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(McTernan); "Worksite Health Promotion" (Friedman, Graham);  
"Lifecycle Health Promotion" (Douglas, Selker); "Healthy Babies"  
(Douglas); "Health Promotion and Disease Prevention for Older  
Persons" (Selker); "Promoting Wellness for Persons with Disabling  
Conditions" (Hedrick); "International Perspectives on Health  
Promotion and Disease Prevention" (Rice); and "Health Promotion and  
Disease Prevention in the Multicultural Setting" (Tseng). (MN)

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PROCEEDINGS  
OF  
ALLIED HEALTH LEADERSHIP  
IN  
HEALTH PROMOTION AND DISEASE PREVENTION

An invitational conference jointly sponsored by:

THE ACADEMY FOR HEALTH PROMOTION  
SCHOOL OF ALLIED HEALTH PROFESSIONS  
UNIVERSITY OF CONNECTICUT, STORRS

AND

THE RESOURCE CENTER FOR HEALTH PROMOTION/DISEASE PREVENTION  
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## FORWARD

This invitational conference, dedicated to the ideals of health Promotion and Disease Prevention, was designed to bring together the leadership in health care and planning for the purpose of sharing what now exists and designing a new health future for our country. The conference was a national effort to assemble representatives from colleges, universities, health disciplines, business, and the political and federal arenas for the purpose of developing a comprehensive document that described new roles for the Allied Health Professions in Health Promotion and Disease Prevention, replicable models for integrating Health Promotion and Disease Prevention into practice, and new paradigms for training and education. Special concerns and needs of the elderly, disabled, young, and ethnic and racial minorities in this country and abroad were also addressed.

These proceedings chronicle our best efforts and ideas. They serve as a beginning rather than an end. Our hope is that these papers will serve both as catalyst and guide for others who will be utilizing these recommendations and models in their respective professional settings and practices.

At this conference we also reckoned with more global and eclectic health issues. It has been concluded that if society is to survive and prosper, living must be matched to our knowledge of health and wellness. Health care providers need to assume new partnerships with their clients and the focus of that partnership must be preventing illness and affecting healthy life styles. Truly a new era in health care has dawned with the allied health professions as standard bearers.

Edmund J. McTernan and Priscilla D. Douglas  
Conference Chairs

## CONFERENCE GOALS

1. TO SHARE EDUCATIONAL AND PRACTICE MODELS IN HEALTH PROMOTION AND DISEASE PREVENTION FOR LEADERSHIP, POTENTIAL CHANGE, AND/OR NETWORKING OPPORTUNITIES;
2. TO DEVELOP A SERIES OF RECOMMENDATIONS BASED UPON CONFERENCE PRESENTATIONS AND DISCUSSIONS, FOR WIDESPREAD DISSEMINATION;
3. TO CONFIRM THE NEED FOR ALLIED HEALTH PRACTICE OF HEALTH PROMOTION AND DISEASE PREVENTION INTERVENTIONS, AND TO IDENTIFY NEW PRACTICE OPPORTUNITIES FOR THE ALLIED HEALTH PROFESSIONS IN THIS AREA OF CONCERN;
4. TO ESTABLISH AN EDUCATIONAL BASE FOR TRAINING ALLIED HEALTH PROFESSIONALS IN HEALTH PROMOTION AND DISEASE PREVENTION SOCIETIES AND ACCREDITING BODIES, AND CONTINUING EDUCATION NEEDS.

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## OPENING REMARKS

Edmund J. McTernan

It is my privilege to open this conference, and to welcome you on behalf of one of the three sponsors: the Resource Center for Health Promotion/Disease Prevention, an activity of the School of Allied Health Professions, which is one of the constituent units of the Health Sciences Center at the State University of New York at Stony Brook. The Resource Center at Stony Brook, and the Academy of Health Promotion at the School of Allied Health Professions, University of Connecticut (another conference sponsor), are two of the nine health promotion/disease prevention (HP/DP) projects which were funded by the Division of Associated and Dental Professions, Bureau of Health Professions, U.S. Public Health Service, in 1983.

About a year ago, the staff at these two institutions discovered that both centers had planned to sponsor an invitational conference of national scope in the third and final year of our projects. To have two such conferences at almost the same time, and probably in close geographic proximity, seemed foolish to us, so we decided to pool our talents and resources to convene this meeting. Colonial Williamsburg was chosen as the venue, both because of its attractiveness, and because it isn't in either of our backyards. We, and the third sponsor, the American Society of Allied Health Professions, hope that you will gain a great deal from the discussions which will take place, and that you will enjoy the setting.

Few who have given thought to the matter doubt the importance and long-range benefits of preventive care and health promotion to the well-being of our society. Those of us who have gathered in this room tonight recognize the fact that the Objectives for the Nation will not be achieved unless the role of the allied health professions in the HP/DP effort is significantly expanded.

If you have seen the special issue of Public Health Reports (May-June 1982) which was devoted to "Prevention and Medical Education," you will know that the medical profession itself recognizes the fact that physicians cannot implement an adequate level of preventive care by themselves, and that the nation's 4.5 million allied health practitioners (or whatever number you count) must become fully active partners in the effort to create a Healthy People.

Many of us who are committed to this goal are very frustrated. Not only does the general public typically fail to see the allied health professional as a valid health counselor (in most instances), but for the most part these professionals themselves do not feel comfortable in that role. Developing such confidence has been one of the goals of our two HP/DP centers; the purpose of this conference is to coalesce and to focus what all of us have learned about developing allied health's role in preventive care and health promotion, during these past three years. This is an expert conference; its intent and design is to give the most knowledgable group of people on these issues an opportunity to share their learning and their experience. This conference is not intended as an introductory experience for anyone. For that reason significant time has been allocated so that all participants can contribute to the deliberations.

Finally, this meeting must present a mixture of elements: equal parts of a celebration and those of a wake. We celebrate the immense progress towards the integration of preventive interventions into the practices of all the allied health professions, which has been achieved over the last three years, with U.S. Public Health Service leadership. We also deeply regret the decision of the federal authorities, forced by current fiscal policies, to withdraw all federal funding from the allied health HP/DP endeavor. We can only hope that these fledgling efforts are strong enough to maintain at least some of their momentum on their own, and that those of us here present can keep this nascent movement alive.

We thank you all for sharing in this effort, and for being present and for adding your expertise to the discussions.

## CONFERENCE GOALS AND PLANS

Priscilla D. Douglas

It is my fondest hope and most fervent wish that this conference will be a landmark event, and that the proceedings--the tangible results of our efforts--will serve to educate, inspire, and establish national incentives for health promotion and disease prevention. Our conference goals are as follows:

To share both educational and practice models as a way of identifying leadership in health promotion and disease prevention and demonstrating how change and innovation can and does take place.

To identify practice opportunities for the allied health professions in traditional and nontraditional settings and,

To establish an educational basis for training professionals in health promotion and disease prevention which considers both barriers and support for new models.

Everyone here is a leader and vital to the health promotion movement in this country. What is discussed, what is debated, and what is confirmed will become the framework for the future. Our plan is to make you an active participant in the future.

## A CHALLENGE TO LEADERSHIP

Clarence Pearson

Editor's note: We are unable to print Mr. Pearson's remarks in their entirety and so offer a summary.

Clarence Pearson addressed five areas which have important implications for allied health professionals: the distant future, present forces shaping health promotion, public perception of the field, action needed to meet public needs and the leadership challenges related to basic goals.

Futurists in health care, Pearson asserted, propose that by the end of the twentieth century most people will see physical disease as a symptom of some underlying emotional, mental, social-psychological or spiritual pathology. He stated that medicine has little or nothing to do with health and that there are few limits to an individual's responsibility for his health. Forecasters believe that eventually the relationship of stress and illness will be understood.

Allied health professional action must be focused on education. To reach school age children, local community action is needed. Pearson pointed out that only a small fraction of the school day is devoted to health education and 27 states have no health education requirement at all.

He advised allied health professionals to seek coalitions of business and education. Business support of school health education is a natural consequence of enlightened self-interest since sixty-five to seventy per cent of the health insurance dollar is spent on health care for dependents.

The effect of mass media, principally television, on public

perception of health care must be considered. Current programming has doctors as the third highest power figure in television, preceded only by law enforcers and criminals. The health care settings seen on television show doctors as powerful, daring, confident, non-materialistic and with the highest success rate of all professionals on television. And this limited and unrealistic vision, the speaker cautioned, is what the public perceives the health care system is, or should be.

Clarence Pearson concluded his address with the thought that it is up to all persons concerned with health care delivery to help reshape public perception to a more realistic view about what can be accomplished. He charged the participants in this conference to give people the choices and resources necessary to make healthier lives for themselves.

**SYMPOSIUM: PRACTICE IMPLICATIONS OF  
HEALTH PROMOTION AND DISEASE PREVENTION  
IN THE ALLIED HEALTH PROFESSIONS**

**INTRODUCTION**

**Nanci C. Rice**

The purpose of this symposium is to provide an overview of the roles and responsibilities which various allied health professions have taken in the health promotion and disease prevention movement. Over the past few years, there has been a significant increase in the participation of these professions in delivering promotion/prevention health care, thus providing the way for others in the field to follow their lead.

It is particularly exciting and inspiring to learn about the involvement in promotion and prevention care by those allied health professions which have been traditionally categorized as unrelated to these areas because they specialized in "therapies." We have come to learn that therapy does not exclude the practice of prevention, but, in fact, is an essential part of it. Examples of this are provided throughout the panel discussions and within the participants' papers.

Further, as the panelists discuss their respective profession's role in health promotion and disease prevention, it becomes clear that the roles and responsibilities which allied health has in these areas of care are rapidly growing and expanding. To rise to these responsibilities is a challenge for us all.

## IMPLICATIONS OF HP/DP FOR THE PRACTICE OF RESPIRATORY CARE

Kenneth L. Axton

### Introduction

Respiratory care is an allied health profession responsible for the diagnosis and treatment of cardiopulmonary diseases. Typically, the respiratory care practitioner works in the hospital setting under the direction of a pulmonary physician. Services range from laboratory diagnosis to bedside treatment modalities. In more recent years, the practitioner is expanding the scope of practice to include rehabilitation and home care services. The broader role has necessitated the need to emphasize preventive care as well as the more traditional therapeutic treatment plans. This trend presents many issues that need to be addressed, some of which are professional and others which are educational in nature.

### Implications of HP/DP for the Respiratory Care Profession

The profession has undergone several name changes over the years. The field has progressed from "inhalation therapy" to "respiratory therapy" to the present day term "respiratory care." Each of these name changes was precipitated by changes in the nature and scope of practice. The current term evolved, in part, because of an increased awareness of the importance of HP/DP in today's health care delivery system. In order to meet this challenge, educators and practitioners alike need to understand the concepts of HP/DP, identify areas that fit their scope of practice and create a general awareness of the types of services and benefits that are unique of their profession. Many topics such as pulmonary function screening, smoking cessation clinics, cardiac and pulmonary rehabilitative services, hypertension screening, and cancer prevention clinics continue to be topics of importance for the field. Many of these services however, have been offered on a volunteer basis under the auspices of such organizations as the American Lung Association or the American Heart Association.

One of the primary issues that needs to be addressed by the profession is what role should HP/DP play at the worksite. Pulmonary function testing is probably the most visible HP/DP related task. Practitioners perform testing but are not fully integrated into the overall patient/client care plan. Interdisciplinary rehabilitative programs are increasing nationally and practitioners need to identify specific ways in which they can be integrated in such programs. This will necessitate the development of research programs that not only increase the public's awareness of their services but also validate cost effectiveness for both the practitioner and the client.

Once the roles have been defined and the worksite setting has been established, the other issue of major importance to the profession deals with the concept of role modeling. Practitioners can serve as effective agents of change only when they themselves believe in the philosophy and display positive behaviors to others. In order to accomplish this, practitioners need to re-examine their own health behaviors and practice what they preach.

#### **Implications of HP/DP for the Education of Respiratory Care Professionals**

Educators can play a vital role in the dissemination of HP/DP principles. Their expertise will set the stage for the development of the practitioner of the future. Specific curricular issues need to be addressed for full faculty and student participation. First, educators need to identify which of the fifteen priority areas are relevant to their curricula and second, the program design needs to be restructured to accommodate those areas. Differences over optimum design, i.e., core courses or integrated courses, will have to be addressed.

Of prime importance to the implementation of HP/DP will be the issue of clinical instruction. Specific sites and learning experiences need to be developed. These experiences will have to stress interdisciplinary health planning in order to be truly holistic in scope. Finally, educators need to plan faculty development programs and continuing education programs that deal with HP/DP concepts on both the personal and professional level. These programs will enhance the school's ability to generate a philosophy of HP/DP rather than merely create a program centered around a topic that happens to be in vogue.

#### **Conclusions**

The respiratory care professional today is making a unique and beneficial contribution to the concept of HP/DP. The American

Association for Respiratory Care has pledged its full support to the movement and many state affiliates are involved in a grassroots effort to increase the public's awareness of their contributions. The questions posed in this paper represent only a fraction of the concerns for the future, but by working in conjunction with other health care professions, the 1990 objectives identified are within our reach.

## HEALTH PROMOTION STRATEGIES IN DIETETIC PRACTICE

Margaret E. Gaughan

### Introduction

The Surgeon General's 1979 publication Healthy People initiated national awareness and effort to develop health promotion/disease prevention strategies. One of the five health promotion priority areas targeted in Healthy People, and delineated further in Objectives for the Nation (1980) is nutrition. Thus it seems pragmatic, if not essential, that registered dietitians become leaders in the health promotion movement.

Lawrence Green defines health promotion as "a combination of educational, organizational, economic and environmental supports for individual, group and community behaviors conducive to health" (Green 1984). This criteria is certainly applicable to the nutritional component of health promotion as well. However, improving nutrition education to facilitate individual behavior change remains the greatest challenge for registered dietitians in the vast majority of practice settings.

### Nutrition Counseling

Healthy People identifies the need for better nutrition education methods. It makes an important distinction between education as the mere dissemination of information in contrast with the teaching of skills used to modify eating behaviors. This process of helping individuals make and maintain recommended dietary changes is a specific type of nutrition education referred to as nutrition counseling.

Because of the complex nature of eating behaviors, modifying dietary habits is a slow and painstaking process highly subject to recidivism. Effective nutrition counseling requires a sophisticated meshing of science and art.

Initially, rapport must be established through skills such as

listening, communicating empathy and positive regard, recognizing non-verbal expression and identifying clients' feelings (National Heart, Lung and Blood Institute, Vol. I, 1984).

Next, information about food composition, nutrient interaction, menu planning, label reading, food purchasing and preparation, eating out and other nutrition consumer issues must be communicated so that the client knows what to do, how to do it, and ideally why it is being done.

Client and counselor must formulate a specific plan of action together, based on sound nutrition principles, yet individualized to accommodate a myriad lifestyle factors. Goal setting, decision making and self-monitoring skills are needed at this stage.

Additional techniques such as reinforcement, contingency contracting, imagery, positive self-talk and cue identification may be helpful in initiating and maintaining dietary changes, and therefore enhance the R.D.'s repertoire of counseling skills (National Heart, Lung and Blood Institute, Vol. II, 1984).

