Public Access to Drug Information in the United States[1]

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INTRODUCTION

During the last 10-20 years in the United States, consumers in general and patients in particular have become more inquisitive about the drugs they take. The consumers have been less and less willing to except their physician's advice on face value. People born during and after World War II sought more involvement with decisions about their own health including their drug therapy. In the United States, approximately 1,5 billion prescriptions are dispensed per year of which, it is estimated, up to 50 percent are taken incorrectly or not at all(1). Because of the increased appetite for more information about health care issues, a plethora of sources, including drug information, have become available. The number of publications dealing with drugs and other therapeutic agents has increased dramatically as well as an increased number of health related articles in newspapers and lay magazines. Books, magazines and newsletters related to health issues and designed for the nonhealth-care professional have proliferated over the past ten years.

Drug information and poison control centers have seen an increase in the number of inquiries they receive from the lay public about drugs. Computerized electronic bulletin boards have added conferences on health issues, including drugs, to their menus. Television news programs have provided an increased emphasis on health issues and have provided commentary on specific pharmacologic agents from time to time. In addition various toll free drug information hotlines have been advertised to the lay public. Lastly but certainly not least, pharmacists have become more active in serving as drug information resources to the patients they serve as well as to the community at large. The public now has access to a vast array of drug information resources and has the potential to be the most well-informed public regarding drug therapy ever.

This paper will discuss the various drug information resources available to the public citing specific examples of the various types. It is not intended to be an exhaustive review on the subject or a catalog of all available resources. There will undoubtedly be good examples that are not included. The resources for public access to drug information are constantly changing and any review of the subject is likely to be out of date at the time it is printed.

BOOKS

There are 750 lay oriented reference books in the U.S. on various health topics of which 30 specialize in drugs(2). A trip to any general book store in the United States will reveal the amount and variability of the available reference books on drugs. The books vary in terms of the number and currentness of drugs included, readability for non-health professionals, format, accuracy of information, depth, and price. While these books are promoted to the consumer as reliable, complete, containing accurate information about drugs and easy to read and understand, a great deal of variability exists. Some books are entirely drug oriented and provide, in a monograph format, a wide range of information about each product listed. Other books combine information about specific drugs with information about various disease states.

In 1982, Stratton(3) reviewed 14 consumer oriented books on prescription drugs. The books were rated based on readability, completeness of drug monograph information, number of drugs covered, price and year of publication. The books were found to be written at grade level of about nine to 14. Monograph completeness ranged from 21.4 percent to 76.7 percent as compared to the *USP Dispensing Information.* The number of drugs in each book ranged from 175 to over 1200. Two references ranked the highest in all categories and they are: (*i*) *About Your Medicines,* USPC, Rockville, MD, 1981, and (*ii*) *The Essential Guide to Prescription Drugs,* 3rd edition, Harper and Row, 1980. Both of these references are still published. *About Your Medicines* (7th edition, USPC, Rockville MD 1993) provides information on the appropriate use of a medicine, *i.e.,* when to take it, what to do when a dose is missed, possible side effects, food and drug interaction precautions, and pregnancy and breast-feeding precautions. Only the most commonly used drugs are included which are indexed by brand and generic names. There are general introductory sections and a glossary of medical terms.

The Essential Guide to Prescription Drugs (Long, J.W., Harper Collins, New York NY, 1993) is organized into six sections. Section One contains introductory information about the book and guidelines for safe and effective drug use. Section Two contains information about the treatment approaches to 25 chronic diseases. This section also contains a brief description of the disease and its known cause. Section Three is a collection of drug profiles on over 200 commonly used agents in the U.S. and Canada. The drug profiles are organized in outline form and contain most of the essential information about each product. Section Four is a listing of all the drugs described in the book listed by drug classes. Section Five is a helpful glossary of drug-related terms and Section Six contains six drug information tables of various topics. The book is indexed by both trade and generic names. In 1991, ten of the most popular drug books were reviewed by a panel of six medical and' drug experts using similar criteria as Stratton(4). They are listed below in order of popularity and include the publisher, date of most current edition and cost in US dollars:

1. *The Complete Drug Reference,* U.S. Pharmacopeial Convention, Inc. Consumer Reports Books (1993); $39.95.

