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Spencer, Dorothy Ann

**CONSUMER HEALTH EDUCATION IN PHARMACIES IN THREE
MIDWESTERN STATES: AN IDENTIFICATION AND DESCRIPTION OF
ACTIVITIES AND ATTITUDES**

The University of Nebraska - Lincoln

PH.D. 1981

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PREVIEW

CONSUMER HEALTH EDUCATION IN PHARMACIES
IN THREE MIDWESTERN STATES:
AN IDENTIFICATION AND DESCRIPTION
OF ACTIVITIES AND ATTITUDES

by
Dorothy A. Spencer

A Dissertation
Presented to the Faculty of
The Graduate College of the University of Nebraska
In Partial Fulfillment of Requirements
For the Degree of Doctor of Philosophy
Major: Interdepartmental Area of
Community and Human Resources

Under the Supervision of Professor W. C. Meierhenry

Lincoln, Nebraska
December 1981

TITLE

Consumer Health Education in Pharmacies in Three Midwestern

States: An Identification and Description of Activities
and Attitudes

BY

Dorothy A. Spencer

APPROVED

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CHAPTER 1

INTRODUCTION

Context of the Problem

Medical knowledge and the health care delivery system have changed dramatically over the last 100 years. As these changes have occurred, the role of health information and education has grown increasingly important within the total health milieu. Research on the various levels of the social structure within which changes occur can help researchers better understand complex phenomena. Lazarsfeld and Menzel (1969) have developed a model for studying such social change. This model divides social problems into contextual, collective, and member aspects. The Lazarsfeld and Menzel model will be used in this study in the review of literature and presentation of data collected.

Chapter 1 will address the contextual level of the problem. The changing health environment and the growing need for a variety of health education programs will be discussed. Chapter 2 will present a description of pharmacy as an organizational or collective component of society. A review of the literature will focus upon the place of the pharmacist in the changing health care system. It will also describe the emerging field of patient and consumer health education and the potential role of pharmacists as health educators. Chapters 3 and 4 will describe a research study which was conducted to identify and

describe educational activities conducted by pharmacists in community-based practice. The results of a survey made in the states of Iowa, Missouri, and Nebraska will translate the responses of more than 200 pharmacy professionals from individual "member" responses to a set of collective data which will then be discussed in relation to the need for health education in the changing health environment. Finally, Chapter 5 will discuss the results of the survey, present a descriptive model of consumer health education for community-based pharmacy practice, and make suggestions for further research relating to the problem of consumer health education in community pharmacies.

Changing Health Milieu

Historical Overview

Historically, infectious diseases and the complications resulting from injuries have been the primary causes of human death. Medical science was severely limited in what it could do to treat or cure these conditions. People survived or died in many instances, not because of what was done for them by physicians, but rather because of reliance on folk remedies, care from family members, and personal faith. By the end of the 19th century, the scientific base of medicine began to expand and more sophisticated treatments became available. Many of the previously fatal illnesses were eliminated as public health hazards, and, by the middle of the 20th century, the life expectancy of the average American had lengthened from 47 to over 70 years (U.S. Surgeon General, 1979).

Today, infectious diseases have been replaced by diseases of lifestyle as the primary cause of death in American society. Stroke, heart disease, cancer, and accidents among young adults are today's leading causes of death. As science and technology have expanded, "curative" medicine has become the model of health care delivery. In this model, patients have increasingly consulted with physicians, and health care has moved from the patient's home, through the physician's office, into the high technology setting of modern hospitals and related health care institutions. In this process, patients have relinquished more and more responsibility for their own health behavior to a delivery system whose image has been built upon the development of new techniques and drugs for use as weapons against a widening spectrum of ailments. Under the "curative" model, the health care delivery system has grown in size, influence, and costs (Health Promotion and Consumer Health Education: A Task Force Report, 1976; President's Committee on Health Education, 1973; U.S. Surgeon General, 1979).

In spite of its successes and huge dollar investment which has been made, the "curative" model, as practiced in our current health care delivery system, has failed to impact upon the greatest contemporary causes of death, namely the diseases of lifestyle.

Few of the nation's health problems can be solved or even reduced merely by making health resources and services available and accessible. Many of the actions which people must take to promote normal development, reduce health risks, and protect their health are their own responsibilities and are largely beyond the control of the health professions. Among these are sound nutritional practices, sufficient physical exercise, safe driving habits, and discarding such hazardous habits as smoking, excessive consumption of alcohol and use of narcotic and psychedelic drugs. (Social Forces and the Nation's Health, 1974, p. 532)

Family Health in an Era of Stress is a report commissioned by General Mills Corporation. In its overview and summary it states:

The majority of American families are ready to accept in principle a new and more active approach to health and health care--one which would require supplementing traditional means of health care with new approaches aimed primarily at preventing health problems before they arise. Yet only a minority are even beginning to put these new beliefs into action--with many obstacles still to be overcome before millions of American families are prepared to make the lifestyle changes necessary to improve their health. (General Mills Corporation, 1979, p. 37)

Among the summary findings of this report, several items are of key interest to those charged with potential roles as consumer health educators.

