

## Knowledge, Attitude and Practices Regarding Self-Medication in Rural Community of Lahore, Pakistan

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### **Abstract**

**Introduction:** *Self-medication has traditionally been described as “the taking of medicines, herbs or home remedies on one's personal initiative, or on the advice of any other person, without consulting with health practitioner. Self-medication can be found in the oldest history of man-kind. The use of self-medicine was perceived as an important factor of health care. Regarding self-medication that the use of medicine without prescription may cause toxicity and almost every drug has some kind of side effects that cannot be ignored while preferring medicine for a specific disease course. Use of drug without doctors prescription can result in any casualty*

**Methods:** *Cross-sectional descriptive research design was used in this research study. The populations for this study were the*

*residents of the Hussain Abad community Lahore. Convenient non-probability sampling was used for the data collection. A sample size of 153 was selected by using Slovene's formula.*

**Results:** *Results of this research shows that 68% respondents were agree that wrong drugs may be used in self-medication, 20.92% were neutral, and 11.12% believes that no wrong medication is used in self-medication. Results also show respondents positive view toward homeopathy as 86.28% respondents believe that homeopathic medicine is safe for self-administration.*

**Conclusions:** *The results of this study conclude that community people of Hussain Abad have inappropriate knowledge regarding use of self-medication. Generally, there is lack of knowledge about the practice of self-medication itself and its implications.*

**Key words:** Self-Medication, Over-the-Counter Drugs, Non-Prescribed Medication, Home treatment, Rural Community.

## **I. INTRODUCTION**

Self-medication has traditionally been described as “the taking of medicines, herbs or home remedies on one's personal initiative, or on the advice of every other person, without consulting a health practitioner. (Patil et al. 2014)

Self-medication, an essential and vital part of self-care, is defined as “selection and utilization of medicines/medicinal results including natural and traditional items by people to treat self-recognized disease or symptoms, alternately irregular or continue use of a medication without prescribed by a physician for chronic or recurring diseases. Despite self-medication is common in worldwide the frequency might be higher in developing countries.(Gyawali et al. 2015). Self-medication can be found in the oldest history of man-kind. The use of self-medicine may be perceived as an important factor of health care. Regarding self- medication that the use of medicine without prescription may cause toxicity and almost every drug has some kind of side effects that cannot be ignored while preferring medicine for a specific disease course. Use of drug without doctors prescription can result in any casualty. (Sarahroodi et al. 2010)

Knowledge of self-medication that people might be ignoring other components which encourage self-medication such as distance to the hospital, or the simple way to access the medicines and create the destructive impacts like resistance and complication of their conditions/illnesses as an aftereffect improper utilization of medications alternately delay in trying to doctor's facility.(El Ezz and Ez-Elarab 2011)

Attitude of people towards self-medication they go to the drug store without doctor's prescription in view they produced their own diagnosis which might be prompt further disease complications The leading factor for this wrong attitude is "financial problems", people try to save their money and no longer go to the physician for their treatment.(Habib, Kamran, and Rashid 2015)

Attitude refers to the effective emotions of the hopeful people who like and dislike self-medication. Thus, the personal experience of people regarding self-medication could be positive or negative.(Monjeza 2013)

Practice of self-medication is the largest health problem and very common in educated people rather than illiterate people. They don't know that the regular uses of self-medication can damages the health and increase the drug reactions which lead the users to the hospital emergency. Practice of self-medication is very common in developing countries and leading cause of death and many other health problems in developed countries.(Angamo and Wabe 2012)

The trend of using self-medication is on the rise among educated people, especially the higher trend is found in big cities. These people are more likely to prefer self-medication because they think they have enough knowledge to treat their illness at home. The peoples from rural areas also prefer self-medication over prescribed medicine because they have limited resources. The major reason for this higher trend in rural areas is directly related to lower education levels.(Havens, Young, and Havens 2011)

The phenomenon of self-medication is increasing day by day and attributes as one of the main reasons for medication error. So, we must keep in mind that medicine must be purchased with the prescription except over the counter medicines and we have to take this proper way to avoid medication errors.(Huckvale et al. 2015)

### **AIM OF THE STUDY:**

Aim of this study was to know the knowledge, attitude and practice of people regarding use of self-medication.

