EVALUATION OF FREQUENCY AND REASONS FOR SELF MEDICATION IN DISTRICT KASHMORE @ KANDH KOT SINDH, PAKISTAN

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ABSTRACT

Prescription drugs are under prescription for good reason, because they are designed to treat specific conditions. In addition every drug has dangerous side effects therefore it is very necessary to consult with medical specialist for proper diagnosis/selection of drug and to avoid from self medication. In this study data was collected by a designed Questionnaire from both males and females within the age group of 15 to 70 years in different regions of the district. Total 800 questionnaires were filled from the persons came to buy medicines without prescription. Out of which 632(79%) were males and 168(21%) were females. The Major reason for self medication was poverty, 34.5% respondents replied that treatment cost is high that they can't afford and 18.5% respondents had idea that their disease is simple so no need to consult with doctors. Furthermore 17.5% respondents have knowledge about drugs and 11.5% had previous experience with disease. In addition some respondents self medicate due to lack of trust in medical services. Our results shown that for self medication mostly respondents were getting information from family/friends/neighbors, Pharmacist, previous prescription, Media and Books.

Commonly self medicated class of drugs was NSAIDs, gastrointestinal medication, pulmonary/anti-asthmatic, antihistamines, topical preparations, antibiotics and anti- diabetic plus herbal drugs, multivitamin, antidepressants and anti-emetic respectively. Prevalence of self medication was high thus there is essential need to diminish self medication tendency by starting patient health awareness programs. Moreover it is also necessary inhibit easy excess of prescription drugs and the sale of medicines without prescription.

Keywords: Survey, Self medication, kashmore @ kandh kot, Sindh, Pakistan

INTRODUCTION

For Success of therapy it is very necessary that the Course of treatment should be monitored by health-care personnel along with that any harmful symptoms must also be reported back to the health-care personnel who can further diagnose and prescribe the appropriate drugs to alleviate the unwanted symptoms. This is usually followed by filling of such drugs at the pharmacy by the pharmacist **[1, 2]**.

Nowadays, a huge proportion of illness are managed by self medicating without consulting either a doctor or a pharmacist **[3]**. There is a tendency of common people to take the drug without discussion due to some valid and non-valid reasons. Self-medication involves the use of drugs without the advice of a physician either for diagnosis, prescription, or surveillance of treatment." **[4,5]** Self-medication embraces a number of practices in which a person himself/herself selects any medicine for the symptomatic relief or cure of an ailment without consulting a physician. It includes sharing drug among family member and from their social group or utilizing the medical prescription inappropriately, either by extending or disturbing the dosage and the administration period prescribed, **[6]** Increase in the prevalence of self medication caused about 2.9 - 3.7 % causes of death in hospitals as a result of drug-drug interactions **[7-13].** Self Medication has a significant contribution in delaying the diagnosis, leading to the development of microbial resistance and causing iatrogenic illnesses. **[14]** It is practiced commonly all over the world; up to 26.2% in developed country like Portugal **[15]** whereas this percentage increases to 59% in a developing country like Nepal **[16]** even much higher i-e 92% in the adolescents of Kuwait**[17]** According to a survey the prevalence of self –medication among Indians is 31% . **[18]** Another study conducted in rural Maharashtra, India shows

81.5% population practicing self-medication.[19]

A World Health Organization (WHO) study reveals that about 65-80% of the world's population residing in developing countries rely on herbs and plants for curing the diseases. WHO marks poverty and difficult availability of modern medicines as main cause for this practice. [20].

As it is reported from previous studies that Self-medication is frequently practiced in developing countries including Pakistan, where it is easy to get medicines without any prescription. As a result various types of undesirable effects and even toxicities may arise, either due to the prolonged use in its therapeutic dose or due to administration of medicine in wrong dose. Self-medication may also lead to severe drug-drug interactions or interaction due to the concomitant administration of drug and herbal product. Generally people believe that, since herbal products are obtained from plants and are not synthesized chemically like modern medicines, so these do not poses side effects. [21] According to one study herbal drugs may cause allergy, organ toxicity and may also show several other side effects. [22] The concurrent use of prescription drug with a nonprescription drug

(allopathic) or herbal drug can also lead to drug interaction.