[1] Presented at the Academic Section of the International Pharmaceutical Federation (FIP) meeting in Tokyo, Japan, September 10, 1993.

2. *The Essential Guide to Prescription Drugs,* J.W. Long, Harper Collins, New York NY (1993) $16.00.
3. *The Pill Book,* Bantam Books, 5th edition, 1992, $6.99.
4. *Worst Pills, Best Pills,* The Public Citizen Health Research Group, Washington, DC (1993) $15.00.
5. *Prescription Drugs,* by the editors of Consumer Guide, Beekman House, (1993) $9.95.
6. *Complete Guide to Prescription and Non-Prescription Drugs,* H.W. Griffith, Putnam Publishing, New York NY (1993) $15.95.
7. *The ABCs of Prescription Drugs*, E. Edelson, Ivy Books, (1987) $4.95.
8. *Prescription Drugs and Their Side Effects*, E.L. Stern, Perigee Books (1991) $9.95.
9. *Physicians' Desk Reference*, Medical Economics, Co. (1993) $57.95.
10. *Graedons' Best Medicine*, J. Gradeon and T. Graedon, Bantam Books, (1991) $14.95.

With the exception of the *Physicians' Desk Reference* (PDR), all of these books are consumer oriented. It should be noted that the first two books on this list corresponded with those of Stratton. A brief description of only the top four books including "Essential Guide" described Previously will be provided as they are fairly representative of the type of information found in any of them. Economics may play a major role in deciding which books to purchase.

The Complete Drug Reference is essentially the *USPDI Volume II, Advice to the Patient,* with a different cover for marketing by Consumers Reports. It is updated on an annual basis. This is the most comprehensive and complete of the consumer oriented books on drugs. It contains nearly all approved prescription and nonprescription drugs in the United States. Individual monographs on classes and individual agents is the bulk of this reference. It is organized alphabetically by class and generic names. Each monograph is easy to read and understand by the non-health professional. In addition to the monographs it has several appendices. One appendix contains color photos of selected brand name products for identification purposes. Other appendices contains a glossary of terms, sections on combination cancer chemotherapy, home diagnostics, and general information about medication use. An extensive index organized by both trade and generic names is located in the back of the book.

The *Pill Book,* edited by pharmacists, is the least expensive of the better drug reference books. It is basically a compilation of brief monographs of the most commonly used drugs in the United States. The monographs contain the most essential information and not nearly as comprehensive as the *USPDI.* However, for most people it will serve as a good reference source. It also contains a color photo section on tablets and capsules of selected trade name products. In addition it has some brief comments on drugs and food, alcohol, sexual activity, pregnancy, children and the elderly. It lists the top 200 prescription drugs in the US and is indexed by trade and generic names. *The Pill Book* is very easy to use and is in its fifth edition and appears to be revised every other year.

Worst Pills, Best Pills, published by the Public Citizen Health Research Group, is marketed primarily for the older adult. It is oriented to providing information about what the authors consider the medications older adults should not use and the ones that are safer. The 1993 edition has basic information on 123 medications that should not be used and lists reasons why and 220 medications that are safe to use. This is not a book that most people will want to buy and should not be used as a sole reference source. It would be a good supplement to one of the other three for the older consumer.

The *PDR* was rated as the most difficult to read by consumers which is not surprising since it is not promoted to the public. However, it should be mentioned that the *PDR* is one of the most popular reference books purchased by the lay public. The reasons for this are not clearly understood considering it is also the most expensive but may be due to the perception that the *PDR* is more "official" and contains more "accurate" information. Because it is written in more technical language the *PDR* is often the source of confusion for patients.