### **SIGNIFICANCE OF THE STUDY:**

The study will bring an overall awareness among the community people regarding the self-medication. It was a first step towards understanding the harms and benefits of self-medication. The awareness of community people regarding self-medication is very significant to minimize its prevalence in future. The study will help to guide community about self-medication how to reduce the frequent uses through lectures and home visiting of rural area of Lahore. These results were to take appropriate actions to limit the use of self-medicine in rural areas, which can promote healthy lifestyle by the use of prescribed medicines only.

**RESEARCH QUESTION:** What are the knowledge, attitude and practice of people regarding self-medication?

## **II. LITERATURE REVIEW**

In the developing countries, the self-medication is seen as a component of self-care, it can be correlated with health. But Self-medication is common due to poverty and limited resources in developing countries e.g. Pakistan. Thus, the usage of self-medication in developing countries is 12.7- 95%, this problem is very common because a person can easily purchase medicine without the prescription. (Gyawali et al. 2015)

Moreover, the use of non-steroidal anti-inflammatory drugs has been established over-the-counter. About 13.1% of them were using self-medication and did not report. In contrast, females were more willing to self-treatment rather than males. (Garofalo, Di Giuseppe, and Angelillo 2015)

Many people agreed that self-medication could lead to misuse of the drug and delayed diagnosis of the disease, 49.5% consider self-treatment safe to use. Also, the wrong drug use for a while may lead to adverse drug reactions (Uppal, Agarwal, and Roy 2014)

Self- medication in developing countries is in the range of 12.7% to 95%. In Nepal, self-medication is 59 percent, while Indonesia is 31

percent self-medicated. While, Pakistan has reported self-medication cases about 50%. Identically, Bangladesh has a higher reported of self-treatment, with 78.5% of adults and 81.3% of young people taking medication through their own understanding and not visiting a health care facilities due insufficient knowledge about self-medication and their implications (Wijesinghe, Jayakody, and Seneviratne 2012). The concept of self- medication has been.

Practiced worldwide its problem concern with public health .Globally, the practice of self- medication is very high, the motivation of people varies from place to place and encourage the practice of self-medication. Likewise, the practice of self-medication in Greece is 77.9%, 98% in Palestine, 71% in Finland and 73.5% in Sudan.(Monjeza 2013)

Similarly from other studies, there is high practice of self-medication and its implications. For instance, in Maldives, the practice of self-medication and its implications found to be 93.5% and 75% amongst pregnant women in U.S, 79% in Netherlands. In Malawi and Kenya have a practice of self-medication is 56% to 53.5%.(Fishman et al. 2011)

### **CONCEPTUAL FRAMEWORK:**

The conceptual framework shows the relationship between knowledge, attitude and practice regarding self-medication among people. There is no knowledge regarding use of self-medicine which further produces positive or negative attitude toward the use of self-medication and there is no practice of self-medication which elaborates that people use self-medication as first treatment protocol when there is no access to hospitals, it also shows that people prefer home remedies or allopathic medicines. (Uppal, Agarwal, and Roy 2014)

### **III. METHODOLOGY**

**SETTING:** The setting of this research work was community of Hussain Abad, Lahore.

**RESEARCH DESIGN:** Cross-sectional study design was used in conducting this research.

**POPULATION:**

The populations for this study was the residents of the Hussain Abad community Lahore.

**SAMPLING:** Convenient, non-probability sampling was used for the data collection.

**RESEARCH INSTRUMENT:** 5 point closed end Likert scale questionnaire adopted from the literature of (Uppal D et al., December 2014) was used as a research tool. Questionnaire consist of 2 parts first consists on demographic data of participant and second is Likert scale questionnaire which is further divided into 4 subparts focusing on part 1 knowledge of self medication part 2 attitude towards self medication, part 3 practice of self-medication, part 4 reasons for the use of self-medication, Questionnaire comprises of 21 quantitative questions.

**DATA GATHERING PROCEDURE:** Ethical clearance to conduct the study was obtained from Institution Review Board Committee the University of Lahore. Permission from community stakeholder was taken to collect health and demographic data in the community. The rules and regulation of community were followed. No personal identity of participants were revealed. No participant was forced to take part in research work. All the confidential data treated confidentially.

**DATA ANALYSIS:** Data analysis was done using SPSS version 21.

**STUDY TIMELINE:** The study was conducted from September 2017 to January 2018 in the rural area of Lahore (Husain Abad) and the duration of this study is five months.