Finally, the nutrition counselor must strike the delicate balance between providing support for the client and encouraging him to take responsibility for his eating behaviors. Dietitians must learn appropriate confrontation skills in order to help clients realistically evaluate their successes and failures (Engen, Iasiello-Varlas and Smith 1983).

### **The Health Promotion Specialist**

The progress of the health promotion movement ultimately depends upon individuals taking personal responsibility for changing health behaviors. Allied health professionals play a critical role in educating and motivating their clients to make recommended changes.

Dietitians are uniquely qualified to take leadership roles in health promotion for several reasons. First, they have a wealth of experience with the issues of eating behavior change, one of the most complex and change resistant of behaviors. As a result the profession is beginning to support the development of counseling skills in undergraduate and graduate curriculum, as well as in continuing education programs. Second, eating habits play a pivotal role in shaping lifestyle; improvements in nutrition behaviors will often initiate and reinforce other health promoting activities. Finally, dietitians have the educational background in biological and social sciences and can readily build competence in related health promotion areas such as exercise physiology, stress management and smoking cessation and substance

abuse (Douglas 1986).

This expanded role of the dietitian formally began during the last decade in the large multi-center clinical trials such as M.R.F.I.T. Dietitians counseled study participants to coordinate a variety of lifestyle changes: diet, exercise, smoking, taking medications, managing stress, etc. This role is referred to in the literature as an "intervention specialist," reiterating the disease preventative focus of these trials.

I have had the opportunity to function as a "health promotion specialist" by participating in the development and implementation of a worksite wellness program entitled LEG-UP (Lifestyle Enhancement Guide to Unlimited Potential) (Danish et al. 1985). The program is a combination of eight group sessions and four individual counseling sessions designed to promote peak wellness in participants. Goal setting skills are taught and applied to various aspects of lifestyle such as nutrition and fitness behaviors, stress and time management, relaxation and assertiveness training, and garnering social support.

The program is designed to influence the behavior, attitudes and knowledge of participants; in addition to improving overall health, the major goal of LEG-UP is to provide individuals with a greater sense of control over their lives.

The experiences with LEG-UP has served to confirm my personal philosophy that nutrition education cannot exist in a vacuum. Coordination with other lifestyle characteristics is essential. Although this has always been true, the health promotion movement has clarified this relationship and paved the way for dietitians to become leaders in the health care system of today and the future.

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**PRACTICE IMPLICATIONS OF  
HP/DP FOR THE HEALTH EDUCATION PROFESSION**

Marian V. Hamburg

**Introduction**

An allied health conference is not a usual setting for health educators. The terminology "allied health" is seldom used to refer to health educators. It has come to be associated with a variety of therapists and technicians who usually provide treatment to patients, and that fact is borne out by the members of this panel. Although the health care setting is one place where health educators are employed, it is not the most common. They are much more likely to be working in other places with well populations.

**An Evolving Profession**

The very title of the profession leads to some confusion. Does it belong to the field of education or to health? Are health educators primarily educators who focus on health concerns, or are they health professionals who use educational methods?

Health educators are not a homogeneous group. One important reason is that they do not have a common professional background. Since the field is relatively new, it has attracted persons from a variety of professions, most commonly from teaching, nursing, allied health, and from the liberal arts such as psychology, sociology and anthropology. Early professional identity clearly influences self-image and titling. School health educators, public health educators, nurse educators are some of the names used.

There is also a continuing debate in health education circles about whether content or process is most important for

professional preparation. Should more attention be given to acquiring health information or to gaining skills in methods of influencing behavior?

### **Progress Toward Professionalization**

Health education is in the early stages of becoming a profession. A body of knowledge, its research base, is growing. It has also gone through the searching process of defining its unique professional role. The completion in 1982 of a role delineation project has resulted in general agreement about the expected functions of entry level health educators. The publication and field testing of a competency based curriculum for health educators has taken the professionalization process one step farther. The emphasis throughout is on the ability to make an educational diagnosis followed by the planning, implementing and evaluation of a program to meet specific needs.

There has been general agreement that there is a common core of knowledge and function and that there are specialized training needs which are related to the four settings in which health educators are employed: school, community, health care and work site. The differences stem from legal, economic, political and social influences. The culture of the setting and the language of the collegial teams are important considerations. There are great differences between corporations, schools, hospitals and community agencies.

The developing code of ethics for health educators reflects the codes of ethics of their professional colleagues in education, medicine, business and allied health.

What has been an all consuming concern of health educators over the past decade is the issue of credentialing. Aside for program accreditation, which has not been widely utilized, health educators have no credentialing system. A national task force on the Preparation and Practice of Health Educators has provided the leadership which has recently brought some general agreement that certification is the best approach. Used in concert with program accreditation, this seems to have the most promise for professionalization. But it is a long, difficult and costly process.

### **Practice Implications for HP/DP**

Health promotion and disease prevention is the very basis of the health education profession--its reason for being. While it is true that some goals of health promotion and disease prevention could be accomplished without health education, almost all of the

Healthy People objectives depend primarily on educational interventions.

Each of the settings provides special opportunities. Schools are the primary institutions for learning the basics of health, discovering where to get information and how to evaluate it, and getting practice in decision making about health practices. Today there is a concerted effort, fortified by such corporations as Metropolitan Life with its Healthy Me initiative, to get a comprehensive, sequential health education program into every school. Categorical campaigns (the disease of the month) are out. Validated curricula such as the Growing Healthy model and the Teen Age Health Teaching Models are being adopted, and teachers are being trained to use them effectively.

Worksites have become important settings for health promotion and disease prevention programs for employees and their families. The reason is that it is good business. There is more production, less absenteeism and higher morale. From early initiation of Employee Assistance Programs focusing largely on drug and alcohol usage, worksite programs have expanded to broader activities that emphasize total fitness in a safe and healthful environment. Stress management is currently getting top billing in many work settings.

Recognition that health care settings need to provide more than medical treatment has changed the practice modalities. Whether it be primary, secondary or tertiary health care, education is needed to promote, maintain or manage health. The HMO movement is evidence that our nation believes in the concept of prevention, not just treatment. The inclusion of health education as an integral part of the services offered underlines its importance. However, there are still problems in financing the educational aspects of health care. A prime example of the application of education to patient service can be found in New York University's Co-Operative Care Center where patients are scheduled for educational "treatment" individually or in groups in order to learn (along with a care partner) how best to deal with health problems. Case conferences include educators, nutritionists and pharmacists, along with the traditional medical care team.

Community health programs of all sorts have long demonstrated the application of educational approaches to maintaining and improving health, whether that meant lifestyle changes or environmental modifications. Health fairs, Community Health Councils and fitness activities are examples.

The goals of health promotion and disease prevention which are the focus of this conference are indeed ambitious. Their achievement

will require the efforts of every one of our professions, working individually and in concert. Health educators recognize that their role seldom requires them to operate alone. Participation is a basic principle. Working with and through others, such as allied health professionals, is fundamental to the practice. Involving the target groups--students, patients, employees and community members--is also a basic tenet. The process becomes the product. Participating in study and decision making about an individual or social health issue is apt to result in change more effectively than any information giving by a health professional. We are all health educators and we have the chance to influence almost all of the factors that affect health: environment, lifestyle, availability and accessibility of health care and even heredity.

#### **What Has Not Been Accomplished**

What has not been accomplished relates to our purpose for this conference: improving teamwork. Health education needs to be a full partner with the allied health professions, and it is not.

There are good reasons for this. Professional preparation is separate, sometimes in different schools of universities. But even if the organization chart shows these professional preparation programs in the same school or in the same division (as mine is at NYU), there may not be interdisciplinary courses or even interdisciplinary fieldwork. Faculty members in their attention to turf protection, may not communicate on any regular basis with the health faculty. The network is weak and remains weak, partly because we have separate professional organizations, separate publications and sometimes separate goals.

Health promotion and disease prevention is a concept and a goal that has the potential for unifying our efforts. But we have to make it work.

## OCCUPATIONAL THERAPY CONTRIBUTIONS TO HP/DP

Marianne Maynard

### Introduction

Occupational therapy is concerned with the well community and the maintenance of health and prevention of deficits, disease and disabilities, besides the rehabilitation of those with physical and psychological impairments or dysfunction (Walker 1971). Our major contributions to the prevention, or health maintenance sector is to enable individuals to modify their health-threatening lifestyles, restore or reconstruct health patterns of work and play, and to replace unsatisfactory life patterns, disrupted function and disorganized unnecessary dependency (Johnson and Kielhofner 1983, p.185). Our knowledge of the occupational process of work, play-leisure, and daily living activities enable us to employ preventive practices for those at risk. As health promoters, our practice has always focused on improving the quality of life of those we serve. As team members with other allied health professions our aim is to encourage healthy lifestyles in order to prevent or retard disease and disabilities from occurring or reoccurring in high risk population groups.

### Guiding Philosophy of Practice

Occupational therapy guiding philosophy provides the framework for our role in the health promotion arena. Occupational therapy is defined as the use of purposeful activity with individuals who are limited by physical injury or illness, psychosocial dysfunction, development or learning disabilities, poverty and cultural differences or the aging process in order to maximize independence, prevent disability and maintain health (AOTA, Representative Assembly, Minutes 1981).

The purposes of occupational therapy are to enable each person to achieve optimum function and adaptation in performance of occupations: self-maintenance, productivity, and leisure; prevent occupational impairment; and promote the maintenance of occupational performance (Reed and Sanderson 1983, pp.5-6).

### **Principal Roles and Practice Area**

The role of the occupational therapist in health promotion and disease prevention is identified within the framework of primary, secondary and tertiary programs (AOTA, Position Paper 1979). In brief, in primary prevention programs therapists often focus upon health promotion activities that are designed to help individuals clarify their values about health, understand linkages between lifestyle and health, and acquire knowledge, habits and attitudes needed to promote both physical and mental health. Practice areas can include educational, health, community and industrial settings. In secondary prevention services therapists help to prevent or retard the progression of a disorder and include early diagnoses, referral and effective treatment, as well as health screening, consultation, crisis intervention and home health care. Practice areas includes health centers, community mental health programs, schools and other community programs such as day care for the elderly.

In tertiary prevention programs the provision of rehabilitation services is included to assist disabled persons to attain their maximum potential for productivity and full participation in community life. Practice areas would include rehabilitation and home health settings.

### **Conclusion**

Occupational therapists continue to expand their practice models in health promotion/disease prevention and disability prevention with a variety of population groups including infant screening and early intervention programs, development programs for children at risk, programs for troubled youth, lifestyle and health habits enhancement programs for adults, and daily living tasks and chronic condition management programs for the elderly and disabled.

There are many approaches to health promotion/disease prevention. Each allied health discipline has the opportunity to contribute its unique expertise besides working together in a team effort to promote health attitudes and practices in society-at-large.

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## HEALTH PROMOTION IN PHYSICAL THERAPY PRACTICE

Bella J. May

### Introduction

Physical therapists have long been involved in a holistic approach to health care, health maintenance and prevention of complications from disease and injuries. By definition, physical therapy is a health profession concerned with the preservation as well as the restoration of human function with a focus on movement and integration.

In 1981, the House of Delegates of the American Physical Therapy Association formalized the profession's integral involvement in health promotion by passing a policy statement requiring the Board of Directors to "study, design, develop and implement plans that promote physical therapy in the areas of holistic health and health promotion by incorporating them into programs of the Association's strategic planning process." The broad based plan that was developed and implemented included:

Expanded educational activities for students and practitioners in basic, graduate and continuing education.

Public relation programs and informational materials for the general public.

Working with local, state and federal agencies to develop and enact legislation advancing and supporting health promotion (APTA 1981).

Educational standards for physical therapists require that students be prepared to "participate in programs to prevent disease, deformity and injury" (Accreditation standards 1982). The emphasis is even stronger in the new standards currently under review; new graduates will be prepared to apply concepts of health

promotion, disease prevention and health maintenance throughout their practice.

Physical therapists are currently involved in a broad variety of programs for individuals of all ages and in all settings. I would like to discuss just a few of these programs to highlight the role of physical therapy in health promotion.

### **Industrial Programs**

Ergonomics, the study of work and the work environment, has been a part of physical therapy in many European countries for many years. More recently, American physical therapists have become involved and now contract with businesses to help develop safe work areas. Background knowledge in kinesiology, biomechanics and human function enables the physical therapist to determine areas of potential hazard and help the employer or engineer redesign a work area to enhance the function of the worker. Therapists experienced in ergonomics are running continuing education programs to help other therapists learn the special skills required in this area.

Physical therapists have considerable expertise in musculoskeletal and cardiopulmonary function, exercise physiology and relaxation and are increasingly involved in comprehensive industrial prevention programs. As part of a health team they evaluate cardiovascular endurance, body composition, joint flexibility and pulmonary function as well as take a history regarding general health, previous musculoskeletal problems, physical activity, eating habits and weight control. Individual consultation may be used for personalized programs designed to meet specific needs.

Company fitness programs often create good long term participation and have been found to be quite cost efficient, particularly for large organizations. Company programs may be broad based and general in scope including individual and group exercise opportunities, safe competitive activities, educational seminars and incentives such as T-shirts and awards. Programs may be aimed at target health problems such as hypertension and obesity and may include stress management. Some company programs are motivational and encourage employees to use community facilities such as health clubs and Y centers.

### **Specialized Programs**

There are many different ways that physical therapists are involved in health promotion: developing community education programs about certain health hazards, teaching proper exercising to various groups and participating in health fairs are but a few.

Back schools have been proliferating recently although physical therapists have long provided education in proper back care. A back school program can have an industrial or community focus; it is a formalized program of instruction and exercise on prevention of back injury. Individuals with a history of back problems or with a potential for back problems are referred into the program by their physician and learn how to alter their lifestyle to prevent injury. In some states, individuals can refer themselves. Back injury and disease is the largest non-life threatening health problem in our society; millions of dollars are lost each year due to back injuries and many more people lose time and functional ability due to back problems without ever seeking professional assistance. Many people seek assistance from a variety of providers including some without appropriate qualification or training in the area.

### **Programs for Children**

Physical therapists provide screening and consultation for a variety of musculoskeletal problems such as scoliosis, joint deformities, posture and athletic problems. Some physical therapists are employed by school systems and provide screening programs on a consultative basis while others provide volunteer screening.

The faculty of the department of physical therapy at the Medical College of Georgia, working with the local medical association and the Richmond County Board of Education helped develop a comprehensive screening program for high school athletes. Twice a year all students who plan to play competitive sports are screened for a variety of musculoskeletal and health problems. A few years after the screening program was instituted, it became evident that screening was not enough and several physical therapists started working with individual schools to teach coaches and players flexibility programs to prevent injuries. Weekend seminars on basic prevention of sports injuries were held for coaches and student trainers. Several of the faculty and therapists from the community have continued to work with some of the schools, providing on field support during a game and teaching proper conditioning and flexibility during practice.