The majority of these drug reference books are updated on an annual or biannual basis and although they may not contain information on the most recently approved drugs, they usually contain information on the most commonly prescribed drugs. The popularity of these books speaks to the level of public interest about drug information. As was shown by the ratings given these books by a panel of experts, the quality and content of the books varies. There are books published on specific topics that may interest different consumers. Some books may not be based on good scientific data or may have catchy titles to woo consumers. *Smart Drugs and Nutrition,* by Ward Dean MD, is a book on how to improve your memory. Since it is written by a physician, most consumers would consider it to be a reputable source. Books on specific drugs or classes such as aspirin, vitamins and minerals, anticancer agents are also available to the consumer.

PERIODICALS

Magazines and newsletters publishing health related information, including information about drugs, are wide spread in the United States. In 1990, there were 79 popular magazines and newsletters specializing in health related topics listed in the *Consumer Health Information Source Book(2).* Several nonhealth-focused popular magazines also include articles related specifically to drugs or drug products from time to time. *Consumers Reports,* is a very popular consumer magazine that prides itself on providing objective evaluations on all sorts of commodities from electrical appliances to various types of foods and drinks. It also provides an occasional evaluation on a drug class or specific drug product. *Consumers Reports* also publishes a health letter which limits its articles to health related topics including drugs. Some consumer oriented magazines publish exclusively on health related issues and while including drug related topics, do not limit themselves to it. These health related magazines and newsletters scan the professional biomedical literature for timely topics and report on those topics perceived to be of general public interest.

Some examples of the health focused magazines include: The United States Food and Drug Administration *FDA Consumer,* which has been published for nearly 28 years. This magazine is available to anyone on a subscription basis for $12 US per year. It is published monthly and includes articles on drugs in nearly each issue. It also includes basic information on newly FDA approved drugs. Recent issues have included brief information on taxol for

ovarian cancer, sumitriptan for migraine headaches, and recombinant hemophiliac factor for treating hemophilia. Review articles on Depo-Provera, treatment of AIDS, fluoride for dental prophylaxis, and unproven cancer therapy have also appeared in the *FDA Consumer* over the past year. In addition to health focused magazines, various news magazines also publish articles on specific drug products or classes of drugs. These latter articles are often the result of some publicized adverse event or therapeutic controversy, *e.g.,* fluoxetine and triazolam which have appeared during the last two years. Other examples of health related magazines include, but are not limited to, the following:

1. *American Health,* American Health Partners, New York NY; bimonthly, $20.00
2. *FDA Consumer,* U.S. Government Printing Office, Washington DC; quarterly, $12.00
3. *Health World,* Health World, Inc., Burlingame WA; quarterly, $8.00.
4. *Medical Self-Care,* Medical Self-Care Magazine, Inverness CA; bimonthly, $15.00
5. *Prevention,* Rodale Press, Emmaus PA; monthly, $12.00

Health related newsletters have become more popular during recent years. Between 1987 and 1990, the number of newsletters increased from 34 to 54. One of the oldest health focused newsletters is the eight year old *University of California Berkeley Wellness Letter* with over 1,000,000 subscribers^). A number of other prestigious medical centers throughout the United States also publish similar newsletters. Most of these newsletters will publish articles related to drugs from time to time. The following are only a few of the many newsletters available:

1. *Consumers Report Health Letter,* Consumer Reports, Boulder CO; monthly, $24.00
2. *The Edell Health Letter,* Hippocrates Inc., Sausalito CA; monthly, $24.00
3. *Environmental Nutrition Newsletter,* Environmental Nutrition, Inc., New York NY; monthly, $36.00
4. *Harvard Medical School Health Letter,* Palm Coast FL; monthly, $18.00
5. *Healthline,* C. V. Mosby Co., St. Louis MO; monthly, $24.00
6. *Mayo Clinic Health Letter,* Mayo Clinic, Rochester MN; monthly, $24.00
7. *Health Letter,* Public Citizen Health Research Group, Washington DC; monthly, $18.00
8. *University of California,* Berkeley Wellness Letter, University of California. Berkeley CA; monthly, $20.00

