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# APPLICATION AND IMPLICATION OF SOCIAL PHARMACOLOGY AND MEDICAL ANTHROPOLOGY IN PUBLIC HEALTH CARE SYSTEMS

Anthropology

**Dr. Chinmoyee Deori** — Professor, Dept. of Pharmacology, Lakhimpur Medical College Hospital, North Lakhimpur, Assam, India.

**Dr. Debashri Bora** — Demonstrator, Dept. of Pharmacology, Lakhimpur Medical College Hospital, North Lakhimpur, Assam, India.

**Dr. Anup Jyoti Bharali** — Associate Professor, Dept. of Anthropology, DHSK College, Dibrugarh, Assam, India.

## ABSTRACT

Social Pharmacology is the study of how contemporary societal and cultural elements influence the outcomes of drug use and how these aspects change in tandem with scientific progress in our society. The field seeks to gather further information about drugs, even after they have been approved and made available commercially. It places particular emphasis on "Phase IV" clinical trials, which are the most expensive opportunities for studying medications in real-world social settings. The primary goal of social pharmacology is to assess how drugs function in genuine environments, which can significantly differ from controlled drug development settings. By drawing upon knowledge from various health-related disciplines, social pharmacology is suggested as a strategic approach for obtaining crucial insights into drugs that have already been introduced to the market. In the past, clinical pharmacologists and therapeutic specialists have played a predominant role in advancing our comprehension of drug mechanisms and their clinical uses. Medical anthropologists on the other hand utilise different theoretical frameworks, all of which have a shared emphasis on improving the healthcare system's comprehension of how cultural, social, and biological elements impact human encounters with pain, illness, disease, distress, and recovery in a variety of settings.

## KEYWORDS

Clinical pharmacology, Public health, Social pharmacology, Medical anthropology, Social research.

## INTRODUCTION

Social Pharmacology is a new branch of Clinical Pharmacology that explores the connection between drugs and society. Its concerns extend beyond the fundamental principles of science. The term "social pharmacology" was coined in the 1960's when there was a growing need to assess how drug dependence was affecting individuals at a societal level. Given the current prevalence of drug abuse and addiction, which affects not only adults but also teenagers and even young children, the importance of social pharmacology has never been greater. Today, drugs are used not only for treating and preventing illnesses but also for everyday needs such as personal hygiene, dental aesthetics, and self-care.

Medical anthropology has a rich history of exploring topics related to illness, its distribution, prevention, and treatment, as well as the social dynamics of managing therapy and the cultural significance of diverse medical systems. This subfield has evolved significantly since its beginnings in the 1950's, always maintaining an applied approach. From the outset, medical anthropologists have dedicated themselves to comprehending and addressing urgent global health challenges, recognizing that these issues are deeply intertwined with human social structures, cultural norms, and contextual factors.

### Evolution Of Social Pharmacology

The evolution of social pharmacology began in the 1980's, encompassing various aspects of drug use during the post-marketing phase. It draws on insights from a wide range of disciplines, including physicians, pharmacists, nurses, biologists, drug epidemiologists, health economists, lawyers, regulators, insurance experts, and communications specialists. The interplay between prescribed medications, over-the-counter drugs, and public health concerns has become increasingly complex. Social pharmacology, within the realm of health science, is dedicated to understanding how individuals using marketed drugs can have social consequences. It involves examining how a person's exposure to a drug and various factors related to drug use can impact society. This field goes beyond the limited knowledge available during a drug's approval process, recognizing that there is much more to learn once a drug is in widespread use. The post-marketing phase offers a broader perspective on medications as they function in the real world, outside the controlled environment of drug development. This perspective encompasses factors like drug ownership, the operations of the pharmaceutical industry, and regulatory oversight.

From a public health perspective, social pharmacology is regarded as a vital source of indispensable information for any drug available in the market. It leverages the diverse knowledge of healthcare experts and delves into the extensive complexities and factors associated with drug utilisation and advantages. This multifaceted approach enables the evaluation of the balance between risks and benefits, the detection of possible concerns, guidance for decision-making, the reduction of adverse drug effects, and the encouragement of correct and effective drug usage. In essence, the scope of social pharmacology goes far beyond what is conventionally known as "Phase IV" research during drug development.