**ETHICAL CONSIDERATION:**

- Veracity. Information was given to participants about the purpose of the study.
- Confidentiality. To keep the confidentiality intact, coding was made so that personal info of participants may not reveal.
- Non maleficence. No participant was forced to take part in study or to fill questionnaire without own willingness. No sensitive information was obtained.
- Autonomy. Informed consent was attached with each questionnaire.
- Justice. No biasness was involved in conducting study and analyzing data. Fair results were concluded.

#### IV. RESULTS

##### PROFILE OF THE RESPONDENTS

Respondents were selected from rural community of Hussain Abad, Lahore.

Variable	category	frequency	percent
Age	20-30	26	18.31
	31-40	72	50.70
	41-50	43	30.28
Gender	male	37	24.18
	Female	116	75.82
Education	primary	95	62.09
	Middle	12	7.84
	Matriculation	40	26.14
	Others education	6	3.92
Marital status	single	51	33.33
	Married	102	66.67
Economic	upper	21	14.09
	Middle	62	41.61
	Lower	62	41.61

Profile of Respondents were between the age of 20-30years 18.31% (26), 31-40 years 50.70% (72), and 41-50 years 30.82% (43). Respondents 24.18 %( 37) were male and 75.82 %( 116) were female participated in this study. The Majority (62.09%) were primary educated, 26.14% were matriculation, only 7.84% were middle education. 3.92% of other education. 33.33 were single and 66.67 were married who was participated. economic status of respondents were 14.09% of upper class, 41.61% were middle and 41.61 were lower class was the part of the study from the community of Hussain Abad Lahore.

**Table2. Knowledge of People Regarding Self-Medication**

Statement	SA	A	N	D	SD
Self –medicate on is safe to use	42.4	39.8	11.1	2.6	3.9
wrong drugs usage	39.8	45.1	8.5	3.9	2.6
self-medication may cause delay diagnose	39.8	45.1	8.5	3.9	2.6
adverse reaction of self-medication	37.2	45.7	13.7	3.2	13.7

usage of incorrect drugs at any time	35.2	46.4	9.8	0.6	7.8
homeopathy medicine is safe	39.8	46.4	13.0	0.6	26.8
usage of allopathic medicine	22.8	19.6	23.5	24.8	9.1
correct dosage of self- medication	39.2	49.0	7.8	3.2	0.6

According to table 2 shows that 42.4%(65) strongly agree that self-medication is safe to use and 39.8%(61)agree ,11.11%(17) remained neutral ,2.6%(4) disagree that self-medication is not safe to use and 3.9%(6) were strongly disagree.42.4%(65) strongly agree that self-medication is safe to use and 39.8%(61)agree ,11.1%(17) were neutral ,2.61%(4) disagree that self-medication is not safe to use and 3.9%(6) were strongly disagree. 39.8%(61)were strongly agree that self-medication may cause delayed diagnose also 45.1%(69) were agree,8.5%(13) were neutral,3.92% (6) were disagree that self-medication may not cause delayed diagnose and 2.6%(4)also strongly disagree. 37.2 % (57) were strongly agree that adverse drug reaction may occur due to self-medication also 45.7 % ( 70) were agree, 13.7 % ( 21) were neutral, 3.2 % (5) were disagree. 35.2% (54) were strongly agree that incorrect drugs may be used by self-medication also 46.4 % ( 71) were agree, 9.8 % ( 15) were neutral, 0.6% (1) were disagree that incorrect drugs may not be used by self-medication and 7.84 % ( 12) also strongly disagree. This shows the most of people (89.35%) don't have enough knowledge regarding use of self-medication.

**Table3. Attitude Regarding Self-Medication**

<b>Statement</b>	<b>S.A</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>S.D</b>
Self-medication should be advised to peers	26.8	20.2	9.1	6.5	4.5
Ask for the use of self-medication	24.1	20.2	23.5	22.2	9.8
monitoring need for self-medication	11.1	11.7	45.7	22.2	22.2
comfort regarding self-medication	52.2	35.9	7.8	1.9	1.7



According to table 3 shows that 26.8 %( 41) were strongly agree that self-medication must be advised to peers also 52.9 %( 81) were agree, 9.1 %( 14) were neutral, 6.5 % (10) were disagree that self-medication not advised to peers and 4.5 %( 7) also strongly disagree. 24.1%(37)were strongly agree that self-medication can be asked by others also 20.2%(31) were agree,23.5 %(36) were neutral, 22.2% (34) were disagree that self-medication cannot be asked by others and 9.8%(15)also strongly disagree. 11.1 %( 17) were strongly agree that monitoring is required for self-medication also11.7 % (18) were agree, 45.7% (70) were neutral,22.2 % (34) were disagree that monitoring is not required for self-medication and 22.2 %(14)also strongly disagree. 52.2 %( 80) were strongly agree that feel comfort with self-medication experience also 35.9 %( 55) were agree, 7.8 %( 12) were neutral, 1.9% (3) were disagree that not feel comfort with self-medication experience and 1.9% (3) also strongly disagree