The number of studies about self-medication in Pakistan is not satisfactory. Moreover the studies performed are mainly based on data pertaining to Karachi which is one of the largest cities of Pakistan having high rate of literacy. Still the findings are alarming showing around 97.3% people self-medicate, [23]. This percentage was 76% for students of Karachi University. [24].

METHODOLOGY

This is a cross-sectional study conducted in district Kashmore @ kandh kot. District Kashmore @ kandh kot located in upper Sindh province in Pakistan. Total Population of District Kashmore is about 800000 (Eight Lac) and majority of population belongs to rural areas.

Study design: In this descriptive questionnaire-based study about self medication and their reasons, data was collected in between the months of December-2014 to February-2015.

Data collection: In this study data was collected randomly by a designed Questionnaire from both males and females within the age group of 15 to 70 years in different regions of the district. A total of 800 questionnaires were filled by asking questions verbally from each consumer in

Sindhi. The questionnaire was in two parts. The first part of questionnaire contained questions on demographic information of the respondents such as age, gender, marital status, and education level. The second part of questionnaire includes questions regarding medication use habits, how often patient practiced self medications, reasons for self medication, source of information, common problems in which self medication is done, commonly self medicated medicines and herbal products, perception about self medications et cetera.

Data analysis: Collected data was analyzed further by using SPSS version 21(Statistical package for social sciences version 21), Analyzed data was reported as frequencies and percentage

as well as presented in tables for ease in understanding.

RESULTS

Total 800 questionnaires were filled from the persons came to buy medicines without prescription. Out of which 632(79%) were males and remaining 168(21%) were females. Demographic characteristics like gender, age, marital status, and educational level are shown in **Table: 1.** Majority of the respondents i.e. 45% belonged to the age group of 41-60 years and 31% belonged to age group of 21-40 years, remaining 10%

and 13 % belonged to respondents having age above 60 years and below 20 years respectively. In addition 552(69%) were married. 144(18%) were single and remaining 104(13 %) were widowed/divorced. In addition 176(22%) were uneducated. remaining 15%. 30%. 21% and 12% had primary, matric, intermediate and graduate degree respectively.

Table: 2. shows that the Major reason for self medication was poverty, 276(34.5%) of respondents replied that treatment cost was so high that they cannot afford and 148(18.5%) respondents had idea that their disease is simple so there is no need to consult with doctors. Furthermore 140(17.5%) s respondents have knowledge about drugs and 92(11.5%) had previous experience with disease. In addition to above reasons some respondents used to do self medication due to lack of trust in medical services. On question about source of information for practicing self medication, 260(32.5%) respondents got advice from family/friends or neighbors and 190 (23.75%) from pharmacist at retail pharmacy shop. About 21% of respondents took idea from previous prescription. Furthermore 112(14%) and 68(8.5%) sought information from electronic/print media and books/drug guides respectively.

Commonly self medicated class of drugs is presented in **Table: 3.** from the questions asked from respondents it is resulted that 165(20.625%) respondents were purchasing NSAIDs (Non-steroidal anti-inflammatory drugs) without any prescription. In addition 109(13.625%) were involve in self medication of gastrointestinal drugs. Furthermore there was 10.25%, 8.5%, 8%, 7.5%, and 7.25% self medication of pulmonary/anti-asthmatic, antihistamines, topical preparations, antibiotics and anti-diabetic plus herbal drugs respectively. Remaining self medicated drugs were multivitamin, antidepressants, anti-emetic and ear/eye drops.

DISCUSSIONS

This study is among the few studies conducted in province Sindh, Pakistan and it is a first study of its type on self-medication conducted in district kashmore @ kandh kot. In this study it was found that self medication is extensively practiced in this area. Similar type of studies were conducted in various regions of the world and also in Sindh province of Pakistan, The results of our study indicated that mostly males were doing self-medication these results matching with a study conducted in Nepal where males practiced self medication more as compared to females **[25].** High frequency of self medication was 45% and 31% found within the adult participants aged between 41-60 years and 21-40 years respectively, our study finding are little bit different from other studies conducted in other countries may be due to the difference in respondents characteristics and health care policies. On the question for reasons of self medication it was found that276 (34%) respondents were doing self medication due to poverty while 18.5% thought that their diseases were simple. These results were similar to a earlier study with the studies **[1, 26, 27, 28]**.

