

Self Medication : Pharmaceutical Anthropological Perspective

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INTRODUCTION

Self Medication with Modern medicine is prevalent globally. As prescription medicines (To be dispensed to patient only on prescription by a registered medical practitioner) are in available freely in many developing countries due to poor drug regulatory compliance results in self medication. People generally indulge in self medication due to poor economic condition resulting in inability to pay fee of physicians or private health care facilities, overcrowding in state hospitals or lack of accessible health care facilities. Though non affordability appears to be the primary reason for self medication there exists a group of people who indulge in self medication for them or for their families not for non affordability issues but they believe they have correctly self diagnosed their illness and decided the medicine on their own and due to easy unregulated availability of prescription drug products procure and indulge in self medication. The outcome of such medication adventure may result in cure or continuation of illness. In the second outcome the self medicationist having failed to achieve the cure may finally see a doctor for treatment. This self medication behavior of people could be a subject of Anthropological Study.

In this article we have attempted to find out reports of anthropological factors linked to Self medication .“Self Medication”. Pubmed has been used to find out studies on self medication from anthropological perspective.

There have been many studies and reviews on self medication published in the literature however very few attempted to explain their findings from anthropological perspective. Only a few reports on Self Medication analyzed from anthropological perspective are found.

The notion that every person is a doctor gets justified in an era of easily available search engines based on internet (e.g., Google) resulted in search for knowledge on diseases, their symptoms and treatment by educated people further augmented self diagnosis, self prescription and self medication.

Cultural of independence of urban educated population across the globe and acquired information on diseases and drugs may debar them from professional medical advice seeking which may be the underlying reason of self medication behavior of this group of people.

Sjaak Vander Geest *et.al.*, published a comprehensive review on Self Medication in developing countries⁽¹⁾. These authors reviewed Self Medication from Anthropological angle .They concluded poor economic conditions in developing countries were responsible for indulgence in undesirable self medication. They cited anthropological studies which described practice of classifying western medicines as “hot” and “cold “by Guatemalan villagers in accordance with their own classification⁽¹⁾. According to that culture Penicillin was considered “cold medicine” as it treats fever a “ hot illness”. They concluded in addition to practice of self medication due to poverty some local cultural concepts of illness further complicate their self medication decisions. A cold medicine is considered correct therapy for “hot” disease like fever.

Cultural reinterpretation is a term used by these authors to describe the process of indigenization of medicines. The local people use modern medicines by sprinkling powdered tablets or contents of capsules on wounds or dissolving in herbal teas before consuming the medicine. Thus they indigenized the modern medicine in their culture specific ways.

Such indigenized forms of medicines are given local names and sold in small local stores. Such cultural reinterpretation of western medicines is found in several countries. In Philippines Diatabs (Loperamide Hydrochloride) and Polymagna (attapulgit) are used by locals in diarrhea which results in bowel of good consistency. The locals in Philippines believe these medicines have similar properties of fruits like star apple and guava which the locals used traditionally for the treatment of diarrhea.

Sjaak Vander Geest et al., has reported in Cameroon the antibiotic tetracycline is easily available in markets and called "folkolo" by locals which means wound healing and contents of capsules are sprinkled on wounds.

Sjaak Vander Geest et al., has reported in Brazil the antibiotic Terramycin (oxytetracycline) is widely available at a low cost and indigenized and is used in intestinal ailments as a single dose therapy. Contents of Terramycin capsules are mixed with pork fat and applied on wounds to treat infection. It is given the name *terramycina de mato*.

Sjaak Vander Geest et al., has presented many more examples of indigenization of medicines in different cultures and interested reader is referred to his book on "*The Context of Medicines in Developing Countries: Studies in Pharmaceutical Anthropology*". Amsterdam, The Netherlands: Het Spinhuis, 1991 by Van der Geest, Sjaak, and Susan Reynolds Whyte, ed.

And also his review on "*The Anthropology of Pharmaceuticals: a bibliographical approach*"⁽²⁾

In India use of western medicines by practitioners of nonwestern system of medicines has been heard quite frequently but no systematic study has been ready found on that matter.

Besides no systematic study on Cultural reinterpretation or indigenization of western medicines in India have been found.

Self Medication in urban and rural cultures may be interpreted as society's reaction to economic hardship and lack of easy and cheap health care. Survival and self preservation from illness based on human experience becomes the key factor in deciding a course of self medication.

Based on Self Medication experiment human being learn how to cure himself and gradually there is adaptation of self medication practices in urban and rural cultures.

Self medication in developed countries takes the form of seeking alternative medicine or therapies based on the knowledge of outcome western medicines, their adverse effects potential or side effects.

The knowledge that western medicine do not offer cure or significant improvement of all diseases like some forms of cancer often lead to abandoning prescribed western medicines and seeking alternative medicines by informed patients.

