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## Self Medication Hypothesis: Probability and Possible Solutions



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#### ABSTRACT

Patient Counselling is a discipline that emphasizes safety in health care. It provides information regarding the patient's disease and medications. However this procedure is totally for a sake of goodness, it may lead to the adaptation of self-medication practice. Self-medication is becoming a dominant global phenomenon underlying with hidden potential risks. This practice may result in a greater probability of pathogen resistance, inappropriate diagnosis, the progression of the disease and other similar consequences. This review focused on self-medication practice in developing countries like India. There are several pharmacies which provide the medications without any valid prescription and self-care of health by individuals encourages the self-medication practice. People thought this was time-saving and budget-saving but they have no idea about it hidden risks. This review concludes that there is a need to augment awareness and implement safe practices.

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#### 1. Introduction

An illness is a common human experience. Patient understands their illness within their own frame work by self decision making. Physician prescribe the medications to treat any illness and the appropriate selection of medications have a great impact in restoration of public health. William Osler once said that "a desire to take medicine is perhaps a great feature which distinguishes man from animals"[1].

In day to day life, many changes takes place in the health care such as prescription auditing, patient counselling and post consultation services. However these changes are invented for better public health, they may lead to the adaptation of self-medication practice. Every day, we are practicing self medication in the form of self-care of our health [2]. Around the 1960's in the west-self-care and self medication were regarded as unnecessary and potentially even unhealthy practices. Self-medication has been defined as "taking of drugs or herbs on their own initiative without a valid prescription to treat their illness" [3]. Self-medication patterns may vary based upon the factors like age, gender, financial & education status, medical knowledge and their perception of illness. A high level of education and professional status have identified as major predictive factors [4].

Some governments are encouraging self-care of minor illness even through self-medication. Although it helps to reduce the cost of treatment and consultation it had many negative effects. As we know self-medication practice is becoming a dominant global phenomenon, it

had a greater impact on developing countries like India [3,5].

#### 2. Self-medication Hypothesis

Self-Medication Hypothesis(SMH)/model refers that there is a hidden cause that tends some one to use the relevant drugs. Here we have a point that be noticed was the people who have mental health related diseases are not the only people adopted or addicted to this theory. It is more empathic to ask the individuals "what did the drug do for you"? Even they didn't know the exact cause, they just follow the suggestions of their well wishes like family and friends or by their past experience. It summons the survey and compassion of the condemnatory feelings and related issues that prone one to use the addictive drugs (E.g.: Depressants- Alcohol).

In a Epidemiologic catchment area, the data shows that 20% of drug users ever experience an episode of drug use and another data from National comorbidity study shows that 15% of alcohol users and 15% of illicit drug users ever become addictive[10].

#### 3. How do People Get Information for Self-Medication?

People get the information about medications from many sources. Major of them, student get access to drug information from various sources like Internet, Books, Professional friends and so on [6]. The other possible sources are:

- 1. Own past Experiences
- 2. Patient counselling or information leaflet
- 3. Relatives and friends advices
- 4. Pharmacist
- 5. Medical representatives/nurses
- 6. Advertisements through television and newspapers
- 7. Magazines and books

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#### 4. Trend of OTC (Over-The-Counter) Switch

The transfer of prescription drugs to non-prescription drugs is known as "Rx-to-OTC switch". Many new medications are first introduced as prescription medicines and later convert them to OTC medications After a sufficient time, a new drug used by large number of population, that drug was converted to OTC drug for favourable reasons. By using large scale experience and gathered information a manufacturer may elect to submit an application for OTC status [3].

Modern people wish to take a greater role in taking care of their own health. They are understandably unwilling to consult the physician for minor illness and feel they can manage their own with getting some relevant information [7]. The most commonly used OTC medications are tabulated as Table 1.

Table 1: List of Commonly Used OTC Drugs

Indication	Drugs Used
Anti-pyretics	Dolo 650, calpol
Analgesics	Cold act, D-cold, Benadryl
Antibiotics	Amoxicillin, Ciprofloxacin, Cefixime
Constipation	Lactulose, cremaffin plus
Diarrhoea	Loperamide
Vomiting	Ondansetron, Domperidone

#### Potential Risks of Self-Medication:

- · Progression of the disease and underlying causes.
- Inappropriate selection of drug of choice.
- Incorrect Diagnosis.
- Chances of Adverse Reactions.
- · Inaccurate dosing and frequency.
- Risk of dependence and abuse.
- Drug Interactions.
- Chances of arising complications.
- Pathogen resistance due to the usage of inappropriate antibiotic therapy.
- Excessively prolonged use [6,8].

#### 5. Possible Solutions

MEducational interventions to instruct the patients on the risks of OTC medication usage without a valid prescription. Receptive health providers attitude towards information shared by the patient regarding OTC and alternative medications. Development online systems at every pharmacy to store the updated medical records. Guidelines to improve management of geriatric and paediatric patients. Stop dispensing diabetic or hypertension and other monthly pack drugs without a valid fresh prescription. Give adequate information about the OTC drug before dispensing. Giving proper counselling to the people about drug misuse and its complications. [9]

#### 6. Conclusion

Self-medication is an alarming concept. Due to lack of awareness and sufficient knowledge, self-medication leads to serious consequences such as pathogen resistance, hypersensitivity and drug allergies. Especially people in developing countries like India have poor economic status and high illiteracy rate are more prone to self-medication. Dispensing modes in the pharmacies to be improved through strict regulatory and managerial strategies to make better health care and cost-effective. Last but not least, that there is a need to augment awareness and implement safe practices.

#### **Conflict of Interest**

None

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