In some communities sports programs are quite developed; the local school system or recreation department employs a therapy group as consultants to provide screening and prevention activities. There are also a number of physical therapists who are athletic trainers and work with college or professional teams. Health promotion in sports is an established area and physical therapists are increasingly involved in a wide variety of programs. Unfortunately, this involvement rarely extends to the general

public which is frequently subjected to all sorts of exercise routines, taught by individuals with questionable background and little understanding of human function. Many are dissuaded by the discomfort created by too much exercise in inappropriate positions, while others sustain minor or major injuries which limit their activities. In many states the laws regulating the practice of physical therapy prevent therapists from providing services to health club and Y centers while allowing individuals without training or education to teach any type of fitness programs and guide people through the use of complicated equipment.

### Programs for the Elderly

Wellness programming for the elderly is another growing area and one in which I am personally involved. There is much research to support the efficacy of health promotion, exercises, fitness and wellness for older individuals, even those who have never been involved before. For the last two years I have been doing a week-long program on health promotion as part of an Elderhostel activity. For five days I have one and one-half hours with a group of individuals ranging from about fifty-five to eighty years of age who have chosen to come to the mountains of North Carolina for a week. Each day I spend about forty-five minutes in a presentation and discussion of important information and forty-five minutes in a designed exercise program which includes a warm-up, flexibility activities, strengthening exercises and some aerobics. The topics of discussion include:

- The dimension of a wellness program
- Proper exercising and conditioning
- Nutrition and weight control
- Stress management and relaxation
- Designing and implementing your own program

The focus is on each person starting where he/she is and making wellness an integral part of the lifestyle. There is considerable discussion and I emphasize the importance of developing a program that will be enjoyable and will meet realistically established goals. I take the same approach in the exercise portion of the program, starting slowly and providing alternative ways of exercising so all can participate. The program has been quite well received. I have done shorter versions of the same program as well as individual parts for different groups around our community.

## Summary

It can be said that health promotion is an integral part of physical therapy practice; it is expected that involvement will continue to grow as the profession continues to provide an ever wider range of services in an increasing variety of settings. Yet physical therapists, as most other health practitioners, generally focus much of their attention on restoration and rehabilitation. I think this is appropriate considering the number of people in need of such services, current reimbursement practices and the limited numbers of practitioners. Under the current system of financing health care, most third party payers provide fees for restorative rather than preventive services. There are few insurance policies that will support health screening, wellness activities or aid in lifestyle changes. Until we see some change in patterns of reimbursement, the majority of physical therapy activities will continue to focus on restoration. It is my belief however, that an understanding of the concepts integral to health promotion, wellness and holistic health helps physical therapists provide more effective restorative services.

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## THE CLINICAL LABORATORY AND HP/DP

Glenda Price

Perhaps more than any other health profession, clinical laboratory practice has changed dramatically over the last decade. These changes are expected to continue and significantly alter the way in which laboratory practitioners contribute to health care delivery.

Advancing technology has meant smaller instruments, fewer manipulations, smaller samples, less training time for the performance of many tests and a move away from in-laboratory testing to bed-side and at-home testing. Nurses, doctors, office personnel, therapists and patients themselves are now able to perform laboratory tests. More and more individuals are taking an active part in their own health care by monitoring various body functions and systems. This shift is consistent with the principles of health promotion and disease prevention and should therefore be encouraged.

The laboratory practitioner's responsibility for the accuracy of the tests has not been eliminated simply because he or she is no longer performing the tests. Educating others on how to perform and interpret test results is a critical new role for clinical laboratory scientists. Ensuring the quality of laboratory results, no matter who performs the test, is the role of the laboratory practitioner.

In addition to the "new" roles of laboratory practitioners as they relate to home testing, the traditional roles are important. A review of the Objectives for the Nation reveals numerous activities in which laboratory practitioners engage.

Microbiological analysis to test for sexually transmitted diseases, assess immunization status and other infectious diseases is just one area of the laboratory that can and should be involved in disease prevention programs.

Environmental surveillance of toxic agents as well as infectious agents is another activity for the laboratorian. Pregnancy testing and nutritional assessment are further examples of laboratory involvement in HP/DP. In each of these areas the laboratory must, however, go beyond the simple performance process. An educational and a prevention component must be added to their activities. It does no good to inform an institution that a staphylococcus infection is present if you do not also include instructions on how to avoid future outbreaks.

In the future laboratory practitioners will be more active in developing screening programs for early detection of disease, environmental surveillance programs to detect toxic and infectious agents and educational programs related to physiology and biochemistry. Laboratory practitioners will also participate in programs designed for life-style changes.

Involvement in program development, education and surveillance activities each requires that the practitioner function outside of the laboratory itself. Renewed efforts toward the health team concept will be important to the success of these activities. Laboratorians will find it necessary to work with therapists, other technologists, nurses, physicians, health educators and dieticians, so that the specialized knowledge and expertise of each discipline will be complementary to the others for the improvement of the nation's health. This "new" orientation for laboratory practice is being incorporated into our educational programs so that the next generation of practitioners will find the role comfortable. Existing practitioners will need to revise their thinking about current roles and seek opportunities to join others in the health care delivery system in promoting health and preventing disease.

## SYMPOSIUM SUMMARY

Nanci C. Rice

The panelists presented an excellent overview of the challenges which their professions are meeting for incorporating health promotion and disease prevention into allied health practices. It is refreshing to hear that these responses have included methods of meeting the needs of populations which were not addressed in the earlier years of promotion/prevention care, such as the geriatric and adolescent groups. And it is encouraging to learn more about the leadership roles in which professions, once considered peripheral to the health promotion movement, have taken to increase their participation and involvement. For example, occupational therapists have conceptually and clinically increased their responsibilities in the areas of secondary and tertiary prevention and continue to serve as role models in the area of health promotion. Many of the other panelists have indicated that their professions have taken similar steps in their respective areas.

Finally, it is obvious that allied health has taken a leading role in providing health promotion and disease prevention care within many different practice settings and that, in many ways, "We've just begun!"

**PANEL DISCUSSION: REPLICABLE ALLIED HEALTH MODELS IN  
HEALTH PROMOTION AND DISEASE PREVENTION**

Eight panelists, each representing a different allied health profession, present HP/DP practice models for their own discipline.

## REPLICABLE MODELS: PHYSICIAN ASSISTANT

Molly Backup

Physician assistants are often in an ideal situation to introduce health promotion and disease prevention measures in practice. Partially because of their newness, training programs have been able to adopt innovative ideas and goals rapidly. Thus both the Association of Physician Assistant Programs and the Committee on Allied Health Education and Accreditation (CAHEA), the credentialing body for PA programs, stress these areas in the initial education of PAs. The profession has also noticed the importance of stressing wellness, prevention of disease, and maximizing patient input in health outcomes. As early as 1975, the American Academy of Physician Assistant (AAPA) House of Delegates adopted resolutions encouraging members to "include measures of prevention" in their practice. Multiple other actions since then have stressed prevention and health promotion in education, research, continuing education, publications, legislation and health policy. A 1984 profile survey carried out by the AAPA demonstrates that in their daily practices the majority of PAs are providing direct health promotion and illness prevention services to patients. Some have gone on to develop positions as wellness educators, leading groups in stress management, weight reduction, exercise, smoking cessation and counseling patients individually on healthy life styles. The profession has supported these developments and continues to stress the importance of incorporating these measures in most practice settings, both as a means of providing quality care and as an important element in the definition of the profession.

As new professionals, physician assistants have developed their roles based on providing assistance to often overworked health personnel and by serving patients in a personal and communicating fashion. In fact, part of the momentum for developing PAs was the pressure from consumers to make health care more available and understandable and to involve the patient more in the process. Thus, the PA profession was envisioned and created at a time when health promotion and disease prevention were also being developed

as major approaches to the practice of medicine.

My role as a primary care PA in a rural family practice office that serves both private and pre-paid patients provides an example of day to day integration of health promotion and disease prevention activities in practice. Some of the potential pitfalls in the provision of these services are reduced or eliminated by my particular position. I am salaried by the Health Maintenance Organization and thus am not pressured financially to see more patients. It is also clearly in the interest of an HMO to keep its members healthy and happy. My salary is significantly less than that of a physician, so I can justify spending more time with patients. And, patients expect and demand the extra attention and guidance. Because the practice is modeled as an HMO, nonmembers generally benefit as well, although some are limited in their follow-up because of lack of reimbursement for health promotion activities that do not carry a specific diagnosis.

Pediatric well child visits are scheduled for thirty minutes. The exam usually takes about five. The remainder of the visit is involved in development assessment, parent questions, advice about age specific risks of injury or disease, and discussion of problems that often occur in discipline, child rearing, etc., at the specific age. Thus, the parents of a two year old are asked about vocabulary, turning pages, walking stairs, kicking a ball, dressing, domestic mimicry and other behaviors. They are advised on the use of fluoride and brushing teeth. Discipline, consistency, and use of a time-out room are raised. Poisoning and the use of ipecac are discussed, as is the use of a car seat and the need for street and garage safety. Parents are encouraged to read to the child and are offered the H flu vaccine. All of this takes about ten minutes, and is included on a one sided age specific history and physical form that becomes part of the record. In my experience, raising these issues on a systematic basis saves time in the long run. Injuries are reduced; parents are more confident in their ability to parent and to handle minor medical problems. Rapport is developed so that problems are detected early and the child and care takers are able to be involved in the solution.

A second example of health promotion intervention is the patient who comes in with a respiratory problem. If the patient smokes and there are any signs of chronic obstructive pulmonary disease (COPD), they are demonstrated. The fact that there is lung tissue remaining is stressed, and that breathing continues even with the infection, so it is not too late to quit and save what remains. They are advised that with continued smoking, the normal breathing will become like that during illness, and that illnesses will become more frequent and severe. And if the patient has any

interest in quitting, it is suggested that since they will be miserable for the next several days anyway, they may as well quit now and get the misery over with. Tips are offered on how to quit: substitutes are suggested for the pleasure, relaxation, and habit, provided by the cigarette. Quitting is unpleasant and the signs of withdrawal can be used for encouragement that one is actually quitting instead of as an excuse for a cigarette. And most importantly, I suggest that I think the patient can accomplish this enormous task, with support from family and friends, and I challenge them to return, or call for help, smoke free. This probably takes ten minutes. It is not always successful, but often it is. If patients return for a follow-up visit, the diagnosis of COPD or bronchitis makes it reimbursable so neither the practice nor the patient need suffer financially for the time invested.

Adult physicals are also age, sex and family and medical history specific. Healthy forty year old women are advised on screening mamography, breast self-exam, the use of calcium and exercise, annual PAP smear and stool occults. That visit takes a little longer, but when the same patient returns annually, and she does because she feels that she is taking some responsibility for her health care, a quick review suffices. In the long run, visits are probably shorter, because confidence is high and questions have already been answered.

In summary, I have tried to describe briefly how a PA integrates health promotion and disease prevention in daily practice.

## **THE RESPIRATORY CARE PRACTITIONER ROLE IN HEALTH PROMOTION**

Ronald G. Beckett

### **Introduction**

Although respiratory care is one of the youngest of the allied health professions, it has been consistently involved in health promotion and disease prevention. Recent changes in medical reimbursement mechanisms such as diagnostic related groupings from Medicare, medical necessity guidelines and others have caused the focus of the health care industry to turn from treatment toward wellness and prevention of disease. Health consciousness has swept the country with waves of exercise and diet programs, warning labels on harmful products and the like, all of which have heightened the public's awareness of their health. With these and other changes the respiratory care practitioner's role in health promotion and disease prevention has increased.

When we speak of health promotion, we speak of programs aimed at preventing disease before it occurs, but that is not the whole picture when it comes to health promotion and disease prevention. In addition to getting people to change their lifestyles for health reasons, HP/DP also includes secondary and tertiary prevention of disease at the earliest possible moment so that the potential of stopping it in its tracks can be better realized. Tertiary involvement deals with minimizing the impact of disease in cases where stopping it would be impossible. Respiratory care practitioners' involvement in health promotion includes primary, secondary and tertiary measures.

### **HP/DP Examples Which Involve Respiratory Care Practitioners**

Respiratory care practitioners (RCPs) are involved in HP/DP as students, practitioners in acute care facilities, in skilled nursing facilities, advanced rehabilitation facilities, in the pulmonary function laboratory, in clinics, as members of respiratory care professional organizations, as volunteers in conjunction with existing programs of the American Lung

Association, the American Heart Association, the American Red Cross, and others. Obviously, the RCP is involved in promoting the health of, and preventing diseases in those individuals afflicted with disorders of the cardiopulmonary systems such as asthma or emphysema.

The following is a summary of HP/DP programs in which the RCP is involved:

### **Smoking Cessation Programs**

RCPs develop and implement smoking cessation programs for local communities, in-house programs for departmental staff or all employees; patients requesting information or aid in decreasing dependency on smoking (as medical condition allows); and patients in formal pulmonary rehabilitation programs. They serve as community volunteers with the American Lung Association and as distributors of information. RCP students develop and implement smoking cessation programs for fellow students as a Respiratory Care club activity as well as a learning activity, distribute information on campus and at health fairs.

### **Pulmonary Rehabilitation Programs**

Major components of rehabilitation programs include patient instruction in relaxation techniques, exercise tolerance, bronchial hygiene, breathing retraining and disease education. RC practitioners develop and implement pulmonary programs for in-house patients with chronic obstructive pulmonary disease (COPD), individual out-patient and community group sessions. They sponsor community better breathing clubs, volunteer with American Lung Association programs and work with cystic fibrosis patients in clinics or in-house programs.

RCP students are involved with didactic and clinical study of pulmonary rehabilitation, may serve as community volunteers with existing programs of the American Lung Association, and may staff informational booths at health fairs, etc.

### **Family Asthma Programs**

RC practitioners lead in the development and implementation of family asthma programs within the community for adolescents, pediatric patients, and preschool children; serve as volunteers with existing programs for asthmatics; and assist with information distribution. RCP students enrolled in didactic and clinical study of family asthma programs, serve as volunteers with existing programs of the American Lung Association, and assist with information distribution on campus and at health fairs.

### **Home Care**

RC practitioners may work at home with individuals with a respiratory disorder, addressing all the topics of a complete pulmonary rehabilitation program, and educate by distributing information. Students are exposed to didactic and clinical study of home care programs and techniques.

### **Diagnostics**

RC practitioners use the technology and techniques in the pulmonary function laboratory which have all been geared toward the early detection of pulmonary diseases. Upon detection of early airway disease, information is given to the patient and a health program is recommended. In addition, occupational pulmonary screening for various industries is carried out in the laboratory or at the job site to detect early long term damage precipitated by the occupational environment. These pulmonary function laboratories are now actively involved in the diagnosis of sleep apnea. Students participate in didactic and clinical study of the pulmonary function laboratory methods, techniques, and the implications of the findings. In addition, students are involved in pulmonary function screening at community health fairs.

### **Other Involvement**

Prudent heart living, blood pressure, and stress reduction are all components of community programs in cardiopulmonary resuscitation. Ecolizer (carbon monoxide) screening at health fairs to promote smoking cessation, and joint sponsorship of social fund raising events for organizations whose concern is lung/heart health or research, are all programs which increase the public's awareness of cardiopulmonary health.

As described in this article, it becomes quite apparent that the respiratory care practitioner is an important member of the HP/DP team. It is a professional responsibility for students of this profession to become involved in their communities concerning issues of health awareness. Knowledge about our health and well being is vital to us all. It seems a crime not to share it.