A study on Self-medication practices in patients attending a Tertiary Care Teaching Hospital in Urban North-West India⁽³⁾. The study reveals the participants who took self-medication were of the opinion that self-medication resulted in quick cure of illness in 50.75%, saved their time in 17.46%, and gave them a sense of independence in 17.06%, respectively. This revelation of sense of independence by 17.46% of study population is interesting and probably explains a behavior of human beings to be self reliant even if they know there is a risk involved in self medication.

Abdulreza Shagnani published a systematic review on Predictors of Self-Medication Behavior⁽⁴⁾ and reported that women mostly performed self medication (cited 9 publications in support) compared to men (cited only in one publication where the number of self medications was higher amongst men) According to these authors fever and headache were the most common felt signs for which self medication was initiated. Family and relatives, friends, information received based on previous prescription of drugs by a physician and pharmacist were the most frequently reported source of information for self medicators.

Saub R, et. al., reported A dental-anthropological study of health and illness behaviour among Orang Asli of the Semai Tribe⁽⁵⁾. Their observational study described the oral health beliefs and illness behaviour in the Semai tribe of Orang Asli community in Malaysia. They collected data from the village Tok Halaq (Traditional healer). The most common oral problem was found to be toothache which is treated by self-medication. In case the pain still persists, the Tok Halaq is consulted who will identify the cause. If "germs" are thought to be the cause by him, he will ask the person to consult a doctor. Otherwise, he will use traditional treatment. If his treatment failed after a few days, the patient

will be advised to see a doctor. The authors concluded that the Tok Halaq plays an influential role in prevention, promotion and the healing process in this community. Hence authors recommended any effort to promote oral health and prevent oral disease must seek the cooperation of Tok Halaq.

FACTORS FACILITATING& DRIVING SELF MEDICATION MARGINALIZATION OF COMPOUNDING PHARMACY

Since Industrialization of pharmaceutical manufacturing in standard dosage forms the traditional compounding pharmacy has become marginalized and transformed to dispensing service of industrially manufactured and packed medicines against prescriptions. Patient need not get his drug compounded at Pharmacy against physician's prescription.

EASY AVAILABILITY OF DRUG INFORMATION

Prescribing Information on such Pharmaceutical Products is available on line. This may give the person indulging in Self Medication access to dosage, side effects, adverse drug reaction and indications knowledge.

EASY AVAILABILITY OF PRESCRIPTION DRUG PRODUCTS FROM PHARMACY WITHOUT PRODUCING A PRESCRIPTION

Due to lack of regulation regarding keeping a copy of prescription by pharmacies excepting for Narcotic Drugs and lack of following refill instruction and lack of oversight and initiating Regulatory action by Drug Regulatory Authorities Self Medication becomes easy to undertake.

RISING HEALTH CARE COST

Physician's fees, Specialist Physician's fees, Superspecialist physician's Fees, Diagnostic testing charges are increasing with inflation. Availability of less number of physicians, indulgence of physician's on diagnostic testing or evidence based practice results in tendency to save money on diagnosis and testing by repeating old prescriptions during repeat

of similar symptoms to save on the physician's consultation fee and diagnostic charges.

PHYSICIAN'S PRESCRIBING BEHAVIOR

Prescribing too many and irrational medicine to poor patients results in significantly high medication cost. This cost burden becomes so significant patient has no other alternative but to choose self medication.

NON AVAILABILITY OF PHYSICIAN OR HEALTH CARE FACILITY

Non availability of Health Care Facility and physician services at affordable cost also compels people to indulge in self medication.

PATIENT CENTRIC PROMOTION BY PHARMACEUTICAL COMPANIES

As self medication may be considered as potential pharmaceutical market and a shift from classical physician's market concept to Self Medicating Patient's market concept due to availability of drug information in internet and comparative costs ,informed patient is increasing deciding on brand selection and hence becoming the target of promotion by pharmaceutical companies.

DANGERS OF SELF MEDICATION

This large scale manufacturing and distribution of Pharmaceuticals which includes potent drugs, drugs with low therapeutic index, drugs with allergic potential ,significant side effects, adverse reaction potential. Drug –Drug interaction or Drug –Food interaction are other significant features of modern medicine usage.

Self Medication of Antibiotics often over short period of time results in Antimicrobial Resistance (AMR).

CONCLUSION

There has been many publication on self medication practice. Most studies highlighted the dangers associated with self medication due to wrong diagnosis, wrong selection of medicine including under dosing or over dosing and potential antibiotic resistance development due to inappropriate use. However very few tried to study the subject from Anthropological angle. However it is found from limited amount of studies on self medication, use of modern medicine has been indigenized in some communities. Traditional healers in some communities play crucial role in the treatment and cultural beliefs of diseases and medicine also influence the self medication decisions. On the other hand educated people in west as well as other parts of the world often indulge in self medication as a choice to decide his own therapy based on his acquired experience and knowledge of disease and medicine.

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