Medical anthropologists utilise different theoretical frameworks, all of which have a shared emphasis on enhancing the healthcare system's comprehension of how cultural, social, and biological factors impact human experiences related to pain, illness, disease, suffering, and healing in various situations. Medical anthropologists' participation at clinical levels has been pivotal in reducing the impact of cultural elements on disease occurrence. Furthermore, they also explore the societal, political, and economic factors that mould health-related behaviours and healthcare systems. This comprehensive approach informs decision-making and interventions aimed at enhancing health. Anthropologists frequently investigate specific aspects of health systems within their socio-cultural contexts.

### Social Pharmacology In Public Health

Social pharmacology initially centred on psychoactive drugs and issues related to drug dependence. Later on, it has transformed into a comprehensive field that primarily focuses on the post-marketing phase of drugs and other medicinal products. According to Venulet, social pharmacology represents the logical culmination of pharmacology's development. It encompasses the complex interaction of numerous elements, such as a drug's characteristics, its accessibility, doctors' prescribing practices, and patient adherence, all of which jointly influence the ultimate therapeutic results.

Alloza defines social pharmacology as a dynamic and interdisciplinary field that integrates critical aspects in the utilisation of drugs available in the market. It takes into account the interactions among healthcare professionals who have a direct or indirect role in healthcare, whether through service provision or enhancing drug treatments. When analysing a drug product, there's a notable difference between the controlled, scientific methods used in drug development and the new "social environment" in the post-marketing phase. This transition introduces external factors, including cultural backgrounds, health, hygiene, education, understanding abilities, and individual reactions.

These elements contribute to a wide range of viewpoints on drug usage, including the societal influences that extend beyond clinical and rational healthcare frameworks. Consequently, social pharmacology explores the use of marketed drugs within a diverse society, employing an interdisciplinary approach that engages all healthcare and public health professionals involved in improving services or drug therapy, such as information dissemination, communication, education, and problem-solving.

Methodological approaches in social pharmacology are comprehensive and encompass a wide range of studies, including pharmacoepidemiological research for drug monitoring, experimental and observational studies (often referred to as "naturalistic" studies), investigations into drug response variability, outcomes assessment, pharmaco-economic analysis, drug toxicity evaluation, drug regulation scrutiny, drug information assessment, and more. From a public health perspective, social pharmacology is considered a vital source of essential data for any marketed drug. It leverages the diverse expertise of healthcare professionals and explores the extensive interactions and factors associated with drug utilisation and its benefits. This multidimensional approach enables the evaluation of risk-benefit ratios, the identification of potential issues, recommendations for decision-making, mitigation of adverse drug effects, and the promotion of appropriate and effective drug use. Essentially, the scope of social pharmacology goes well beyond what is typically known as "Phase IV" research in drug development.

The primary goal of social pharmacology is to bridge the gap between knowledge about drugs and their application in various aspects of daily life. To achieve this, we must first take into account all the significant factors that can influence drug usage, which includes important social factors in addition to essential clinical and theoretical knowledge. Next, we should explore the societal impact of drug use and consider the key stakeholders in the drug supply-demand chain that can influence the outcomes of drug utilisation. Besides the traditional stakeholders, in today's world, the media also plays a substantial role in shaping the public's perception of medicinal products, either directly or indirectly. Lastly, we need to take into consideration the cultural background, socioeconomic status of patients, and the level of knowledge of healthcare professionals, as these factors can influence the patterns and standards of drug use.

**Vaccines And Social Pharmacology**

Vaccination has emerged as one of the most crucial methods to enhance public health. The availability of vaccines for various disease prevention stages has contributed to an overall improvement in the health of populations. It has led to a substantial reduction in mortality rates, an increase in the size of the demographic population, and a significant decrease in the transmission of numerous deadly diseases. To make vaccines accessible to the public, they must undergo a rigorous screening process, including various phases of clinical trials. In this regard, our society has been fortunate in dealing with COVID-19, as vaccines became available relatively early for a disease about which limited information was initially available.

However, there were widespread concerns and "vaccination hesitancy" observed globally, particularly in countries like the United States, Russia, Poland, and others. This hesitancy likely stemmed from a lack of trust and a shift in the balance between perceived risks and benefits. This issue is more pronounced with vaccines compared to other drugs because vaccines are typically administered to healthy individuals to prevent a hypothetical disease that may or may not occur in that individual. Nevertheless, the significance of a properly vaccinated individual extends beyond personal health and is essential for the overall health of society, thanks to the development of herd immunity. The erosion of trust has influenced how society perceives the impact of drugs or vaccines and how they have altered public behaviour. This underscores the importance of social pharmacology.