**HEALTH PROMOTION AND DISEASE PREVENTION**  
**SELF-INSTRUCTIONAL MODULES**

John Bunker

The School of Allied Health Sciences (SAHS), University of Texas Medical Branch has developed a series of fourteen self-instructional modules. The modules present the concepts and practice of health promotion and disease prevention (HP/DP) and are designed for training allied health and other health professional students. The modules address the content, knowledge and process skills needed to shift the balance of our traditional educational, clinical and research programs from a disease-oriented to a more generalized HP/DP approach. The focus is on knowledge, skills and practice of primary and secondary prevention.

The instructional modules form the core of our integration of HP/DP training into the existing SAHS curriculum. The modular approach was selected because of the flexibility it affords faculty in trying to implement programs across departments without requiring major curriculum revisions. The modular format allows faculty to select and assign modules in a course or curriculum which will be completed by students outside the classroom, at their own pace. The modules consist of text interspersed with review questions, structured exercises and a self-assessment post-test. Multiple teaching modalities for the modules apply methods that fit best with the particular content and process for each module.

The first four modules of the series, the "core modules," were developed by the HP/DP grant faculty: Guy Parcel, Denise Simons-Morton, John Bunker and Bruce Simons-Morton. The core modules provide an extensive overview of HP/DP concepts and programs. These modules present and describe a strategic process that may be used by health professionals as a systematic approach to promoting health and preventing disease. The strategic process presented is a useful and practical tool for creating and implementing effective interventions at any of four levels for change:

individual, organization, community and government. The strategy consists of three interrelated phases: health needs assessment, intervention and evaluation.

The remaining ten "content modules" were developed by various faculty in the SAHS and selected experts in specific content areas such as high blood pressure control, sexually transmitted diseases and pregnancy/infant health. Modules one and two are prerequisites to the other modules in the series. The modular format allows instructors and students to select only those content modules which are of importance or interest to the specific health profession, and to choose them in any order. Each of the ten content modules has as its subject one of the HP/DP priority areas presented in Promoting Health Preventing Disease: Objectives for the Nation. Each module is twenty to forty pages of single spaced text and requires from two to four hours to complete.

The initial section of the module outlines the objectives that the student should achieve at the completion of the module and provides a brief introduction to the content area. The next section includes basic information of the content area, including: important terms and concepts; the known epidemiological studies; and factors related to risk reduction and health promotion. The following section provides a discussion of strategies for HP/DP interventions based on the framework presented in module two. The final section presents a description of those skills and resources which the health professional should possess or understand to effectively intervene in the content area. In addition, several clinical examples are presented which illustrate intervention programs and strategies outlined in the preceding sections.

The post-test provides twenty-five multiple choice questions and tests content areas consistent with the learning objectives presented at the beginning of the module. The correct answers are provided with a brief explanation of why the correct answer is the appropriate response. The post-test is not intended to serve as a grading or evaluation mechanism and instructors are encouraged to develop a separate testing procedure to evaluate student performance with the modules.

The SAHS is in the process of field testing the modules with other schools of allied health. Revisions based on student and faculty evaluations of the modules are currently taking place. We anticipate completion of all modules by June 1986. For more information regarding the modules, please contact Dr. Denise Simons-Morton, Division of Health Education, SAHS, UTMB.

## ROLE-MODELING HP/DP FOR MEDICAL LABORATORY PERSONNEL: A REPLICABLE MODEL

James P. Cornish

### Introduction

There is a paucity of replicable allied health research models in health promotion and disease prevention for or by medical laboratory professionals. This regrettable state of affairs can be attributed, in part, to the perception by medical laboratory professionals and their clientele, of the role these professionals play in the health care system. Traditionally, medical laboratory professionals have not been considered health promoters and disease preventers. But in actuality, they may well have been the forerunners of preventive and diagnostic efforts in allied health, since they have been participating in secondary and tertiary prevention efforts since at least the turn of the century (Price 1984).

Even now, when the nation is intensely focused on health (Healthy People 1979, Objectives for the Nation 1980), it is not surprising to find no reference to the role of medical laboratory professionals in highly visible cases since they have traditionally been the "silent partners" in health care (McTernan and Lehmann 1984). The new replicable strategy this pilot program offers medical laboratory professionals is the opportunity to convert to an overt "speaking" role as health promoters and disease preventers by role-modeling. Utilizing an immense specialized body of knowledge and the present skill of generating technical data, the natural progression by medical laboratory professionals to equal partnership in health promotion and disease prevention awaits only a replicable model.

## The Replicable Project

Through the cooperative efforts of the School of Allied Health Professions at the University of Connecticut, a pilot program involving medical laboratory professionals was launched at Windham Community Memorial Hospital (WCMH), a 175 bed acute care facility. The elements involved in this project are also considered risk factors for coronary heart disease (CHD): reductions in smoking, stress, and blood cholesterol levels (NHL & B Institute 1985); better control of hypertension, body weight, and body fat; improvements in nutrition, fitness, and exercise habits.

The goal of this project was to prepare role-models for health promotion and disease prevention. Through participation in a planned program laboratory professionals could improve their health and their health promotion acuity. The pilot program, if successful, could be expanded to other hospital employees, to business and industry, and to the community at large.

Three objectives of the program were identified. First, an advisory health network team for health promotion and disease prevention was to be established. Second, it would demonstrate that laboratory professionals could modify behavior that resulted in improved health and improved health promotion acuity. Finally, it would prepare individuals who could share their own health program experiences with others in at least one formal or informal session at the conclusion of the program. In order to achieve this goal and these objectives, medical laboratory professionals at Windham were asked to voluntarily participate in a planned program for one year (Table I). Any improvements in the health of the individual participants, modification of lifestyles toward greater health and happiness, or improvements in the worksite environment indicating improved health promotion acuity would be interpreted as signs of success for the project.

## Methodology

Several approaches were used to accomplish the stated objectives of the program. The first objective was achieved by personal solicitation of a cadre of qualified and interested personnel who represented several special areas of the hospital community. The second was pursued by recruiting participants primarily from within the medical laboratory. An arbitrary number (twenty-six) of volunteers were accepted. Baseline information was collected using several strategies. A questionnaire on personal health and lifestyle prior to conducting any formal sessions was administered. The instrument was from the Blue Cross/Blue Shield Guide to Staying Well (Blue Cross 1983), which was adopted from a risk analysis developed by Howard F. Hunt and James R. White at

the University of California, San Diego. This survey was chosen because it focused on the target areas of concern to the project. The instrument was again administered at the conclusion of the twelve month program. Baseline studies were conducted on each volunteer, including High Density Lipoprotein (HDL); Low Density Lipoprotein (LDL), total cholesterol, triglycerides, and HDL cholesterol percentage. A total body fat analysis was done along with body weight, and blood pressure was monitored monthly. Participants were advised to consult a physician prior to participation in any weight loss or exercise program. Individuals were then encouraged to set their own goals and become faithful participants of the program. Any improvement in their health while participating in the program was considered a measure of the success of the program. Objective three was achieved by presenting lectures, literature, and other tools to the participants to facilitate their presentation to others. The concept of "each one teach one" is not new, but a tried and true method for the dissemination of information.

### Discussion and Results

In response to personal solicitations to establish the advisory team, no individual who was asked, refused. As a result the team consisted of the project director, a medical technologist; a pathologist; a cardiac treatment nurse who was instrumental in monitoring monthly blood pressure and weight; a patient education nurse; an employee health nurse; two nutritionists; two physical therapists; a director of community relations; and an associate administrator of the hospital.

The population for the program consisted of eight males with a mean age of forty-one, and eighteen females with a mean age of forty. The ages for males ranged from thirty-two to fifty-eight, while the females ranged in age from twenty-two to fifty-nine.

All objectives of the program were achieved to some degree, although the specific results will be reported in a subsequent paper. However, some interesting spin-offs are shared below.

### Spin-offs of the Program

Dietitians have run two eight-week weight loss clinics at the hospital for interested hospital and community members for pay. One participant has fifteen people she now advises on weight control (diet) and proper exercise. She uses "Lean Cuisines" in her meal plan. The hospital has conducted a survey of all employees and community industries to determine the level of interest in a "for profit health promotion program." An employee health nurse, who was hired by the hospital after this program was

started, now has a blood pressure screening program for all employees. There appears to be a more healthful choice of hospital cafeteria food, and the calorie count for many foods is displayed. An employee aerobic exercise class was established. Fresh fruit and granola mix has either replaced or accompanies Danish pastry, cakes, and cookies at laboratory in-services and many other hospital meetings. The hospital has created a hospital-wide health promotion team and is providing mini grants to employees who will organize and oversee some employee fitness activity. In response, a bowling team was reactivated, a baseball team was formed, several employees, including three from the lab competed in road races, with the hospital paying for transportation and registration. The position of Health Promotion Coordinator has been posted.

### Summary and Conclusion

Medical laboratory professionals, who may well be forerunners of disease preventive efforts in allied health, have an opportunity to become equal partners in the health promotion and disease prevention arena. By completing the Life Management Test and having blood lipids, weight, percent body fat content, and blood pressure measured before and after (during, in the case of weight and blood pressure) participation in a planned series of lectures, consults and seminars, medical laboratory professionals had the opportunity to evaluate their progress toward achieving some personal health goals in a replicable health promotion model. With added knowledge and experience from the program, the participants have been encouraged, through role-modeling, to share the joy of better health and happiness with friends, family and community. The success of this pilot program is evident by the attainment of personal goals and the contribution to real change in the health environment of the hospital by the participants. In some small but significant way this project has contributed to the success of meeting the 1990 federal government target date for improving the health of the nation.

TABLE I Health Promotion Project

Sept. 6, 1984	Health Promotion and Disease Prevention, Part 1	J. Cornish, Ph.D., MT
Sept. 27	Health Promotion and Disease Prevention, Part 2	J. Cornish
Nov. 1	Life Habits (film)	J. Cornish
Nov. 29	Lipids: Too Fat or Not Too Fat	V. Bradley, MT Chemistry Supv.
Dec. 13	Behavior Modification: A Need for Many	C. Adams, Ph.D. Cl. Psychologist
Jan. 10, 1985	Nutrition and Health Promotion, Part 1	L. Cyr, RD L. Schwartz, RD
Jan. 17	Nutrition and Health Promotion, Part 2	L. Cyr L. Schwartz
Jan. 29	The Art of Exercise and Fitness for Medical Laboratory Personnel, Part 1	B. Cawley, RPT L. Ferguson, RPT
Jan. 31	The Art of Exercise and Fitness for Medical Laboratory Personnel-Part 2	B. Cawley L. Ferguson
Feb. 7	Nutritional Science and Consumerism	K. Davidsohn P. Moffatt L. Shields
Feb. 28	A Novel Technique for Success: Subliminal Motivation	J. Cornish
May 16	Behavior Modification and Weight Reduction	S. Adams, Ph.D. Nutritionist
May 23	Aerobic Exercise	M. Withey, RN
Sept. 13	The Clinician's Approach to Risk Factors	M. Kilgannon, MD

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## A PHYSICAL THERAPIST'S ROLE IN A UNIVERSITY HEALTH PROMOTION PROGRAM

Susan Theve Gibbons

The expanding focus of preventive health care is creating new opportunities for many health professionals. Physical therapy practice is also undergoing much expansion and change, and it is important for physical therapists to recognize the implications for practice in health promotion and disease prevention.

The purpose of this paper is to present the experience of one therapist in a health promotion program. It is intended to serve as a model to others in both a conceptual and practical sense, offering ideas and inspiration for other therapists as well as a replicable practice model.

In 1983, the University of Connecticut, School of Health Professions was awarded a three year federal grant to foster the development of health promotion programs in allied health. One of many goals of this project was to increase student involvement in and awareness of professional and personal health issues. As one activity designed to promote this goal, the HP/DP project sponsored a campus-wide "Wellness Week" in the spring of 1985. The author of this paper, a registered physical therapist working with the project, played a major role in the planning and implementation of the Wellness Week program.

The goals of Wellness Week were two-fold: wellness information, activities and screenings were offered so that students, staff and faculty at the university could learn more about their personal health and local health programs. In addition, an opportunity was created for allied health students to practice health promotion skills such as medical screenings and fitness evaluations and to demonstrate their expanded roles in preventive health areas to themselves and others.

In order to clarify the steps involved in planning and implementing this project and the author's role as a health

professional and physical therapist, a brief planning outline follows.

### **A Planning Committee**

The associate project director and the author contacted individuals from various university organizations and colleges to assist in planning the program and to encourage widespread commitment and involvement within the university.

### **Program Goals and Objectives**

Program goals such as "increasing student awareness of personal health issues" and more specific objectives such as "offering a booth to assess physical fitness" were arrived at by the planning committee, based on personal and group expertise, interests and practical considerations of cost and staffing needs.

### **Fund-Raising**

More than half the necessary funds were provided by the sponsoring HP/DP project. Local businesses were contacted by the author and associate director and many agreed to donate health-related items (athletic clothing, a bicycle, weights, etc.) to be used as prizes for the kick-off "Fun-Run" event and raffle prizes throughout the week.

### **Publicity and Encouraging Participation**

Local radio stations and newspapers carried information about the program and flyers and posters were distributed on and off campus. Participation in numerous activities or screenings at the event was encouraged through a system of raffle tickets and prizes. A raffle ticket was issued to each participant upon his/her completion of an event or screening. Consequently, participation in many areas resulted in greater likelihood of winning a prize. Tickets were drawn randomly from a box and prizes awarded at the end of the week.

### **Staffing and Program Implementation**

The program was held in the ballroom of the university's student union building. Participating organizations such as the American Cancer Society, State Department of Transportation, and University Health Services, among others, were encouraged to provide their own staff as much as possible, but student volunteers were offered for times when booths could not be staffed. As a physical therapist, the author played a major role in the staffing and direction of a fitness assessment booth. Physical therapy

students were trained by the author in a separate program during their clinical courses and were encouraged to volunteer during Wellness Week to gain practical experience. Other student volunteers were recruited primarily from the School of Allied Health's Clinical Dietetics and Medical Laboratory Sciences programs. Students also received raffle tickets based on the number of hours volunteered and were eligible to win prizes. Informal feedback from students during and after the program indicated most felt the time spent was both enjoyable and educational.

### Problems and Recommendations

As always, problems arose during the week and experience provided improved ideas. Specific problems included the site of the program. The location, on the third floor of the student union, made publicity and awareness more difficult. The development committee was aware of this limitation at the start of the planning stages, but was unable to find a more accessible location. "Drop in" student volunteers at times made activities hectic and disorganized, since students required training during program activities.

The most successful aspects of the program included the raffle prize system, which proved very popular. High-participation activities such as the "Seat-belt Convincer," nutrition analysis and fitness assessment were also very popular. More extensive and aggressive publicity and more structured volunteer training and assignments would have improved overall function of the program.

The outline of one type of health promotion project and one individual's involvement is intended to help others to identify new roles for themselves in preventive health and to develop similar programs. As a physical therapist, the author feels there is both great need and opportunity for therapists to become involved. Other authors have addressed this issue as well. In 1983, Randall Gee stressed the importance of physical therapists to "feel free to work in non-traditional settings such as fitness and health oriented settings." And while much of the focus on health promotion seems very recent, in her 1961 presidential address to the American Physical Therapy Association, Agnes Snyder spoke of a "great trend in medical care toward preventive aspects" and of a need for physical therapy to expand its involvement in preventive programs. Health promotion offers expanded horizons and exciting opportunities to physical therapists and all health professionals. Individuals must become aware of and actively pursue these new roles.

