

45 of Years of Enabling and Pioneering Social Pharmacology

Jose' Luis Alloza*

Department of Biomedical Sciences, School of Medicine and Health Sciences, The University of Alcalá, Madrid, Spain

ABSTRACT

Social pharmacology is a discipline which implements better results of drug use. The discipline studies marketed drugs in their real "habitat". A pluralistic society with a multidisciplinary structure. Health professionals, public health researchers, net researchers, as well academics and the communication mass media, are the common denominators which support its wide application. Its expansion takes into account the great value of new drugs, plus cultural and social changes.

Keywords: Social pharmacology; Drug development; Drug surveillance; Pharmacoepidemiology; Clinical trials; Postmarketing period; Pharmacogenomics; Outcome research; Globalization

Correspondence:

Jose' Luis Alloza, M.D., Ph.D, Retired Professor. Department of Biomedical Sciences, School of Medicine and Health Sciences, The University of Alcalá, Alcalá de Henares, Madrid, Spain; E-mail: advancedsocialpharmacol@gmail.com.

DESCRIPTION

Nearly 45 years ago I started pioneering the fundamentals of a new discipline entitled "Social pharmacology" (or Sociopharmacology), focusing on the values of drug utilization and their social consequences [1]. The diaspora of the discipline came from the 39th Annual Drug Information Association Meeting in 2003 (San Antonio, Texas, USA) in a session devoted to Social pharmacology [2]. The fundamentals of this discipline are described in a general reference [3]. The various components of Social pharmacology are derived from research aimed at results obtained from to different environments (Figure 1).

development and distribution process is no longer in place through the operations and management control of the pharmaceutical industry and by government regulators.

The scope of social pharmacology is discussed in several publications [5-17]. The list of methodological approaches in Social pharmacology is extensive: Pharmacoepidemiological studies in drug surveillance, experimental and observational ('naturalistic'), studies dose response variation, outcomes research, pharmaco-economic studies, drug-toxicity evaluation, drug regulation evaluation, drug information evaluation (Figure 3).

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Figure 1: Contents of social pharmacology book 1985; Clinical and Social pharmacology: Postmarketing period.

Overtime this discipline has expanded its horizon and become enriched by incorporating the contributions of physicians, pharmacists, nurses, biologists, drug epidemiologists, health economists, lawyers, regulators, insurance specialists and communications specialists (Figure 2) [4].

The goal of this discipline is to attain knowledge about the use of drugs after marketing approval is obtained. The approval dossier contains only a tiny part of the knowledge that remains to be gathered as new drugs find their place in the market. The post-marketing period represents the widest vision of medication use when studied in an actual "life cycle" in a social habitat. This post-approval period is a new specific and aggressive environment where strict control of the drug

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The merit of Social pharmacology consists of organizing the puzzle of the various contributing scientific topics and identifying the drug as the central part of the structure, achieving a sum of the efforts, and maximizing results of a new knowledge to be applied to the individual patient and society (Figure 4).

A recent report by Morgan describes how these applications of the scientific methodology of social pharmacology have now expanded widely to address many diverse issues associated with the post-approval utilization of drugs in the marketplace [18]. However, sometimes the value of the social pharmacology discipline and its supporter's researchers, or authors may not be fully appreciated [19].

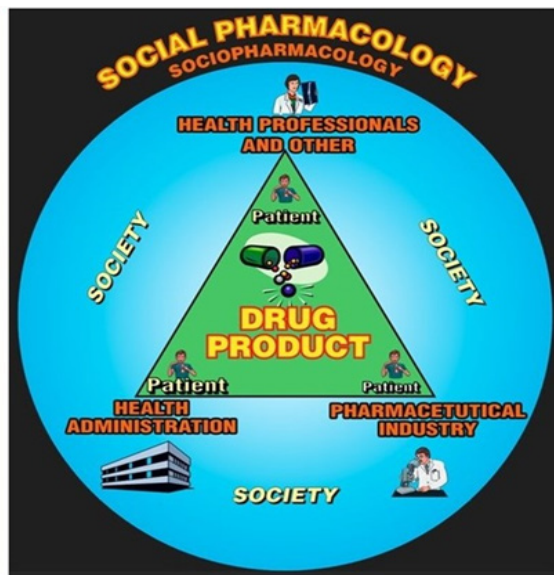


Figure 2: The focus of social pharmacology within environment of marketplace, major players and the weight of the patient differs among the scenarios.