Our results have shown that for practicing self medication mostly the responds were getting information from family/friends/neighbors, Pharmacist, and previous prescription. These results were similar to the studies conducted in east Hong Kong **[29].** rural north India**[1].** and in Erode, South India respectively **[27].** Along with that respondents were receiving drug related information from drug guides and Drug advertisements.

In Our study it is resulted that Major self medicated class of drug was NSAIDS (Non-steroidal anti-inflammatory drugs). More than 20% of the respondents were involve in frequent self medication without knowing the possible hazards of drug induced gastric ulceration and nephropathy by NSAIDs.

Second most commonly self medicated class of drug was gastrointestinal medications like cimetidine, ranitidine and proton pump inhibitors

These findings were similar to other studies in India [1, 27].

Pulmonary/cough medications were third self medicated class of drug followed by antihistamines and tropical preparations these relatively high results may be due to residence of respondents in rural areas and worked in agricultures. Moreover about 7.5 % of the respondents were involved in self medication of antibiotics; self medicated antibiotics were used to treat throat infections, tooth ache, diarrhea, and other problems. In addition about 7% respondents were involved in self medication of anti-diabetic and cardiac drugs. Our study revealed that 5% respondents were using herbal drugs for cure of both chronic and acute illness. Most of the respondents has thought that herbal drugs are safe without any adverse effects, but the risk of possible drug interactions is always prevalent with their use [30]. Likewise there was also self medication of multivitamins, antiemetic and ear/eye drops but at less extent.

Our study conducted on this topic of self medication has great importance, because self medication is very dangerous it can cause very serious consequences. As we know that health care professionals like medical doctors and pharmacist study for 5-8 years to get necessary skills required for proper diagnosis and selection of appropriate regimen for patients. Moreover it is also very necessary to mention here that one should never self medicate antibiotics because they are age, dose, diagnosis specific and incorrect use may result in drug resistance and prolong recovery process.

CONCLUSIONS

Present study revealed frequent prevalence of self medication in the study population. So there is essential need to diminish self medication tendency by starting educational programs for provision of awareness to community regarding hazardous consequences. Moreover there it is also necessary to establish and implement the policies to restrict the sale of prescription medicines and controlled drugs without prescription

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Table 1: Respondents Demographic characteristics

Background of patients.	Number and %age n (%)
Gender. **Males.** **Females.**	632 (79) 168 (21)
Age. **15-20 years.** **21-40 years.** **41-60 years.** **61-70 years.**	104 (13) 248 (31) 368 (45) 80 (10)
Marital Status. **Single** **Married** **Widowed**	144 (18) 552 (69) 104 (13)
Educational level **Uneducated.** **Primary.** **Matriculation** **Intermediate.** **Graduate.**	176(22) 120(15) 240(30) 168(21) 96(12)

Table 2: Reasons and Source for Self medication

Self med. Data.	Categories.	Total. n (%)
Reasons.	Disease is simple.	148 (18.50).
	Poverty.	276 (34.50).
	Previous experience with disease.	92 (11.50).
	Patient Knows about drug and disease.	140 (17.50).
	Lack of trust in medical Services.	62 (7.75).
	Self decision.	82 (10.25).
Sources.	Books/Drug Guides	68 (8.5).
	Family/Friends/Neighbors.	260 (32.5).
	Pharmacist.(Retail pharmacy shop)	190 (23.75).
	Previous Prescription.	170 (21.25).
	Media (Print/electronic Media)	112 (14).

Table 3: Drug classes commonly used for Self medication

Drug Class.	Total. n (%)
NSAIDs.	165 (20.625).
G.I Medications.	109 (13.625).
Pulmonary/Cough Medications.	82 (10.250).
Anti-histamine.	68 (8.500).
Topical preparations.	64 (8.00).
Antibiotics.	60 (7.500).
Cardiac Drugs.	58 (7.250).
Anti-Diabetic.	58 (7.250).
Herbal drugs	36 (4.500).
Multi-Vitamin	36 (4.500).
Anti-depressant	32 (4.00).
Anti-emetic.	22 (2.750).
Ear/eye drops	10 (1.250).
Total	800 (100)