was 16.4% as shown in table 1.In table 2 about 88.5% of mothers were taking their treatment regularly. Table 3 Shows that 72.5% of the mothers took medicines from the nearest pharmacy, 25.1% of the mothers took medicines from health centers' pharmacy and 2.4% of the mothers take them from both pharmacies. There was statistical association between medication method and educational age of mothers as reflected in table 4 ($\chi 2$ = 6.319, P = 0.0424) as well as with educational level of mothers as shown in table 5 ($\chi 2$ = 6.023, P = 0.0141).

Table 1: The prevalence of self-medication among mothers in Burri district, Sudan.

Medicines' types	No	%
Medical prescription	240	83.6
Self-medication	47	16.4
Total	287	100.0

Table 2: The percentage of regular medication among mothers in Burri district, Sudan.

Medication	No	%
Regular	254	88.5
Irregular	33	11.5
Total	287	100

Table 3: The source of medicines used by mothers in Burri district, Sudan.

Source of medicines	No	%
Health center pharmacy	72	25
The nearest pharmacy	208	72
Both	7	2.4
Total	287	100

Table 4: The relationship between age of mothers and medication behaviour in Burri District, Sudan.

Age of mother (years)	Medication				Total	
	Medical prescription		Self-medication			
	No	%	No	%	No	%
≤ 30	28	70	12	30	40	13.9
31 – 40	88	85.4	15	14.6	103	35.9
> 40	124	86.1	20	13.9	144	50.2
Total	240	83.6	47	16.4	287	100

Table 5: The relationship between educational level of mothers and medication behaviour in Burri District, Sudan.

Medication	Educational level				Total	
	Under secondary school		Secondary school and above			
	No	%	No	%	No	%
Medical prescription	60	25	180	75	240	83.6
Self-medication	20	42.6	27	57.4%	47	16.4
Total	80	27.9	207	72.1	287	100

DISCUSSION

Self-medication is a common practice in developing countries where the awareness regarding treatment and its effects is law. In Sudan the problem is present particularly in case of allergy and bacterial inflammation. In the present study the prevalence of self-medication was high (16.4%) among women. Antibiotics are usually are the most medication that used without medical prescription, in the study carried out in Sudan, about 41% of respondents used antibiotics without medical prescription[9]. also Ahmed et al (2013) found the prevalence of self-medication with antibiotics for children in Sudan was 36.6% [10]. Auta et al (2012) also found high percentage of self-medication which was 53.2%[11]. Awad et al (2006) concluded in their study that, the prevalence of self-medication with medicines including herbs in urban areas of Khartoum State is high. They also found relationship between self-medication and age and education [12] as well as revealed by this study (with age of mothers ($\chi 2$ = 6.319, P = 0.0424) and with educational level of mothers ($\chi 2$ = 6.023, P = 0.0141). Self-medication practices may lead to some problems such as incorrect self-diagnosis, delays in recovery, incorrect dose, severe side effects and others. The effect and effectiveness of self-medication is an area of cohort studies.

CONCLUSION

The prevalence of self-medication was high. There was statistical association between self-medication and mother's age and educational level.

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