The “Social Pharmacology Mission” is to assess any condition of the pharmaceutical marketed products, important for the individual and the society; and to generate useful public health knowledge for marketing drug decisions.

Figure 3: Mission of social pharmacology.

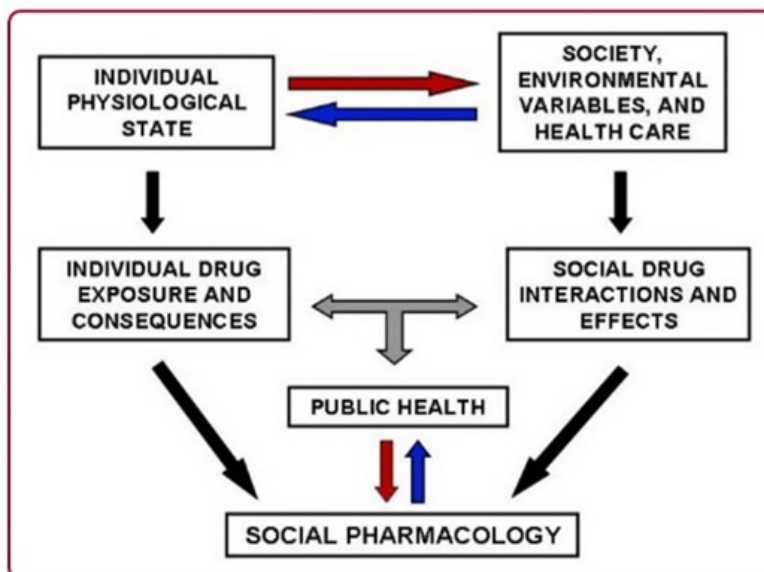


Figure 4: Interrelationship of the constituents in social pharmacology.

Major institutions with broad scientific horizons such as “Groupe Pharmacologie Sociale Toulouse” Service de Pharmacologie Clinique Faculte de Medicine , Tolouse University (Toulouse, France) have also recognized the benefit of applying this discipline.

Health education within universities is of special interest because the students represent the most influential sectors of the future society. Progress with current events also moves the pharmaceutical industry

towards the social interests of public health, and therefore, their activities fall within the framework of social pharmacology (Figure 5).

There is an ancient saying that ‘nothing is as constant as change’ (Heraclitus, 500 B.C). We are in a society of change, including globalization with its pluses and minuses. This means that any event can be quickly identified anywhere. This “constancy of change” can be our destiny, always with the desire to transform scientific curiosity into useful, societal applications (Figure 6).



Figure 5: As a science rigorous “problem solving”.

TOGETHER
WE COULD DO
MORE

Be part of our success in
“SOCIAL PHARMACOLOGY”

► **Developing a better use of drug therapy**

Figure 6: Seeding social pharmacology: Join together.

CONCLUSION

Social pharmacology is an interdisciplinary science that responds to new demands/alert mechanisms and encourages pharmacological research (real life). It interprets the real “life cycle” of the drug in its habitat and also expands the methodological approach and know how it works in the globalization process. Social pharmacology encourages an ongoing dialogue between researchers, generating projects and actions for the individual and the society under the support of public health. It promotes a proper and efficient use of drugs including “risk-benefit” analysis. It is a well-established discipline, included in the academic curriculum of medicine and pharmacy in some countries and a highly recommended method for solving drug problems. It has succeeded to impose/widespread itself all over the world. The pharmaceutical industry currently operates consistently with this discipline.

ACKNOWLEDGMENTS

Louis lasagna, M.D, D.Sc. 1998 (2003†) tutor and mentor, “Dr. Alloza is, like these other physicians, a discipline in our efforts to improve the use of medicines in caring for the sick, and playing a leading role in the linkage between traditional clinical pharmacology and what might be termed “social pharmacology” [20].

This manuscript is dedicated to the of Louis Lasagna, M.D. Sci.D. who founded the first unit of clinical pharmacology in the world (Johns Hopkins University,1954). He was a tutor and mentor of many students including José-Luis Alloza M.D., Ph.D. and John J Schrogie M.D. John has contributed to the review and editing of this article.

CONFLICTS OF INTEREST

The author declares that this updated article on “social pharmacology” has not any potential conflict of interest. The figures belong to the author.

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