**Table 4. Practice of Self-Medication**

Statement	S.A	A	N	D	S.D
Self-medication as first choice	11.1	11.1	45.7	22.2	9.8
Immediate use of self-medication	22.8	60.7	9.8	1.3	5.2
Preference of home base medicine	60.1	22.8	10.4	1.3	5.2
Preference of allopathic medicine	42.4	41.1	11.7	2.6	1.9
Check expiry date before use of self-medication	10.4	49.6	1.9	0.6	7.8

According to table 4 shows that 11.1 %( 17) were strongly agree that self-medication is first choice of treatment also 11.1 %( 17) were agree, 45.7 %( 70) were neutral, 22.2% (34) were disagree that self-medication is not first choice of treatment and 9.80 %( 15) also strongly disagree. 22.8%(35)were strongly agree that self-medication is immediately use for problem occurrence also 60.7 %(93) were agree,9.8 %(15) were neutral, 1.3% (2) were disagree that self-medication is not immediately use for problem occurrence and 5.2%(8s)also strongly disagree. 60.1%(92)were strongly agree that

self-medication prefer as a home base medicine also 22.8%(35) were agree, 10.4%(35) were neutral, 1.3 % (2) were disagree that self-medication is not prefer as a home base medicine and 5.2%(8)also strongly disagree. 42.4%(65)were strongly agree that they are prefer allopathy medicine also 41.1%(63) were agree, 11.7 % (18) were neutral, 2.6%(4) were disagree that they are not prefer allopathy medicine and 1.9%(3) also strongly disagree. 10.4 % ( 16) were strongly agree that before use of self-medication must check expiry date of medicine also 49.6 % ( 76) were agree, 9.1 % ( 14) were neutral, 1.9 % (3) were disagree that before use of self-medication not check expiry date of medicine.

## V. DISCUSSION

The results of the study show that there is generally high uses of self-medication among the community people of Hussain Abad. The study was aimed at determining the knowledge, attitude and practice about self-medication and its implications among the people of rural community among 18-54years.

Thus, the study revealed that 80.8% of the respondents practiced self-medication to treat their health problems. Findings in this study are almost similar to other studies conducted in Bangladesh by Chandarmal (2011) which revealed prevalence of 71% of self-medication cases among the sampled population. The results in this study are of course higher than those found in the study conducted in Tanzania by Kagashe & Msela, (2012) which showed 58.9% use of self-medication.

The study has revealed that there is generally inadequate knowledge about use of self-medication and its implications. Thus, out of 153 respondents, only 35.29% (54) respondents had moderate to high knowledge about self-medication practice and its implications because they responded that wrong medication may be used in the practice of using self-medication. This coincides with a study conducted in Sri Lanka by Balamurugani & Ganesh (2015) which revealed a very high percentage of lack of knowledge about self-medication and its implications (93.5%). These results are also supported by studies conducted among pregnant women in U.S.A by Marek & Antle (2013), and in Netherlands done by Fishman et al. The variations observed in the findings could however be attributed to the

study population enrolled in each specific study, sampling technique and the sample size for the study as most of these studies used a larger sample size. This implies that self-medication is indeed a worldwide practice and this should be of public health concern as people are exposed to the side effects of wrongly administered medications.

Results also shows that self-medication practice is more common among people who belongs to low economical class because they were facing economic crisis which limit their resources to visit hospitals or clinics for the sake of proper medical diagnosis and drug administration.

## **LIMITATIONS**

Non-probability sampling technique was applied in the study. There might be response bias in the results because of the sensitive topic. The study was conducted in rural area of Lahore.

## **VI. CONCLUSION**

The results of this study conclude that community people of Hussain Abad have inappropriate knowledge regarding use of self-medication. Generally, there is lack of knowledge about the practice of self-medication itself and its implications. People are also keeping and using nonprescription medicines and over the counter drug. It was also observed that pharmacies are more utilized as the major source of medication than any other sources; thus, promoting self-medication.

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