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## LIFESTYLE EDUCATION SERIES

Rosa A. Mo

**Editor's Note:** The Lifestyle Education Series is an HP/DP program of the Union Carbide Corporation, Section N-2, 39 Old Ridgebury Road, Danbury, CT 06817-0001. The program staff includes, in addition to Ms. Mo: Deborah J. Lewis, Manager, Health Promotion and Fitness and Howard T. Kraft, Health Fitness Coordinator.

Health Plus is a comprehensive corporate headquarters health promotion program. The key objectives of Health Plus are prevention of health problems and enhancement of personal and professional quality of life. Programs offered on an individual and group basis include lower back pain prevention and rehabilitation, blood pressure management, cancer screening and prevention, exercise classes, CPR and first aid training, health awareness, smoking cessation, nutrition education and weight management, and stress management. Each of these programs addresses the needs of the whole person with health assessment, personal action plans and goals, and a multi-faceted curriculum including guest speakers from related disciplines.

Health Plus Fitness, the on-site exercise program, is the best and most extensive example of a program geared to all aspects of lifestyle change. It starts with an orientation, followed by a comprehensive health screening, an educational session, an individual lifestyle program design session, referral to other health promotion programs and participation in the exercise segment of the program. The Fitness Center has been developed as a health learning center with a variety of seminars, displays, special events and resource files supplementing the exercise activities which take place there. A cornerstone of the Health Plus Learning Center, as the center is known, is the Lifestyle Education Series which we would like to highlight here.

The Lifestyle Education Series consists of mini-presentations in all the major areas of health which are affected by the way we live and is designed as an independent study program for Health Plus Fitness program participants and non-participants alike. Non-participants pay a \$5 registration fee; fitness program participants attend for free. Because the presentations last for fifteen minutes and participants can work their way through the series at their own pace, the Lifestyle Education Series is ideally suited to the needs of the busy business person. Those who complete ten "core" and four "elective" topics within a six-month period are rewarded with a program T-shirt, a Lifestyle Education Certificate and induction into the Fitness Center "Wall of Fame." The Lifestyle Education Certificate is also one of the requirements for graduation from one stage of the Fitness Program to the next for those with health risk factors.

The core topics include cholesterol, hypertension, smoking cessation, atherosclerosis, triglycerides, medical self-care, weight management, relaxation techniques and lower back pain. The elective topics include body composition, muscular conditioning, sodium, time management and business traveler's nutrition. The participants choose the topics that interest them and can help them reach their own individual goals. This program, like all other Health Plus programs, encourages self-responsibility. We provide the structure where they can meet their individual goals, but they proceed at their own pace. These are not lectures, but give-and-take sessions where the participants determine the agenda on a given topic. For example, in "Nutrition for the Business Traveler," the participants generate a list of difficulties encountered during business trips. The nutritionist uses this as a springboard for discussion. To make the sessions as action-oriented and hands-on as possible, in this section the participants order "dinners" from a restaurant menu according to their own nutritional needs. An important part of the Lifestyle Education Series is the atmosphere provided by in-house medical and health promotion staff members and the comfortable setting of the presentations. Physicians, the physicians assistant, nurses, exercise physiologists, the nutritionist, the health promotion program manager and successful participants take turns presenting. The series takes place in the Fitness Center lounge which has easy chairs, a basket of fresh fruit and a pot of hot water for herbal teas and decaffeinated coffee. The lounge also has brochures and a health display which changes monthly.

The Lifestyle Education Series is mapped out over a three month period and each topic is offered twice during the quarter. Employees read about the series in the Health Plus program newsletter, on the bulletin board in the Fitness Center, and in other employee publications. Participants keep their own

scorecards of the sessions they have attended, which keeps staff administration to a minimum and gives the participants responsibility for taking charge of their own health.

The Lifestyle Education Series is an easy start on lifestyle change for some employees who are not yet ready to commit themselves to a more extensive program. This program can serve as a stepping stone for referral to other group or individual programs requiring more time. Graduates of the program come away with a T-shirt, a certificate of achievement and most importantly, a sense that they can have an impact on their health through positive lifestyle changes.

## RADIOLOGIC TECHNOLOGY AND HP/DP

Ann F. Rufo

Radiologic technology is defined as that branch of medical science which deals with the use of radiant energy in the diagnosis and treatment of disease.

Radiology in the nineteen eighties is the product of much research and development. Examinations performed may range from a common chest radiograph to breast biopsy, a routine ankle radiograph to a carotid arteriographic procedure, all of which have very quickly become an integral part of the typical day in the department. The equipment is sophisticated and invaluable, with "bigger and better" available annually. But the most valuable commodity of a bustling Radiology Department is the operator, more commonly known as the radiographer.

The radiologic technology profession is now more than fifty years old. Our educational programs were developed with a strong technical base which evolved around the equipment that we employed. As late as the 1950s, educational programs were informal and most radiologic technology students were educated through an apprenticeship system. Typical tasks of the radiographer include equipment operation, patient aid, darkroom procedures, nurse-mate and any other responsibilities necessary to diagnose trauma and disease of patients.

Today, however, hospitals are finding that radiographers also play a vital role relative to positive patient relations to the institution. Because we are in direct contact with patients for an extended period of time during the radiographic procedure, I feel that our role should be expanded to include a more direct dialogue with patients regarding issues of health promotion and prevention. For example, in many small and large institutions there have been great efforts devoted to the development of free-standing medical centers, designed for fast, efficient patient care in an out-patient setting. They provide total patient care

including examination, diagnosis, treatment and often follow-up. Radiologic technology is no longer a purely diagnostic technology. The pattern of patient care has changed dramatically, almost as fast as the field itself, with many changes the result of D.R.G. implementation.

Through the mass media, the general population is much more aware of potential health problems and hazards. Patients have questions and they want help. This is what all of us as health care workers are here to address.

When a patient enters the often fearful world of health care, the radiographer is often one of the first professionals encountered. Often examinations that the patient must undergo are long and involved; patients easily become concerned, worried, and often mystified. During this initial period the time spent with the radiographer can be very valuable. I have chosen the breast examination, mammography, as a specific example of a stressful and often psychologically horrifying experience for a patient. The American Cancer Society (ACS) and the National Cancer Institute have found that the mammogram, a low dose radiographic examination, could detect cancers too small to be palpated by the experienced examiner. To date, the ACS recommends a mammogram annually for patients over fifty, and every one to two years for patients in the forty to forty-nine age group, depending on physical findings and risk factors. A baseline examination for patients thirty-five to thirty-nine years old, is recommended.

Breast cancer is the foremost cause of cancer deaths in women. Almost one in eleven women will develop breast cancer some time in their lives. There were an estimated 119,000 new cases of breast cancer, and an estimated 38,400 deaths in the United States in 1985.

These statistics and well publicized research findings have fortunately resulted in a surge of baseline mammogram examinations. The patient, under average circumstances, goes to her physician for an annual checkup. Based on the data noted above she is subsequently referred for a mammogram. I propose that at this time, the proper method of breast self-examination be taught to the patient by a radiographer in the Radiology Department, as a part of this routine procedure. In the same literature, ACS states that approximately 160,000 people with cancer would have been saved by early diagnosis and proper treatment.

The radiographer is at the forefront in the diagnosis and treatment of patients. Many examinations are involved and time consuming, due to the nature of the studies. Patients, even

though only there for routine follow-up or to track chronic problems, are almost always anxious and tense, especially during the waiting period between procedures.

Both tension and tedium could be alleviated by using the time for education. For example the mammogram patient can be instructed in breast examination. I believe that anything one can say or do to help the patient deal with the problem or potential problem, would be an invaluable service, whether only to help at the moment or for future reference. In my opinion, the curriculum of our educational programs in radiography should be expanded to involve a broader based knowledge of patient educational techniques in order to promote early detection and disease prevention in our patients.

## OCCUPATIONAL THERAPY IN HEALTH PROMOTION: A MENTAL HEALTH PERSPECTIVE

Betsey C. Smith

### Introduction

In November 1984, an occupational therapist at the Institute of Living in Hartford, Connecticut, presented a workshop on health promotion entitled "Are We Promoting Health?" to forty rehabilitation staff members. Goals of the program were to explain and define health promotion concepts and determine personal wellness scores. As a practical model, the program was unique in that it featured an occupational therapist as a leader in defining health promotion, and as an educator in a psychiatric setting.

At the Institute, rehabilitation staff have demonstrated a positive relationship between health and activity through a diverse activities program. However, occupational therapists have had to assume varied clinical and educational roles to substantiate connections between activity and health because sixty percent of rehabilitation staff are not trained professionals, health promotion is a new concept within the department, and the impact of role-modeling has not been emphasized.

### Review of Literature

The concepts of health promotion are not new to occupational therapy. The basic tenets of the profession were proposed by psychologist Adolph Meyer in the late nineteenth century. He professed a holistic view of the patient and systematic use of time, interest, satisfying activity and life experiences (Baum 1983). Since then, the term "occupation" has maintained the premise "that man, through the use of his hands as they are energized by his mind and will, can influence the state of his health" (Reilly 1961). "Doing" or "purposeful activity" generates feedback about capabilities and limitations. It promotes

development of self-worth and competence (Fine 1983).

It appears that it is the occupational therapist's knowledge of the various activities which provides the basis of rehabilitation programming and promotes health. The profession's emphasis on occupation makes it unique (West 1984) and suggests the contribution it can make to multidisciplinary health promotion activities.

### Implementation

The health promotion workshop at the Institute for Living was proposed and implemented by a staff occupational therapist and scheduled as part of in-service programming. Flyers announcing the workshop were distributed prior to the workshop, a strategy not ordinarily utilized. The session was divided into three parts: explanation of health promotion concepts, with posters used to highlight facts; a life management test using the Blue Cross/Blue Shield Guide to Staying Well (1983); and finally, a discussion of personal and professional health promotion strategies.

### Discussion

Feedback regarding the workshop was favorable. The staff's active participation in the program--asking questions, completing self-assessments--was in sharp contrast to earlier, more passive roles in educational programs. They joked about their "low wellness scores" and seemed comfortable sharing their resistances to "practice what they preach." Their receptivity to the material may have been enhanced by having a staff member and peer present the information. In this setting, knowing the audience is the key to success.

In retrospect, the timing of this program was ideal. Shortly thereafter, the Institute's Health, Education and Life-Style Program Committee (H.E.L.P.) was activated. Similar to most other hospital programs, the committee has planned monthly activities to promote health habits and life-styles among employees. Most noteworthy is the committee's interface with the Rehabilitation Department. The department has co-sponsored a hospital-wide "Fun Run" and summer olympics and has organized smoking cessation groups for patients. It is evident that some department personnel have accepted the challenge to promote health and are effective role models for the patient population.

## Conclusion

Occupational therapists' knowledge and application of activities as part of the treatment process can be easily translated into health promotion activities. At the Institute of Living, professional and non-professional rehabilitation staff have demonstrated the positive effects of activity. Occupational therapists have facilitated increased awareness and understanding of the theory and rationale through their varied roles of educator, supervisor and clinician. Health promotion programs for staff and patients have been effective in promoting a supportive environment in which health habits and behavior can be adopted and maintained. It is time for therapists to support and articulate the basic tenets of occupational therapy. We have expertise in "occupation" and can be active in developing health promotion programs with other allied health professionals.

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**Work Groups: Breaking Barriers to Allied Health  
Practice of Health Promotion and Disease Prevention**

**DISCUSSION LEADER: HOWARD COHEN  
REPORTER: ELLEN HOPE  
SUBJECT: CLINICAL PRACTICE**

"Once again preventive medicine in its drab and unattractive garb turns out to be the solution. I often like to point out that, if you do preventive medicine and public health exactly right, exactly nothing happens and things are very dull. Let us all pray for a little boredom." (Emphasis added, Osborn 1986)

The work group had little difficulty enumerating various barriers involved in the mounting of effective HP/DP programs. The more salient are listed:

1. Lack of a body of knowledge, as for example the paucity of scientifically controlled trials which would demonstrate the value of exercise and fitness programs for the elderly.
2. Lack of reimbursement for prevention by insurance carriers.
3. Poor role modeling by professional agencies and staff. For example, health care facilities which sell cigarettes and junk food, provide ash trays and show lack of interest in potential health hazards.
4. Emphasis on acute medicine, short lengths of hospitalization or meeting DRG "trim points." Dependence on "high tech" detracts from time consuming preventive services

which appear to be less cost effective than the treatment of illness.

5. Failure to include preventive health services in the delineation of clinical services, HP/DP services often are not identified as part of the job description.
6. Limitations of practice: technical procedures performed on patients without regard for patient fears, anxiety and the need to know implications and ramifications of test results.
7. Limitations of teaching skills: inability to relay appropriate information to patient.
8. Role blurring: imprecise delineation of responsibilities among various health care workers (psychologist, social worker, physician assistant, nurse practitioner, etc.) is not clear.
9. Legal implications: fear of jeopardizing an individual license.
10. Restraints placed on health care providers may augment status of health spas, pharmacies or health food stores, thus filling a need but perhaps generating misinformation.
11. Lack of joint venturing; medical and allied health professionals not sharing in all aspects of HP/DP programs at a health care facility.

The work group had somewhat more difficulty in formulating strategies or proposing models to overcome the identified barriers. Nevertheless, the majority felt that the following measures could have an impact.

1. Provide the media with specific health education programs developed by qualified allied health professionals.
2. Utilize "Madison Avenue-type" marketing plans to sell HP/DP; seek public relations techniques to change public attitudes and increase awareness of HP/DP.
3. Tapping national figures and celebrities to support HP/DP.
4. Improve our own role modeling. Starting at the top, with administrators, medical directors etc., by altering behaviors and policies, including cessation of cigarette sales and smoking.

5. Organize the delivery of health care services in facilities, with specifically identified "prevention" clinics or sections of departments.
6. Solicit support from state legislatures, the insurance industry, the traditional medical establishment and philanthropic organizations.
7. Provide more regularly scheduled health fairs.
8. Bring organized health education by allied health care professionals into physician's offices.
9. Recognize that HP/DP requires changing attitudes on the part of providers and recipients of HP/DP services.
10. Increase public awareness of regulatory agencies and policies on occupational safety and health; implement OSHA's "right to know program" in the workplace.

In sum, the challenges are Herculean and encompass philosophical, fiscal and programmatic issues. There is a need for an additional body of knowledge documenting the value of many prevention strategies.

Allied health professionals need the guidance and support of other organizations. Included among these are federal and state legislatures, the insurance industry, the media, the professional schools and the medical establishment.

Health promotion-wellness activity requires a change of attitude and awareness, and positive action. Reassessment of our nation's goals as they relate to the allocation of the federal health dollar, with particular emphasis on HP/DP, is required.