NEWSPAPERS AND TELEVISION

The daily newspapers and television news programs often highlight new drug approvals, provide copy on the latest research report published in various medical journals on breakthrough therapies. The public is constantly getting news clips on various beneficial as well as adverse effects of various drugs. Each of the major television networks have weekly hour long news shows in which they will cover specific topics in more depth than is possible on the daily news bulletins. It is not uncommon for these shows to discuss various health related topics including drugs. Topics have included fluoxetine, triazolam, treatment of various types of cancer, cholesterol lowering agents, etc. Various investment focused newspapers, *e.g., The Wall Street Journal,* often publish articles on investigational agents or newly released agents that have the potential for high impact or revenue for specific companies.

DRUG INFORMATION AND POISON CONTROL CENTERS

In the United States, there are over 100 drug information centers (DIC) and 43 regional poison control centers (PCC)(5,6). The majority of the drug information centers are located in colleges of pharmacy or academic health centers with some also being located in larger community and government hospitals. All of the DICs are fairly independent of each other and very little coordination occurs between them. With few exceptions, drug information centers are primarily promoted to serve as a resource for information about drugs used in therapy for pharmacists, physicians, and other health care professionals. Hospital based drug information centers in many cases do not accept requests for information from outside their own institution.

Poison control centers, on the other hand, are primarily for the purpose of providing information to the lay public about toxic substances and what to do in case of an accidental or intentional ingestion. Poison control centers are more commonly staffed by nurses but some are staffed by pharmacists. Those PCC staffed by pharmacists often become a public resource for drug information. Some drug information centers are combined with poison control centers and serve to provide information in both areas to both the consumer as well as health care professionals.

The Arizona Poison and Drug Information Center (APDIC) is an example of a combined center staffed by pharmacists. The APDIC is funded through a contract with the State of Arizona and is administratively under the University of Arizona College of Pharmacy. The APDIC was established by legislative authority in 1981 for the purpose of providing drug and poison information to the citizens of the State of Arizona through a toll free telephone access. In addition the APDIC was charged with providing educational programs throughout the State on poison prevention. The APIDC is staffed with 10 full time equivalent pharmacists who serve as poison information specialists. There are also an additional 4.5 FTE pharmacists that are dedicated entirely to the provision of drug information. The drug information specialists are funded by the College of Pharmacy and the University Medical Center and not by the APDIC budget. However, the drug information pharmacists serve as back up to the poison information specialists when they receive drug information questions that require an in depth literature search. During the past year the APDIC receive more than 71,000 requests for information or assistance with a toxic exposure(7). Of these 71,000 calls, a little over 20,000 (or 28 percent) were for drug information. The number of requests for drug information has increased at the rate of 10-20 percent for the last several years indicating the increased interest in drug information. The majority (35 percent) of the requests were for identification of specific products, followed by adverse drug reactions including interactions (24 percent), miscellaneous (9.5 percent), and drug dosing (eight percent). Various other

[2] A complete list with mailing addresses of these magazines and newsletters can be obtained from reference 2.

types of questions referred to the APDIC included product availability, indications for use, teratogenic effects of drugs, and drugs excreted in breast milk(7). Several drug and poison information centers similar to the APDIC exist throughout the United States.

There have also been several consumer oriented free standing drug information centers located throughout the United States. Some of these centers were primarily for the purpose of providing information and education about drugs of abuse. Some of these centers have been forced to discontinue their services due to budgetary recision. However, one drug information center continues to promote its services to the lay public within its community. The University of Florida Medial Center in Jacksonville, Florida has a separate consumer telephone line for the purpose of answering drug information inquiries of the lay public. This service is supported by the Medical Center and averages about 10 calls per day(8).