*Today, almost one out of two American families is cutting back in some essential area in order to cope with inflation. These figures are higher for low-income families, minorities and single parents.

*There is a backlash against the barrage of information about products hazardous to health. And, despite all of the material on health released by the government and available in the media, only about one in four families feels well informed about good health practices.

*There is a growing concern about the rising cost of medical care--with a vast majority of family members protesting doctors' fees, hospital charges and drug prices. (General Mills Corporation, 1979, pp. 37-38)

Rushmer (1975) discusses the changing attitude towards the "curative" model of medical care.

This medical mystique was understandable in the days when the effectiveness of medical management was largely ineffectual and based heavily on faith and confidence in the physician. However, the time is long past due for both health professions and societal institutions to mount a major effort toward enlightening the public about health, disease, disability and their proper management. With the current transition to service-oriented society, there should be ample manpower for the education, counseling, information-handling, and other services required if the necessary dedication, drive and organizational incentives are to be mobilized. A major objective of such an effort would be to elevate the understanding of patients and their families to such a level that they can actually participate to a much larger extent in the decision-making aspects of their management. (p. 179)

Alternative Models Sought

Studies by Roemer (1974) and the Pharmaceutical Manufacturers Association (1973) find that health consumers are seeking health care as a right, not as a privilege. The demand for services is growing and will continue to grow to the degree that the current health care delivery system may not be capable of managing the volume of patients seeking care.

The cost of health care has also become a national concern. Medical costs have been increasing two to three times faster than any other area of the economy. "By the mid-1970's, Americans were spending more than \$118 billion a year for medical care, or about \$540 for every man, woman and child" (Jelley & Hermann, 1978). Of this total for health expenses, it has been estimated that less than 0.3% goes for preventive health measures and less than 0.5% for health education (Health Promotion and Consumer Health Education, 1976).

Rushmer (1976) calls for health care delivery to become more humanized, and Worth (1976) believes the health care delivery system must reorient itself to give rewards for the maintenance of health and not just for the treatment of illness as is inherent in the current "curative" model.

Medical care is only one aspect of health care--there is a need for a broader health focus that emphasizes health maintenance and disease prevention. It has been suggested that the greatest single untapped manpower resource is the individual consumer who can take the initiative to preserve personal health. When sufficiently motivated or "activated", the educated consumer will take positive steps to prevent the occurrence of illness, the progression of minor illnesses, or the onset of personal dependency. The consumer will understand the changing delivery system and how to gain entry to it. Moreover, he will learn what he can accomplish by self-help before calling on the formal health care delivery system. Thus, consumer patient activation can help to alleviate the pressures bearing on service delivery, scarce manpower, and health facilities. (Wang, Reiter, Lentz, & Whaples, 1975, p. 449)

Growing emphasis is being placed upon "wellness" as the coming model for health care. Such a model offers a potentially more effective management approach for diseases of lifestyle and will help place responsibility for health behavior back upon the individual. Stressing self-help and prevention of illness, such a model can also help to reduce or at least contain health care costs for both the individual and society. Inherent in a "wellness" model of medical care is increased emphasis on information dissemination and effective health communication and education.

Patient Information Needs

Patients' knowledge about health and their attitudes toward the health care system have been studied by Schwab, Montenegro, and Fleming (1967); Ware and Snyder (1975); and Coope and Metcalfe (1979) among others. In a study by Alt (1966) areas of health information in which patients expressed interest fell into 17 categories. These categories included: (a) activity after discharge (from the hospital), (b) the real diagnosis, (c) their own reluctance to ask questions, (d) symptoms they wished explained, (e) suggestions for obtaining more information, (f) reasons for treatment, (g) prognosis, (h) confusion about medications, (i) operation--what it was; what was taken out, (j) personal care, (k) diet, (l) personal problems, (m) nursing care and nurses, (n) miscellaneous questions, (o) finances, (p) marital relations, and (q) tests which were carried out.

Such a list suggests either that the personnel active in the delivery of health care in our society, particularly the physicians, have failed to communicate with patients or that, if they have, the

communication has not been very effective. Apeltgren and Rowels (1978) suggest that there is no single way to communicate with patients. "Common sense should dictate that information given to one patient might not even apply to another. . . . The manner and words chosen to counsel patients can be as important as the factual information itself" (p. 7).

Family Health in an Era of Stress, (General Mills Corporation, 1979) describes a paradox at work in regard to American behavior in the area of health care.

Perhaps more than ever before, Americans are interested in their health and concerned about health problems. They show a greater awareness of specific health problems and are taking more interest in the quality of health care that their families are getting. (p. 24)

At the same time that an increased awareness and pro-health health effort is evident, it is also obvious that

Americans do not have any coherent and well thought-out approach to health care, they still . . . deal with major health problems as they occur--rather than trying to anticipate and prevent them before they happen. While Americans pay lip service to the need for good preventive health habits, very few actually have the self-discipline and real personal commitment to practice on a regular basis. (General Mills Corporation, 1979, p. 26)

Two phenomena present in our contemporary health care milieu, noncompliance and consumerism, can help illustrate the conflicting behavior patterns which call for increased health information and education efforts aimed at both patients and the well population.