**Medical Anthropology In Public Health**

A generation ago, anthropologists introduced the concept of an "adversary model," which suggested that resistance to change in healthcare was mainly due to a clash between modern and traditional medicine, driven by cultural differences. However, today it seems that people's acceptance of healthcare is primarily influenced by factors such as the quality, cost, and convenience of modern medicine, rather than cultural disparities. Challenges related to how medical roles are perceived and the social consequences of changes and restructuring in healthcare organisations are recognized as significant issues in designing effective healthcare services for developing nations. Additionally, potential roles for traditional healers in supporting primary healthcare are being explored and discussed.

Defining the anthropology of health systems is a complex task, but it primarily revolves around ethnography within health systems, encompassing public systems, private providers, disease campaigns, insurance, legislation, and more. Health systems are perceived as social systems influenced by power dynamics, politics, and historical factors. The fragmentation within the anthropology of health systems is attributed to factors such as geographical diversity, interdisciplinary nature, and a persistent division between "theoretical" and "applied anthropology". Bridging these gaps is essential to create a more cohesive and impactful field.

Ethnography, as a qualitative research approach, sets anthropology apart from other fields. Genuine ethnographic research strives to avoid misconceptions and distortions by aiming to grasp the perspectives of the people under study. This stands in contrast to conventional public health research, which frequently imposes an outsider's viewpoint on study participants or groups them into culturally defined categories that align with the researchers' goals. In essence, the practice of spending prolonged periods of time engaging with those intimately involved in a situation is considered one of the most effective methods for achieving a profound understanding of it.

Culture encompasses more than just individuals; it also plays a role in mental well-being and substance use across various levels. Individuals within diverse social, ethnic, or cultural groups may have a higher likelihood of experiencing mental health issues or substance misuse due to increased exposure to stressors such as discrimination and social isolation. These communities may also hold different views on healthcare and encounter language-related obstacles when trying to access healthcare or other essential services. As an example, the ancient Aztecs consumed alcohol before any contact with white colonists or immigrants. However, their alcohol consumption was limited and reserved for rituals; any other use of alcohol was severely punished, even with the penalty of death.

Healthcare systems that integrate the expertise of medical anthropologists tend to achieve more success on a global scale. These systems acknowledge the valuable role played by medical anthropologists in facilitating and nurturing positive relationships between healthcare institutions and the communities they serve. From the viewpoint of medical anthropologists, all components of a healthcare system are interconnected and mutually reinforcing. A noteworthy instance of this can be seen in Kenya, where anthropologists played a significant role in researching community perspectives and beliefs concerning abortion, individuals seeking abortion services, and the substances used for abortions. Similarly, in Cameroon, anthropologists have contributed to establishing sustainable community practices for the care and treatment of Buruli Ulcers in communities affected by this condition.

The history of Health Policy Systems Research (HPSR) dates back to the 1960's when the World Health Organization (WHO) organised conferences on health planning. However, progress in this field was slow due to the intricate nature of health systems reform. It wasn't until the late 1990's and early 2000's that HPSR gained momentum, with the WHO highlighting its significance and defining health systems as encompassing all efforts aimed at improving health. Anthropologists, sociologists, political scientists, and economists have increasingly become involved in studying health policy, programs, and systems, particularly following the WHO's call for more research in this area in 2010.

In the last few years, there has been significant growth in ethnographic research within the field of medical anthropology, particularly concerning health systems. Ethnographic studies have delved into the power dynamics within the realm of global health by scrutinising policymakers and healthcare personnel. These studies offer valuable insights into how policies and systems shape health outcomes and global health agendas.

In anthropological studies, participant observation is a research approach that involves thorough documentation of the smallest aspects of individuals' lives. It also involves an examination of the larger

societal influences and structures that shape people's actions. What distinguishes anthropology from numerous natural and social sciences is its qualitative ethnographic method.

## CONCLUSION:

Socio-cultural faith and opinions can frame the approach to and behaviuor regarding drug use and abuse. Culture plays a pivotal role in shaping the mind set of individuals about potential problems they may face with substance use. For many socio-cultural bodies, this may grant protection. The involvement of Social Pharmacology and medical anthropologists in health systems contributes to a more comprehensive and culturally sensitive approach to healthcare, ultimately leading to improved health outcomes and better-informed healthcare practices and policies.

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