HOTLINES

In 1990, there were 103 toll free hotlines available to the public for a variety of health related topics(4). Several "hotlines" have been developed for the purpose of providing drug information exclusively(8). In the Boston area, the Massachusetts College of Pharmacy has made available at no charge prerecorded information on about 250 drugs accessed using a touch tone telephone. About 800-1000 calls are logged on the system each month. The system is called "Medi-Message." Two fee-for-service drug information "hotlines" have also been developed and promoted to the lay public. Ask the Pharmacist, Inc. is located in Chapel Hill, North Carolina and is accessible through a "900" number in which the caller is charged $1.95 per minute to talk to a pharmacist.

Another "900" number hotline is the Health Information Network (HIN) located in Indianapolis, Indiana. It provides taped 24-hour messages on more than 2,400 medications and 240 health topics. The messages cost $0.99 per minute and are about three minutes long. The information includes indications, proper use, side effects, warnings and precautions. HIN is produced by the publisher Medi-Span and is offered as a service to community pharmacies for $1,000 with the pharmacy receiving their own 900 number. It is intended to complement the pharmacists role in counseling patients(8).

There are also a number of toll free hotlines that are related to specific disease states and agents which provide information on treatment. These include: Vietnam Veterans Agent Orange Victims, the National AIDS Hotline, The Alcohol and Drug Hotline, The Alcohol Abuse Emergency 24-Hour Hotline, the National Clearinghouse for Alcohol and Drug Abuse Information, The National Arthritis Foundation, the Cocaine Hotline, and The National Headache Foundation(4). In addition the American Pharmaceutical Association in cooperation with the national daily newspaper *USA Today* annually sponsors, during national pharmacy week, a day long toll free information service on drugs for anyone throughout the country. Many state pharmacy associations also provide this type of service during national pharmacy week. These toll free pharmacy organization supported public access drug information services, however, are primarily for promotional purposes. They serve to promote the pharmacist as a community resource for drug information and to encourage patients to ask questions about their medications.

ELECTRONIC BULLETIN BOARDS AND COMPUTERIZED DATA BASES

Consumer oriented electronic bulletin boards are available to anyone who is willing to pay the subscription fee. Two very popular bulletin boards are Compuserve(9) and Prodigy(10). Both of these systems have forums for health related issues including drugs. Prodigy has two sections dealing with health; Health News and Health Topics. Health News provides daily updates on the latest health-related findings and developments in the fields of public health, medicine, nutrition, fitness, diseases and psychology. Health Topics spotlights health issues and findings of special importance to families including wellness, children, brain and behavior diseases, exercise and other timely "hot topics". It is not uncommon for the Health News section to mention new drug approvals and specific adverse events reported on specific drugs. A recent example is the voluntary withdrawal of flosequinan from the market due to increased hospitalization among users.

Compuserve has several health related forums which include Cancer Forum, AIDS Forum, Diabetes Forum, Health Net, and Health Data Base. The forums related to specific disease states provide information about that disease state and treatment as well as provide for individual questions and interchange among the members of the forum. The Health Net is a general health information forum providing for dialog among members. The Health Database is a service that lets subscribers search for and retrieve articles from consumer and professional publications on topics relating to various areas of health. The core data base included a collection of health related publications oriented to nonprofessional readers. The coverage begins with 1989. In addition, a collection of more technical journals is also available which include *The Journal of the American Medical Association*, *Lancet*, *New England Journal of Medicine*, and a large number of very specialized titles. Abstracts are provided for articles but full text is usually not available. In addition to specific journals there is a large number of health-related articles from nonhealth publications.