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**Work Groups: Breaking Barriers to Allied health  
Practice of Health Promotion and Disease Prevention**

**DISCUSSION LEADER: ROBERT ENDIAS  
REPORTER: JEANNE L. GALBRAITH  
SUBJECT: INDIVIDUAL BARRIERS**

The group addressed the issue of individual barriers by posing two basic questions: What prevents each of us as individuals from behaving personally in a wellness format and what prevents us from establishing an individual professional practice or program based on the wellness model?" Further refining the questions as basically the difference between "internal" and "external" barriers, the group identified a broad range of items in each category.

Recognized internal barriers were the allied health professional's attitude; emotions; lack of confidence; inability to take risks; feeling of powerlessness; fear of crossing boundaries; and inability to judge one's own behavior objectively. The barriers of socialization and cultural norms, particularly with regard to gender identity, were considered especially significant. They led to insensitivity, isolation from social and political reality and a lack of social consciousness, social responsibility and creativity. Further, socialization through professional education also led to insularity from other professions, lack of opportunity to learn and practice leadership skills, an excessive respect for expertise, and the development of professional language which resulted in a communication barrier between the client and professional. The young adult's belief in his or her own immortality was also seen as a barrier during the period of professional education.

External barriers which were identified included a lack of knowledge, time, mentors, role models, and an environment conducive to change. Public perceptions and expectations and peer pressures were also seen as barriers. Economics, politics, organizational structure and change, and the legal issues of insurance and liability were seen as barriers of a business nature. Socialization and cultural norms were recognized as external as well as internal barriers, as were the lack of opportunity to practice leadership skills, and insularity from other disciplines. The educational curriculum, with its theory as opposed to practice dichotomy, was also seen as an external barrier.

The group's recommendations for health promotion specialists to deal with these individual barriers to allied health practice of HP/DP suggest team practice and for individuals to learn to behave in an affiliative as well as an independent way. Recommendations also included the need to learn goal-setting, planning, and organizational skills; to provide more exposure for allied health professionals to social skills such as counseling; to learn community and social activism; and, to broaden the scope of the curriculum so that students are exposed to a multidisciplinary range of skills in social work, business, and counseling.

**Work Groups: Breaking Barriers to Allied Health  
Practice of Health Promotion and Disease Prevention**

**DISCUSSION LEADER: HELEN K. HICKEY  
REPORTER: JOANNE L. DOMINGO  
SUBJECT: PROFESSIONAL ORGANIZATIONS**

In the workshop entitled "Breaking Barriers in HP/DP in Professional Organizations," the following areas were identified as barriers:

1. Elitism and insularity
2. Accreditation standards
3. Unavailability of a method to easily exchange knowledge and experience in HP/DP among the allied health professions
4. Lack of knowledge among allied health practitioners as to what HP/DP is about
5. Practitioners not placing the knowledge they possess of HP/DP on an equal footing with their other responsibilities
6. Ineffective HP/DP marketing practices
7. Turfdom and self-interest concerns that run rampant among allied health practitioners
8. Lack of research activities among allied health professionals

Examples were offered in each "barrier" category. Strategies suggested for overcoming barriers include:

1. The need to establish a philosophy among allied health practitioners as wellness promoters. In addition, by becoming cognizant and sensitive to all HP/DP activities, practitioners can be brought together for collaboration and linkages. Emphasis should be placed on the value of this collaboration to promote wellness among all the patients and

clients who are served. By doing this, some of the discipline specific activities which are so paramount for many professionals, and for which an enormous amount of time and energy are spent in planning and implementation, could be more focused on the inter-disciplinary approach to HP/DP. This collaboration could allow us to promote linkages at local and state levels in order to gain resources (both human and financial) from industries, corporations, concerned citizens, governmental representatives, schools of allied health and voluntary health agencies, to name but a few.

2. Professional organizations should include HP/DP activities at national, state and local meetings. These activities could come in the form of fun runs, juice breaks, stretch and flex exercises, and prohibition of smoking in meeting rooms, along with inclusion of this topic on the conference program. These organizations should also have position papers on HP/DP, as well as authored papers in professional publications.
3. In the student arena, educational experiences should be included which provide opportunities for working with a healthy population, such as with athletes or in well-baby clinics, as well as with an unhealthy population. This would enable professional programs to include competency statements on HP/DP in their curriculum.

Several methods to exchange information and experience were recommended:

1. Each professional organization, including the American Society of Allied Health Professions (ASAHP), should have an individual designated as its emissary for HP/DP with a suggested term of office of three years for continuity, plus an established feedback/reporting system for exchange.
2. Time should be allocated on the agenda of the annual ASAHP Professional Organizations Leadership Meeting for reports and discussion of ASAHP activities with the HP/DP designee from each professional organization invited.
3. A resource list of allied health professionals involved in HP/DP activities should be published in the newsletter Trends.
4. Awareness of the value of HP/DP activities should begin with educating students as to their roles in HP/DP.

5. Institutionalization of health practices could be assisted by publishing current activities in HP/DP throughout the country in the newsletters of professional organizations, and in Trends and the Promoter.
6. Marketing practices would be strengthened and enhanced by making the Promoter available on a subscription basis with its focus on information concerning resource materials. Agencies such as the Center for Disease Control and the National Center for Health Education and their publications should be used to publicize resource materials. Resource lists of available materials for sale at cost are needed and should be publicized through every possible medium. A resource directory should be compiled listing replicable HP/DP models from professional organizations, educational institutions, voluntary health agencies, etc. Available consultant services should be included.
7. "ASAHP should create an exhibit on HP/DP activities for viewing at its annual meeting with professional organization leaders, its annual and state meetings, meetings of the American Public Health Association and its state affiliates, and the annual meetings of the American Hospital Association and its state affiliate associations.
8. Health educators should be included in educational efforts at all levels.

There are vital needs for more joint activities and exchange of "know how" in HP/DP research activities. Professional organizations must take the lead in these efforts through educational programs, publications and membership development.

**Work Groups: Breaking Barriers to Allied Health  
Practice of Health Promotion and Disease Prevention**

**DISCUSSION LEADER: STEVEN DANISH  
REPORTER: KENNETH L. AXTON  
SUBJECT: EDUCATIONAL SETTING**

The educational process is an important link in the development of HP/DP models. Higher education, at the undergraduate and the graduate level, can increase awareness of the HP/DP philosophy of health care and can be the mechanism for instilling that philosophy in the practitioners of today and tomorrow. In order to accomplish this and meet the goals set forth in Healthy People (1979) and Objectives For The Nation (1980), health educators need to identify those barriers that could impede the implementation of HP/DP in their schools. Planned organizational change is not always easy to stimulate, but by addressing as many concerns as possible prior to the implementation phase, the change process will be less threatening and ultimately more successful.

The workshop participants have identified barriers in three different areas:

**Professionally Related Barriers**

- ill-defined role delineations
- lack of interdisciplinary communication
- too much emphasis on technical as opposed to professional characteristics of the allied health practitioner

### **Curriculum Related Barriers**

- lack of consensus on where HP/DP should be placed in the curriculum: core or integrated courses; undergraduate or graduate instruction
- lack of educators trained in HP/DP
- students untrained in problem solving skills
- inappropriate or inadequate clinical education: lack of sites; inadequately trained practitioners and clinical instructors

### **Affective Related Barriers**

- attitudes regarding HP/DP: legislative and medical establishment, student, faculty, practitioner, consumer
- lack of communication: individual, professional groups and associations, inappropriate nonverbal/role modeling

In an effort to overcome the above barriers, the following recommendations need to be considered:

Health care educators, students and faculty need to work together to increase public awareness of HP/DP.

Build coalitions that support interdisciplinary models of HP/DP.

Identify specific populations that could benefit from HP/DP services.

Utilize a more holistic approach to patient care with a special emphasis on interdisciplinary care.

Collect research data that validates the developing models of HP/DP.

Emphasize critical analysis skills in the clinical and didactic components of the curriculum.

Find alternative clinical facilities that can provide a strong base of training in HP/DP.

Implement faculty development and continuing education programs in HP/DP that reinforce the need for personal health promotion and community preventive services.

## HEALTHY PEOPLE: PROGRESS REPORT, 1986

J. Michael McGinnis

Editor's note: We offer a summary of Dr. McGinnis' address

Dr. McGinnis opened his address by contrasting the marked increase in the percent of the gross national product which health care has assumed. From 6 percent in 1965, health care expenditures jumped to 10.5 percent in 1982. Almost one-half (42 percent) of all health related expenditures in 1982 were spent on hospitals, with 19 percent of the health care dollar going to doctors, and 8 percent to nursing homes. Not only had personal expenditure on health care risen significantly, but federal expenditure during the same period had also risen sharply: in 1965, \$3.6 billion was spent; in 1982, \$83.7 billion was expended.

Dr. McGinnis noted that in 1982 the largest proportion (29 percent) of a total \$322 billion expended on health care in America was paid by private insurers. A close second (28 percent) came from direct out-of-pocket payments by consumers. Other public sources of funding and Medicare each paid 16 percent of the total spent while Medicaid payments covered 11 percent of the total. During the years 1967 to 1982, Medicare expenditures jumped from \$3.4 billion to \$51 billion.

Three major reasons were cited for this remarkable growth: expanded medical coverage, population growth and rising health care costs. The expansion of coverage, for example, included broadened benefits for retirees in 1965 and for the disabled in 1972. In that year, for example, end stage renal disease was covered. The rise in the number of Medicare beneficiaries climbed from 19.5 million in 1967 to 30 million in 1984.

Finally, the "graying" of the population of the United States was graphically illustrated. In 1980, 24.7 million Americans were aged 65 or over. In the year 2000 an estimated 36 million will be over 65; in the year 2020, it is projected that 53 million Americans will be over 65.

**PANEL DISCUSSION: EDUCATIONAL IMPERATIVES  
FOR HEALTH PROMOTION AND DISEASE PREVENTION  
IN ALLIED HEALTH**

Six panelists, each representing a different  
educational perspective and context,  
present mandates for HP/DP in allied health

## ACCREDITATION: BEGINNINGS OF A NEW AGENDA

Polly Fitz

In preparation for this conference the search for information focused on the accreditation system's support for innovation in higher education. The recent Council on Postsecondary Accreditation (COPA) report, Educational Quality and Accreditation: A Call for Diversity, Continuity and Innovation provides the mandate for our collective future. The report offers the bottom line that the nation's system of higher education must adapt to serve society's future needs rather than trying to return to a golden past. In the discussion of objectives both institutional and educational, the COPA report's central theme is relevant to the improvement of individuals and society.

It is clear that this conference supports the objectives necessary to achieve the needed improvement in the health status of the nation as outlined in Promoting Health/Preventing Disease: Objectives for the Nations. Further, the health of society is vital to the quality of life for its citizens. Health professionals graduating from our institutions of higher education have the potential to lead and guide society in the direction of health. To accomplish this, health professionals need new skills and competencies in working with healthy, as well as sick, clients.

The system of higher education has the opportunity to change the preparation of both future health professionals and teaching professionals. To accomplish these changes, programs preparing health professionals need to ensure the inclusion of appropriate content into the educational experience of those students. The change to include health concepts, health counseling and health education skills is a significant departure from our disease oriented curricula. In addition to the professional associations, the changes would need to be supported by health professional accrediting and certifying bodies.

In the recent conferences which have had allied health education as their theme, the accompanying accreditation and agenda discussions and papers focus on control, participation, cost and process. The issues addressed do not appear as comprehensive issues tied to a large societal picture. Instead, the changes addressed focus on the many aspects of the process of accreditation and the roles and responsibilities of the many players.

Major external forces are at play in the mandate for change to the accreditation systems. The environmental changes include changes in the organization and financial systems in health care. For example, policy decisions and public support for both higher education and health professional education are needed. A changing student population requires flexibility in programs and more flexible financial support for their experiences. Competitive forces between health care institutions and among institutions of higher learning, and increased participation by the consumer, call for change. These external forces can produce the pressure cracks which weaken or the pressures which catalyze rational change.

Internal forces at play in the mandate for change to the accreditation system are the increased emphasis on outcome dimension for accreditation standards and improved training and performance of the accreditation players: educators, administrators, site teams and review boards. Additional forces include the sharing of control between associations and educational institutions, and increased interaction between the specialized accrediting bodies and educational administrators. With multiple agendas and multiple players in a complex set of accrediting systems for allied health education, there is no choice but to continue participative planning, coordination and integration of activities to ensure changes.

The guarantee of health professionals entering the system who can effectively deal with healthy and sick clients and new practice environments will only be realized by some changes begun yesterday. Some recommendations to consider:

Accrediting agencies for health professional schools and programs should support curriculum innovation as criteria and standards for accreditation.

Groups such as the American Society of Allied Health Professions should sponsor future conferences concerning allied health education which focus on environmental and societal needs, with special emphasis on the health of society and the impact on activities

such as accreditation.

Continue conferences in the area of health promotion to emphasize "state of the art" as a catalyst for changing educational programs, accrediting standards and ultimately, the competence of future health professionals.

Continue federal and state initiatives to support the needed changes in health professional curricula.

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## CONTINUING EDUCATION

Elaine Friedman

### Introduction

Continuing professional education is an area that must respond to the demands of several task masters. Among them are accrediting agencies interested in relicensure and recertification and professional associations who require participation in continuing education for membership. The market place becomes a taskmaster when advanced technology demands new skills to implement the changes. Another market is created by allied health professionals who wish to maintain basic skills or learn new skills for practice or career shifts. Each of the presentations--on credentialing, accreditation, the workplace, graduate and entry-level education--highlight important consequences for the field of continuing professional education. Although it is mandatory only for a few allied health professions, and the trend is away from mandatory requirements, most professionals view continuing education a part of their professional obligation, to enable them to provide the highest level of quality health care.

### The Challenge

At a series of invitational workshops on HP/DP sponsored by the federal government in 1984, several recommendations were generated which have particular relevance for continuing education in health promotion/disease prevention. One recommendation suggests that content on planning, developing, delivering and evaluating disease prevention, health protection and health promotion programs should be included in education and continuing education of undergraduate, graduate and postgraduate students of business, public health, medicine, nursing, allied health and other appropriate professions. Another recommends that health professional accrediting, certifying and licensing groups should

review their procedures to ensure that disease prevention, health protection and health promotion principles and priorities are included.

Increasingly, the professions are recognizing their roles in health promotion, as documented by position statements and initiatives undertaken by the American Academy of Physician Assistants, the American Association for Respiratory Therapy, the American Dental Hygienists' Association, the American Occupational Therapy Association, the American Society for Medical Technology and the American Hospital Association among others. The challenge, therefore, to continuing professional education is to provide educational opportunities for practitioners which are meaningful, relevant to practice, affordable, accessible and meet accreditation guidelines within each profession.

### **Models and Emerging Roles**

Collaborative arrangements are often the most effective models for providing continuing professional education. By combining the talents of practitioners, educational institutions, professional associations, community based health organizations and continuing education specialists, programs may be designed which are most likely to meet the goals of HP/DP initiatives. Although the formats most commonly implemented for continuing professional education are lectures and workshops, other formats worth considering include grand rounds, mini-internships, individual learning contracts, case studies, programmed instruction, tutorials and media-based modules. Program design, development, evaluation and accreditation may be more difficult using alternative education strategies, but that too, must be part of the challenge. Complacency expressed through the use of traditional educational modes is not any more acceptable than complacency expressed through practicing traditional health care delivery. Just as health promotion challenges traditional health care, so must innovation in continuing professional education challenge tradition.