Noncompliance

"A random patient with a random disease consulting a doctor chosen at random stands a less than 50-50 chance of doing what his doctor recommends" (Simonds, 1974, p. 8).

Noncompliance is the intentional or accidental failure to comply with physicians' directions. Research on the problem suggests that 30-50% of all patients are in some degree of noncompliance in following specific therapeutic regimens (Gillum & Barsky, 1974). Noncompliance can take a number of forms including delay in seeking care, nonparticipation in health programs, breaking appointments, failure to follow physicians' orders, or failure to take prescribed medications (Gordis, 1979). Failure to take prescribed medications is the most prevalent form of noncompliance, but taking medications for the wrong reason, taking incorrect dosages, and incorrect timing of medications are also signs of noncompliance (Hussar, 1975).

Patients who fail to comply with physicians' advice typically experience longer periods of illness, lower recovery rates, higher rates of hospitalization, longer lengths of hospital stay, increased follow-up visits to physicians, and frequently higher health care costs (D'Altroy, Blissenbach, & Lutz, 1978).

Studies of Noncompliance

The phenomenon of noncompliance has been extensively covered in the literature. Clinte and Kabat (1976); Wilis and Dunsmore (1967); Daniels (1978); Butt (1974); Ball (1974); Romankiewicz, Gotz, Capelli, and Carlin (1978); Svarsted (1976); Fletcher, Fletcher, Thomas, and Haman (1979); Dunbar, Marshall, and Hovall (1979); Lasagna (1973); Toledo, Hughes, and Sims (1979); Mathews and Hingson (1977); and Kasl (1975) are but a few of the authors who have addressed this critical problem in health behavior.

Studies of specific diseases and health conditions have been made to better understand the unique relationship of these diseases to the problem of noncompliance as a whole. Hypertension is the condition about which most disease-specific compliance literature has been written. Himmeloch (1980), Peoples-Veiga (1976), Ruley (1978), Webb (1980), and Kirscht and Rosentock (1977) are among the many researchers who have studied the noncompliant hypertensive patient. Among other areas of clinical medicine, Wysocki, Czyzky, Slonska, Krolewski, and Janeczko (1978) and Powell, Burhart, and Lamy (1979) have made several of the studies dealing with diabetic patients. Obstetrical and gynecologic problems have been addressed by Bonnar, Goldberg, and Smith (1969); pediatric compliance has been discussed by Arnhold, Adebajo, Callas, Callas, Carte, and Stein (1970); and nutritional aspects of noncompliance have been reviewed by Hughes, Fleming, Berkner, and Gaffron (1980).

Another unique aspect of noncompliance which has been identified are the problems of older people in complying with medication regimens (Atkinson, Gibson, & Andrews, 1977; Wandless, Mucklow, Smith, & Prudham, 1979). Among methods of detecting noncompliance are the testing of urine, counting of medication dosage units, and/or patient interviews (Boyd, Covington, Stanaszek, & Coussons, 1974). Problems of detecting noncompliance and improving compliance have been studied by Mikeal and Sharpe (1974); Green (1979); Ley, Jain, and Skilbeck (1976); Park and Lipman (1964); Soutter and Kennedy (1974); and Norell (1979).

General factors which contribute to noncompliance can include the nature of the injury or disease, waiting to see a physician, waiting to be referred to another physician or other health professional,

the clinical treatment setting, and failure to comprehend the importance of therapy. Factors in noncompliance related to medications include poor understanding of the instructions; multiple drug therapy; method and frequency of drug administration; duration of therapy; adverse or side effects; fear of becoming drug-dependent; discontinuing therapy when symptoms subside; unpleasant smell, taste, or feel of medications; perceived availability of alternative therapies; incorrect measurement of medications; and cost of therapy (Blackwell, 1973; Gillum & Barsky, 1974; Haynes, 1979; Hussar, 1975).

The Noncompliant Patient

Studies have failed to suggest socio-economic descriptors which could be used to predict which patients will not comply with medical regimens. Noncompliance seems to cross age, sex, racial, ethnic, educational, and economic boundaries and is found in most strata of society (Health Promotion and Consumer Health Education: A Task Force Report, 1976).

Gaines (1979), describing how a patient learns, indicates that in order to comply, a patient must first understand what is being presented to him. He must then integrate this new knowledge into his own set of values and actions, and finally, if education has been successful, he will accept the reasons which require him to modify his behavior. It is this last, attitudinal change, which is most difficult to achieve. Gaines cites the patient's psychological make-up and emotional level, his socialization skills, his cultural and ethnic background, his economic level, the home and business environment in which he must function, and geographical considerations as all affecting compliance behavior.