USP DI Videos® will soon be available from the United States Pharmacopeia(11). This system is designed to be available in pharmacies to supplement patient counseling. It is currently undergoing evaluation in a number of locations throughout the United States. The system contains 150 drug-specific segments of up to eight minutes per segment. The user can select from a menu of drugs one or more to review. Each segment contains an introductory 60-second overview of the drug containing a brief description of use; information critical to the proper use of medication (*e.g.*, take on empty stomach); precautions necessary to minimize the likelihood of harm especially when first taken (*e.g.*, drowsiness) and those relating to long-term use; and a statement relating to the possibility of severe side effects, particularly those requiring immediate medical attention. The USP DI Videos® can be made available id a pharmacy waiting area for patient activation while waiting for prescriptions being prepared for dispensing. However, patients desiring drug information on any product could make use of the system at any time.

A video program currently available is USP DI Visualized *About Your Diabetes*® is a state-of-the-art interactive

video program designed to help patients understand and control their diabetes. This program was developed jointly by the USP and the American Diabetes Association. The program allows the presentations to be customized to individual patients.

PHARMACISTS AS PROVIDERS OF DRUG INFORMATION

Last, but certainly not least, in the many resources available to consumers for drug information is the pharmacist. The history and tradition of pharmacy is well rooted in being a resource for information about medications. In the early days of the profession pharmacists had a personal as well as professional relationship with their clients. Physicians would prescribe various combinations of medicinal ingredients for the cure and mitigation of disease and the pharmacist would compound individual prescriptions for the patient. The patient would often rely on the pharmacist for information about the prescription. What it was for, how to use it, any adverse effects that could be expected, etc. Independent of the physician, pharmacists would often prepare various medicinal compounds for treating minor ailments. Many of these concoctions would be viewed by today standards as homeopathic at best with very little medicinal value. However at the time and with the level of sophistication and knowledge in the 19th century they were considered valuable and people relied on their pharmacist and trusted him to provide the best and most effective medication for their use.

During the industrial revolution of this century and especially during the 1950s, 60s and 70s pharmacists in general have become more distant from the patient and until recently it was considered unethical to discuss individual prescriptions with patients. Discussing medications with patients was considered the prerogative of the physician and the physician only. In 1975 at the completion of the Study Commission on Pharmacy, the profession of pharmacy was redefined as a "Knowledge system which renders a health service by concerning itself with understanding drugs and their effects upon people and animals"(12). The Commission recognized that the pharmacist should serve as a resources not only to other health care professionals about the rational use of drugs but also to the lay public. The Commission stated that pharmacists in the future will not be viewed so much as dispensers of drugs but rather as dispensers of drug information both as individuals and to the community(12).

In 1978, a new set of practice standards for the profession was published by the American Pharmaceutical Association. These revised standards provided the profession with new direction as to how it should conduct its professional role(13). The new practice standards for the first time listed one of the responsibilities of the pharmacist is to counsel patients about their medications at the time of dispensing. The pharmacist has a responsibility to determine the level of knowledge the patient has about the medication(s) prescribed and to instruct in areas where needed including timing of dosage, proper administration and possible adverse effects and when to seek additional medical advise if any adverse events occur. The pharmacist was also responsible for evaluating and monitoring therapeutic response of patients to prescribed medications according to these standards. At the community level, the practice standards considered it the pharmacists' responsibility to become involved with drug education programs, health screening, and to become a community resource for drug information. Since 1978, several states have, by statutory authority or administrative regulation, instituted mandatory patient counseling by pharmacists. In 1993, 37 states, one of which is Arizona, require pharmacists to provide specific information about their prescribed medication to the patient at the time of dispensing.