Emerging roles for allied health practitioners in HP/DP includes playing a more active role in continuing professional education. Leadership from among the ranks of the professions is an essential ingredient in quality assurance and quality control. Opportunities abound for involvement in continuing professional education through professional associations, academic institutions and community based organizations such as the American Cancer Society, the American Heart Association and the March of Dimes. Committee participation from professionals is always appreciated and provides a way of insuring that the continuing education needs of the professionals are met.

## **Future Trends**

It seems evident that interest in health promotion/disease prevention will continue to gain momentum in many sectors. In corporate America, the interest is for reasons of improved health status, cost containment and employee attitudes toward work. Among legislative and governmental agencies, it is for reasons of cost containment and consumer protection. And in the general population, the motives are to look terrific, feel terrific and be self-empowered in maximizing personal health potential. The health professions must respond in support of trends and must, therefore, tool up through continuing professional education. Creativity and innovation will enhance our personal selves, our professional selves, our patients and our students. The momentum for leadership is in the hands of the allied health professions, and active participation in continuing professional education will strengthen that leadership position.

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## CORPORATE MEDICAL DEPARTMENT

Norbert Goldfield

On any given day last week one million workers in the United States called in sick. It is easy to understand management's increased interest in worksite health promotion as a means of controlling the upward spiral of health care costs. For the individual employee, clinical research points to the positive health benefits of worksite wellness programs. This paper will summarize research data on worksite health promotion including references to programs undertaken by CIGNA Corporation. The focus will be on emerging areas of partnership between the worksite and the private medical sector. Although cost containment represents the initial and continuing impetus to preventive health services in the worksite, provision of medical care at the workstie can accrue to the benefit of both the patient and the outside health care practitioner.

Why health care at the worksite? Worksite health promotion represents a natural vehicle for cost containment, for it combines the potential for decreased benefit claims, while preserving first dollar coverage for the individual. Worksite health promotion represents one of the few remaining mechanisms where an employee feels that he or she is receiving more medical care and yet may be saving money for the employer. Unfortunately, as recent authors have pointed out, health promotion programs, over the long-term, may cost the employer more money (Russell 1986). Overriding this consideration is the fact that health promotion is extremely popular. Many individuals participate in one health promotion program or another. As a consequence, health care institutions view preventive services as a strong marketing tool.

There are other social factors which argue in favor of health promotion programs specifically at the worksite. These factors revolve around the issue of patient compliance. Numerous studies point to problems of patient compliance with medical regimens (Haynes, Taylor and Sackett 1979).

This problem is often exacerbated when a health professional attempts to convince an individual to not only take specific steps against a disease process, but also to engage in preventive activities which typically do not have a limited time frame. The Parsonian medical model, at least as practiced in the United States, looks to the sick patient as the paradigm for the doctor-patient relationship (Parsons 1975). In contrast, the worksite represents the logical site for a new medical model which emphasizes preventive health practices and ways of increasing patient compliance with therapy for specific diseases. The employee spends the better part of his waking day at work. In contrast, only a few minutes are spent with a private physician, health educator or visiting home nurse/aide. The worksite represents an environment in which the worker needing medical assistance on a preventive activity or disease regimen, such as high blood pressure, can receive care and education for as long as necessary. From the employer's perspective, visits on site save time--a Robert Wood Johnson study on dental treatment revealed that the greatest disability was time lost from work (Wall Street Journal 1981)--and hopefully, increase compliance.

What is the quality of medical care provided in an occupational medicine setting? How do patients seen in worksite clinics compare their care to the private sector? A recently submitted study of medical care provided at CIGNA Corporation found that patients were highly satisfied with the medical care they received (the satisfaction scale utilized was modified from the RAND Health Insurance Study questionnaire); fifty percent of patients who came to the clinic would have gone to their private medical doctor the very same day if the worksite clinic did not exist. Of interest is the fact that ninety percent of all visits are seen and taken care of by nurses. Finally, patient visit time is fifteen to twenty minutes on average as compared to a two to three hour time (self-reported from the patients) for their private medical doctor.

This paper has attempted to indicate how worksite health promotion can be beneficial not only from the individual patient point of view, but also to the surrounding health care professional community. For outside health practitioners, each of the health promotion interventions described represents an opportunity to increase participation in their patients' well-being. Though the medical model has traditionally looked down upon worksite health promotion, cost containment pressures, together with increased popular interest in preventive life styles, have served to heighten the importance of this form of health care delivery.

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## CREENTIALING AND HP/DP

Glenda Price

Health occupations credentialing has become almost universal. Various mechanisms are used with the primary purpose of providing assurance to the public that the health care practitioner is competent to provide the services needed. These mechanisms define the minimum knowledge and skills necessary in each discipline for safe practice.

The credentialing mechanisms include certification, licensure, registration and accreditation. While these processes have the same final goal, their approaches differ.

**Accreditation** is the process by which an agency or organization evaluates and recognizes an educational program (not individuals) as meeting certain pre-determined criteria or standards.

**Certification** is a process by which a non-government agency or association grants recognition to an individual who has met certain pre-determined qualifications specified by that agency or association.

**Licensure** is the process by which an agency of government grants, by statute, permission to persons meeting pre-determined qualifications to engage in a given occupation and/or use a particular title.

**Registration** is the process by which government or non-governmental agencies identify and list on an official roster those persons who meet pre-determined qualifications.

One of the effects of credentialing processes is the standardization of educational programs and practice approaches. Any content included on certification and/or licensure examinations or mandated by accreditation is included in the

curriculum. This forced attention to the issue of health promotion/disease prevention in allied health will have positive outcomes. These include:

The specific knowledge and skills related to the tasks of the discipline and focusing on the fifteen priority areas will be emphasized.

The value of HP/DP concepts will be instilled early in the student's introduction to the profession.

Interdisciplinary health care will be enhanced.

The allied health professions will be understood to have a commitment to HP/DP.

The roles of some practitioners will be expanded.

Credentialing processes for health manpower allow for the involvement of educators, practitioners, consumers and health professionals from other disciplines. This wide range of views provides the mechanism for the specific discipline to test its approaches, develop liaisons with other practitioners and most importantly, push the profession in a particular direction. Those individuals involved in the credentialing activities of their professions have the opportunity to influence the HP/DP practice of their colleagues through this mechanism.

## GRADUATE EDUCATION IN ALLIED HEALTH TO PROMOTE HEALTH AND PREVENT DISEASE

Rose A. Walton

Allied health education is an ever changing, expanding, dynamic process responding to the health needs of this nation. The health promotion, health protection, disease prevention movement is an old idea with a new impetus. Healthy People and Objectives for the Nation are the blueprints for this new effort to radically change the concept of health care in America.

Historically, we as consumers have never demanded health protection nor expected that any physician or other health care professional would promote our conformity to healthy practices to prevent disease or disability. We have seemed to prefer that the medical profession concentrate on curative and restorative medical services, the ones we use most and identify as the most needed. However, this new impetus requires that the medical profession shift gears to emphasize preventive and protective care. In this system, the physician would be a team member along with a cadre of other health professionals, some of whom may already be better prepared in the health promotion, health protection and disease prevention aspects of health care needs and services. To accomplish this major change in health care, we must turn our attention to the interdisciplinary approach to care and education.

To focus attention on advanced education for allied health professionals and to attain the goals of the government initiative of health promotion, health protection and disease prevention, I chose to use the definition of allied health endorsed by the National Commission on Allied Health Education. That broad definition, "All health personnel working toward the common goal of providing the best possible services in patient care and health promotion" (National Commission on Allied Health Education 1980, p.14) allows us to be idealistic and to speak about innovation in health care and health care education in all its aspects. It may

also allow us to speak about change and educational imperatives needed to address the health care needs of all of us who are neither totally healthy nor one hundred percent unhealthy but rather somewhere along a continuum upon which we shift from time to time as circumstances and/or environment change.

For purposes of this paper, the term "graduate education" will be limited to advanced education for allied health professionals which provides formal, credit-bearing education beyond the basic occupational preparation, which for most, is the baccalaureate level. This graduate education is currently diverse and opens many practice possibilities, from more specialized clinical practice, to supervision, education or research. It also allows professionals to supplement knowledge and skill.

Graduate education will play a significant role in the accomplishment of the recommendations identified by the participants of the "Workshops on Health Promotion/Disease Prevention: Impact on Health Professions Education," held in the spring and fall of 1984. The summary of those workshops outlines forty-eight recommendations, clustered in nine categories (HRSA September 1984). The workshop concentrating on allied health identified specific recommendations for us to consider and focused on the practice, role modeling, education, institutional and professional responsibilities we must adopt to make health promotion/disease prevention a more integral part of health care education (HRSA April 1984). Graduate education will play a significant role in faculty development and in the education of practicing professionals to bridge the gap until health promotion, health protection and disease prevention become a part of every curriculum in health profession education, including medical.

The mandate is clear. The nation is alert to a movement which promises more quality and quantity of life. Graduate education coupled with continuing education must accept the challenge and begin to be more innovative. I would identify the following as imperatives for success:

First, we must begin to open doors to more flexible plans and non-traditional patterns of education and to allow choices for practitioners who need and want skills and information but who must continue to practice in a traditional health arena, slow to change and overextended in underserved areas. We will not have a health care system built on the sound philosophy of health promotion and protection very soon, but if we gather the forces, so to speak, that goal may be achieved sooner than we might otherwise hope.

Second, interdisciplinary education has been discussed and strongly supported in the allied health literature. Shepard, Yeo, and McGann (1985) summarize pertinent literature and suggest a plan for organizing and implementing an interdisciplinary geriatric training program for basic education programs in allied health. This same model might well be used in graduate programs for health promotion/disease prevention and without as many barriers as we find in entry-level programs where turf and professional allegiances are strongest among faculty and students. It is essential that interdisciplinary programs be taught by an interdisciplinary faculty to provide the positive diversity and role modeling essential to prepare practitioners to continue to function in multidisciplinary health care settings.

Third, according to the National Commission on Allied Health Education, graduate education in allied health "may lead to additional clinical mastery and specialization or acquisition of nonclinical skills, such as teaching, administration, or research" (1980 p.74). We must therefore, develop curricula which allow health professionals preparing for new roles in educational or health care settings to gain a basic understanding and sufficient knowledge in health promotion/disease prevention to make a difference in their approach to practice. We must also develop a curriculum which will allow some to choose HP/DP as their future role in allied health education or care. Health educators on all levels of education could enter allied health graduate education to specialize in health promotion/disease prevention education and begin to make a real difference in the approach to personal and community health in public schools and colleges. This would create a real difference for the consumer who enters the health care system with an expectation of prevention and promotion rather than only of cure and restoration.

Fourth, students in graduate education need to experience, through supervised internships or practica, teaching or supervision in a setting where the principles of health promotion, health protection, and disease prevention are an integral part of the setting. These experiences can help bridge the gap between allied health and public health as well as strengthen articulation with other educational institutions and levels of allied health education.

Fifth, cooperation with other agencies working with environmental, architectural, and other public health concerns will be stronger when allied health professionals at the graduate level are willing and more assertive in approaching nonhealth faculties to share their special expertise. This sharing of information is essential to the accomplishment of the common goal of a healthier nation.

Sixth, basic to all of the educational imperatives is research. Faculty and students alike should be encouraged to continue to be, or to begin to be, involved in research efforts to document allied health professionals' role and function in the health promotion movement in this country. All graduate programs should include requirements for students to develop research skills so that they may participate competently in scholarly activity. This recommendation carries with it implications for administrators and funding agencies and mandates that reward systems for faculties include compensation which not only allow but insist on this involvement.

And last, but by no means diminished in importance by its place on the list and foremost in our plans to implement an innovative change in allied health in order to accomplish the Objectives for the Nation, must be a personal commitment to make a difference. This personal commitment must be to ourselves for the lifestyle changes necessary for a healthier self. It is a commitment to be a role model who verbally and non-verbally speaks for a healthier nation, and a commitment to continue the effort until we make the difference in our health care system. Cultural and economic differences must be a part of each plan and graduate education in close concert with continuing education must be in the forefront of the health promotion, health protection and disease prevention educational effort.

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## RP/DP IN ENTRY-LEVEL ALLIED HEALTH PROGRAMS

Clyde R. Willis

In April 1984, leaders from the academic community, government and the professional associations convened in Rockville to evaluate the effect of the health promotion/disease prevention efforts on education for health professionals. This was the first of five conferences which concluded in September 1984. A series of 170 recommendations were generated by the conferences representing the collective efforts of more than two hundred individuals. Twenty-five specific recommendations were generated by attendees of the first conference and covered areas including curriculum, faculty, students, accreditation, industry, government and communication. Needless to say, all recommendations related directly or indirectly, to our entry-level programs in allied health. However, only those most specific to entry level programs will be considered.

In many ways, participants of the conferences were confronted with a task that is all too familiar. Not only were they asked to consider the complex and diverse professions within the allied health family, but they were asked to consider the equally complex and diverse objectives for the nation in health promotion and disease prevention.

When all five conferences had been completed, four major recommendations dealt specifically with entry-level education in allied health. For each of the recommendations, a rationale and list of strategies were included.

All health professionals should receive in their education a thorough knowledge of the principles of disease prevention, health protection and health promotion and be aware of the goals identified in Promoting Health/Preventing Disease: Objectives for the Nation.

**Rationale:** The goals identified in Objectives for the Nation reflect a broad consensus of the most current measures for the promotion and protection of health and for the prevention of illness. Optimal health care can result only from a comprehensive and coordinated approach in which practitioners of all disciplines support and promote the same goals. Moreover, practitioners cannot be expected to understand their potential and responsibilities in this total effort unless they have been provided with the requisite knowledge and skills during their professional preparation.

**Curriculum related to disease prevention, health protection and health promotion should be characterized by an interdisciplinary focus, developed through interprofessional collaboration which includes specific experiences in building health teams.**

**Rationale:** Understanding health systems, health behavior and environmental health requires an interdisciplinary approach. Increasingly, there is recognition that critical factors contributing to morbidity and mortality relate in important ways to behavioral, social, economic and environmental factors. Health professionals must cooperate and work together in health care teams. Training in these concepts can encourage the development of effective teams and promote interprofessional collaboration. In addition, health professionals must recognize the involvement of individuals outside the health professions in disease prevention, health protection, and health promotion concepts and learn how to relate effectively to these individuals in an expanded health team concept.

**The effectiveness of education in disease prevention, health protection and health promotion for health professionals should be evaluated on a continuing basis.**

**Rationale:** Because of the continuous change in the size and nature of health problems and the rapid changes in the scientific knowledge base and technology, all health professions educational programs should develop and implement methods for regular curriculum review and revision. Disease prevention, health protection and health promotion curricula must be included in this ongoing review. This will help to assure relevance and currency of curricula without major increases in duration of the program.

**Community colleges and universities with specific health occupation education programs should recognize, foster and support disease prevention, health protection and health promotion in their curricula.**

**Rationale:** An often untapped, and generally incompletely developed, resource in achievement of the national objectives for disease prevention, health protection and health promotion is the transmission of information and skills to persons in all walks of life who will assume--in the work place, community, or a health-related career--the bulk of the responsibility for service, education and leadership in health. This is an appropriate and important role for the educational system of the United States.