At the national level, the United States Congress passed the Omnibus Budget Reconciliation Act of 1990 (commonly referred to as OBRA 90) which includes a section (4401) that recognizes pharmacists as professionals whose expertise can be effectively utilized to detect potential problems with drug therapy and promote rational outcomes from drug therapy(14). In addition, for the first time, the U.S. Congress has expressed an interest in reimbursing pharmacists for cognitive services that are separate from the sale of a product. For the purpose of this paper only the counseling requirements of OBRA 90 will be discussed. Under OBRA 90 all pharmacists in the United States are now required, for all federally funded prescriptions, to provide drug information to individual patients about their prescription medications at the time of dispensing. Laws and regulations related to non-federally funded prescription medications remain the jurisdiction of the states. The federal government has relegated the administration of OBRA 90 to the states and requires state boards of pharmacy to develop administrative regulations to comply with the law. The provisions of the law became effective January 1, 1993. Many feel that those states who do not have patient counseling requirements will utilize OBRA 90 as a means to institute broader based patient counseling requirements. The requirements for patient counseling about prescribed drugs is fairly specific and detailed and may be reviewed elsewhere(14). Suffice it to say that the pharmacist has now been given authority as well as the responsibility to serve as a provided of drug information to his or her patients. It further provides the pharmacist with the responsibility and authority to monitor the outcomes in individual patients of the drugs dispensed. More recently, the USP is preparing a fall 1993 education campaign to encourage the public to seek information from their health care providers about their medications. The "just ask" campaign will coincide with National Pharmacy Week October 24-30, 1993. Patients will be encouraged to ask 10 questions about their medications and will be provided a "Just Ask" card as a reminder.

OBRA 90 also provides for the pharmacists performing prospective and retrospective drug use review programs and educational interventions when deemed appropriate. OBRA 90 does not, however, provide a detailed description of the criteria and standards upon which to base these DURs. The law has listed three compendia that are to serve as the basis for these criteria and standards. The compendia are: (*i*) *USPDI,* (*ii*) *American Hospital Formulary Service Drug Information* (AHFSDI), and (*iii*) *American Medical Association Drug Evaluations.* The law also allows for the use of peer reviewed literature(14).

In the United States, there are a number of public opinion polls conducted on various issues throughout each year. One such poll is conducted by the Gallup Poll, one of the most noted and respected of pollsters, each year to assess the publics' opinion on which occupations are the most trust worthy. Each year, since 1988 and including 1993, the public has rated their pharmacist as the most trusted professional

with whom they deal. Pharmacists have the responsibility to live up to that trust and to be a more active provider of drug information at the community level. The Commissioner of the U.S. Food and Drug Administration, Dr. David Kessler, has publicly stated that "pharmacists should reinforce the instructions of physicians by direct counseling." Furthermore, Dr. Kessler has stated that the "FDA will therefore foster the development of computer-based patient-information materials for distribution by pharmacists. To do so, it will work closely with the National Council on Patient Information and Education, other professional and consumer groups, and other government organizations"(15).

In the United States, the profession of pharmacy has and is continuing to undergo a significant evaluation of its mission and purpose in the health care delivery system. The phrase "pharmaceutical care" is being used to describe the new direction for the profession. The new mission statement for the profession encompasses the concepts of pharmaceutical care which in essence takes the pharmacist back to being more responsible for individual patient drug therapy. Pharmaceutical care proposes that the pharmacist develop a covenental relationship with patients and take responsibility for all aspects of their drug therapy as well the beneficial outcomes. OBRA 90 is consistent with the precepts of pharmaceutical care and provides the pharmacist with the authority and responsibility to implement it.

SUMMARY AND CONCLUSIONS

Public access to drug information in the United States is provided through a variety of channels. The public has a number of resources at its finger tips including a variety of consumer oriented reference books, periodicals, publicly supported drug and poison information centers, computerized electronic bulletin boards, newspapers and television programs. The majority of these resources, especially the written forms, provide the public with a vast amount of information about a lot of drugs. Only one source, however, the health care professional and especially the pharmacist, provides the public with an interpretation of the information that is more relevant to their individual needs. It is my opinion that written information about technical topics such as drugs, cannot be fully comprehended by those without the education and training to put it in its proper perspective. Therefore, the pharmacist must continue to serve as vital resource for drug information to the public.

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