However, this expanded role will not occur without the encouragement and support of federal, state, and local governments and national, state and local health professions groups concerned with the realization of a healthier population in the United States and the accomplishment of goals identified in Promoting Health/Preventing Disease: Objectives for the Nation.

It is not likely that one would find much argument with any of these broad recommendations. But, as nine allied health institutions have learned, integration of HP/DP principles into existing curricula is a task not to be underestimated.

In 1983, nine institutions received funding from the Division of Associated and Dental Health Professions, Bureau of Health Professions, Health Resources and Services Administration. The projects have been summarized in a number of sources, most recently in a chapter by Tom Robinson in REVIEW OF ALLIED HEALTH EDUCATION: 5 (1985).

The projects at the University of Connecticut, Western Michigan University, State University of New York at Stony Brook, Howard University, San Jose State University, University of Washington, University of Texas at Dallas, University of Texas at Galveston and Baylor University have developed innovative and useful strategies and products, but have experienced a number of common frustrations that, in the long run, may be the more meaningful outcomes of the shared experience.

The faculty assumptions on which many of our projects were developed apply to all who seek to infuse our entry-level education programs with the principles of HP/DP. To those who seek to embark on a similar task, a review of those assumptions may be of value.

All allied health professions are equally motivated and interested in integrating principles of HP/DP into existing curricula.

Virtually every effort to expand the orientation of our students to HP/DP has stressed the need for an interdisciplinary approach. Nevertheless, that approach must be viewed as a goal of varying importance to our scores of professions and that variability must

be acknowledged and respected. Certainly dental hygiene and dietetics are but two groups whose professional mission is highly consistent with efforts in health promotion and disease prevention and their progress reflects that compatibility. Occupational therapy has made significant progress in adapting to the movement. On the other hand, speech/language pathology is only now beginning to recognize its importance.

**Entry level professionals need to be competent in all aspects of HP/DP.**

The fact that many of the objectives in health promotion/disease prevention are peripheral to the primary professional mission suggests that it may be well to focus and to link specific professions with specific objectives rather than assume that all of the objectives will be of equal importance and equal relevance to all professions.

**Current faculty are sufficiently prepared to reinforce HP/DP.**

Without question, faculty development must precede or at least coincide with the efforts to modify curriculum. For some of our educational programs, perhaps as few as ten percent of the faculty can be considered as competent to lead the effort. These are the zealots with an orientation and enthusiasm that provides true leadership. There are, perhaps, another thirty percent who can be viewed as active supporters. These faculty are flexible and receptive to change. They are key allies and must be reinforced frequently for their efforts. The remainder, representing a majority in most institutions, are more difficult to classify. They consist of the passive supporters and resisters. Their relative numbers are key to the success of any program in that a substantial number of resisters can thwart any effort, regardless of its value.

**Institutions of higher learning are receptive to change.**

Health promotion and disease prevention, in most institutions, has no home. It does and should cross departmental and collegiate lines; and in doing so, it is consistent with the traditions of academe. It is clear that no project has succeeded without support from the highest levels of administration and the most successful programs can usually be traced to institutions with administrators who have provided this support. New incentives and rewards must be developed to ensure participation by the faculty and those incentives and rewards must come from the highest levels of the institution.

## **Summary**

Efforts to integrate HP/DP principles into existing entry-level curricula represent an enormously difficult and complex task. Those who are leaders in the effort should recognize and confront the barriers without falling victim to faulty assumptions. When we recognize that the freshmen we admit next fall will constitute the allied health professional workforce well into the year 2030, we recognize that we do not have the luxury of postponing our efforts.

**The Hidden Health Care System:  
Non-Professional Trend in Health Care**

Lowell Levin

Editor's note: We offer a summary of Dr. Levin's address.

Dr. Levin began his address with compliments to those health promotion and disease prevention practitioners who had persevered during the "dry years" when HP/DP was not a "sexy" enterprise and when "serious professionals" would not have anything to do with this point of view. Times have changed and the HP/DP movement is recognized and appreciated. Dr. Levin challenged as excessively "liberal," Michael McGinnis' estimate that about ten percent of health status or disease prevention resulted from medical intervention. Indeed, he himself estimated that no more than 3.5 to 4 percent of health status results from medical intervention. The world is made of ordinary people, Dr. Levin declared, who take care themselves and practice HP/DP behavior, no matter what professionals believe. He emphasized community resistance to professional beliefs, and lauded such resistance as a sign of vitality and strength.

An important theme in Dr. Levin's address was that the world of health care is not a professional world but a world of lay care, by people who make their own diagnosis, determine treatment and practice prevention and restoration. In support of this concept, Dr. Levin summarized several major trends:

Decentralization of planning and development, both in government and in social organization

Shrinking of corporate size and dispersion of populations

Movement from single to multiple options

Shift from "high-tech" to "high-touch"

The last trend is the most relevant to health care. Dr. Levin cited examples of "high-touch" such as the movement from hospitals to hospices, the resurgence of home births, lay midwives and alternative health care strategies such as naturopathy, homeopathy and chiropractic. The variety of choices available does not mean that consumers are abandoning allopathic medicine but only that there are a greater variety of options and that these options are being exercised.

The public, Dr. Levin maintains, is becoming increasingly aware that health status changes do not, for the most part, come about through professional intervention. He noted that rising standards of living, better nutrition, improved personal and social hygiene, better environment, reduction in the birthrate and a favorable agent/host/environment relationship are all factors in better health status.

The shift in medical care alters the professional model, which on a patient/provider relationship, to an economic or bureaucratic model which posts a consumer/provider relationship. Such changes evoke new questions, with a consumer seeking to "buy the best" as well as looking for a "best buy." These conditions are supported by the "blizzard of health information" which 3,500 do-it-yourself health books and an array of media provide. The technology for self-diagnosis and self-treatment has expanded and is routinely available to consumers through convenient, local outlets.

Dr. Levin challenged the audience to incorporate lay self-care into the health promotion movement. He urged his listeners to help the health and fitness movement, still an essentially middle class phenomenon, to work into the culture at all levels. A movement for HP/DP should be a social movement towards health, not a "professional" movement. He reminded all present that health is not a product, but a process which includes understanding options and which proceeds as a creative, growing enterprise.

## PROGRAM SUMMARY

Priscilla D. Douglas

In closing, I am glad that the allied health professions have seen the challenge of the future. I am happy that this conference has focused on expanded roles for the allied health professions and that the health professions have recognized and supported health promotion as an important facet of their role in health care. Dr. McGinnis has described and conceptualized an important role for the allied health professions in health promotion and disease prevention.

This conference and its participants have endorsed full integration of health promotion into practice. As the result of this endorsement we have heard and seen strong support for educational models that include new curricula on the undergraduate and graduate level that emphasized understanding of the behavioral change process, development of communication skills and integration of health and wellness concepts. Although the health promotion movement in the United States has been largely consumer initiated, the health care system and the professionals at this conference seem to be saying that they are ready to assist in preventing illness by emphasizing positive life-style choices and continuous personal growth.

Dr. Levin has spoken candidly and eloquently about the "hidden health care system or the non-professional trend in health care." For many, the antecedent to health promotion and disease prevention is or was the holistic health movement, a concept which assumes the integration of the mental, physical, emotional and spiritual needs of the individual. As far as I can observe, the health professional can function in this holistic model by being a collaborative partner with the client and arriving at improved strategies for self-health. Illness need no longer be the primary focus of the professional-client relationship.

We acknowledge but are not defeated by the greatest barriers to health promotion:

Lack of scientific evidence to document the efficacy of intervention

Lack of coordinated efforts among public, private and voluntary agencies to support needed programs

Lack of reimbursement for preventive services

Lack of financial resources and incentives by third party payers

The limit to what the federal government can do to establish regulations and guidelines that affect and alter personal behaviors.

Dr. Merlin K. Duval, President of the National Center for Health Education, writing in the Journal of Allied Health, asks the allied health professions to define their respective roles in health promotion and disease prevention. I believe this conference has provided us with a significant beginning; we may not know where the path will lead, but we are prepared to take up the banner for health or happiness.

Thank you.

## CLOSING REMARKS

Edmund J. McTernan

This meeting has taken place at a critical moment in the history of the development of health promotion/disease prevention as a major component of allied health education and practice. We are approaching the end of a three year period during which a few of our traditionally underfunded allied health education centers have had the luxury of federal funding in support of a full-time commitment to prevention and promotion. Yet, the infant movement which we have begun may not really be able to survive without the modest support which it has enjoyed during this brief period.

Even those allied health schools which do have a genuine commitment to this movement will have difficulty in funding their programs. It will be extraordinarily difficult to keep this HP/DP ball rolling in the years just ahead. If prevention and promotion are to become accepted interests and responsibilities of all allied health practitioners, it must be the educators who modify the traditional curricula to which we submit our students. It is the educators who must mount the postgraduate programming which will convince and equip those who are already in practice to prevent--not just to cure or to rehabilitate.

Dr. Douglas has urged us all to take up the banner of HP/DP. We hope that the Proceedings which will result from this conference can serve as a road-map to guide us in carrying that banner most effectively; those Proceedings will be published as a special supplement to the University of Connecticut's Journal of Health Promotion. We hope that this publication will be available early next fall; each participant in this conference will receive a copy of the Proceedings as soon as they are received from the printer.

Finally, Dr. Douglas and I want to express our appreciation to everyone who has contributed to making this conference such a great success: to Meg Gaughan, Jan Horne and Dr. Bill Doiron of the Academy of Health Promotion at UConn; to Ruth Levitt-Bekofsky, Nanci Rice, Elaine Friedman and Dr. Rose Walton of the Resource

Center at Stony Brook; to Dean Fitz; and to others at Stony Brook and Connecticut, for their support. We especially salute Dr. Tom Hatch, Dr. Dave Hoover (who has not been feeling well, and who was unable to be with us), and Ted Carp, all of the Bureau of Health Professions, for their encouragement, support, and counsel throughout the life of these projects, as well as this conference.

Most of all, we thank each of you who has participated, for sharing your special expertise with us, and through the printed Proceedings, with many future readers who share the concerns and interests with which we have wrestled here in Williamsburg.

We wish you a safe journey home; let's meet again three years to see how well we've contributed to achieving the 1990 goals!

Thank you.

## Post-Conference Sessions: Five Special Cases

The formal sessions of the Allied Health Leadership in Health Promotion and Disease Prevention Conference ended with the closing remarks by Priscilla D. Douglas and Edmund J. McTernan. Post-conference sessions offered participants five additional workshops in areas of special interest: health promotion and disease prevention issues in a crosscultural context, in disabled populations, on the international scene, and in a lifecycle and worksite context were examined.

## WORKSITE HEALTH PROMOTION

Elaine Friedman and Robert Graham

### Rationale

Corporate interest in health promotion has expanded considerably in recent years as evidenced by the proliferation of worksite health promotion programs. While no exact figures are available, a recent study of the Fortune 500 companies indicated that fifteen percent had some type of health promotion programs for employees (Reza-Forouzesh 1984-85). Another study estimates that over 3,000 companies nationally offer some kind of fitness or wellness programs for employees (Golaszewski 1981).

Rising health care costs, as well as the cost of employee absenteeism, are the two primary reasons given for this growth. Total medical care expenditures in the United States in 1980 were recorded at \$247.2 billion, or 9.4 percent of the gross national product, with business paying over half the national health care bill (Brennan 1982). General Motors spends more on employee health insurance than on steel; Chrysler Corporation estimates that for every new car it sold in 1980, \$220 went to pay for employee health benefits (Brennan 1982, p.19). Since larger companies can reasonably expect that their employee health statistics will reflect national epidemiological data, they can expect that:

- one out of four employees will get cancer
- one out of ten will suffer from an emotional problem
- over half will die of heart disease
- one out of ten women will develop breast cancer
- one in three employees will suffer from hypertension
- one in five employees will die from the effects of smoking and alcohol consumption (Brennan 1982, p.11)

The Center for Disease Control indicates that almost fifty-four

percent of all deaths under age sixty-five are attributable to adverse lifestyles, and according to the Health Insurance Association of America, 339 million productive work days were lost in 1980 as a result of acute health conditions (Brennan 1982, p.11). Clearly, improving the health status of employees will be a cost benefit to employers through increased productivity and decreased health care costs. Worksite health promotion programs offer a unique opportunity to accomplish these objectives.

### Models

Worksite health promotion programs vary tremendously in scope and design; they are shaped by financial resource allocations and priorities of corporate decision-makers. Four basic models are identifiable:

1. A "one-time" activity such as a single screening effort or seminar, without any follow-up.
2. A "fitness first" approach which usually centers around an employee's well being and improvement through weight control, nutrition counselling, and exercise.
3. A "mixed bag" approach which involves a variety of activities, but lacks cohesion and clearly delineated objectives.
4. A "comprehensive" approach which consists of a well planned and well funded program with long-range objectives, broad based participation, and a mechanism for evaluating results (Novelli and Ziska 1982).

Further, within each model, there are several other variables to consider. Some programs are operated totally within the worksite, in facilities specially designated for health promotion; some operate entirely outside the worksite in community or proprietary settings; and some worksite programs utilize a combination of in-house and outside facilities. Some programs are well staffed with salaried specialists hired by the corporation while others rely on consultants or volunteers to operate programs. Another variable is cost. Some programs are available at no cost to employees and some are available at a minimal charge. And a few programs are offered to families of employees or company retirees, as well as to employees.

Examples of comprehensive programs include those developed by Kimberly-Clark in Neenah, Wisconsin and Pepsico in Purchase, New York. Each offers health assessments, fitness programs and educational components, including health counseling. Most

services are provided by in-house staff members and each corporation maintains an in-house fitness and exercise center. Kimberly-Clark estimates that their programs cost \$260 per employee, all of which is covered by the company (Patton et al. 1986).

It is probably safe to say that no two worksite health promotion programs are exactly alike. Evaluation studies are few and far between; therefore, it is not yet possible to document which model is most effective in either reducing health care costs or in increasing employee productivity. What has been documented is that, in general, worksite health promotion programs do have positive outcomes for individuals and for corporations.

### **Role of Allied Health Professionals**

Many of the allied health professions are particularly well suited to involvement in worksite health promotion programs. At an invitational workshop held last year in Washington, D.C., sponsored by the Bureau of Health Professions, participants concurred that allied health educators should offer courses to prepare practitioners for employment in business and industry. Results of a recent study of twenty-five major corporations with health promotion programs done by Friedman and Strasberg at the State University of New York at Stony Brook, indicated that the following categories of allied health professionals are currently utilized in worksite health promotion programs: nurses, nurse practitioners, health educators, nutritionists, psychologists, occupational therapists, alcoholism counselors, physical therapists, physician assistants, exercise physiologists, medical technologists and health care administrators. Projections are that the field will grow considerably in the future. To summarize in business language: a market has been identified. Will allied health respond actively, passively or not at all?

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## **Lifecycle Health Promotion**

### **HEALTHY BABIES--HEALTHY OLDER PERSONS: EXPANDED ROLES FOR ALLIED HEALTH PROFESSIONALS**

Priscilla D. Douglas and Leopold G. Selker

In this session we will focus on health promotion and disease prevention in prenatal women and the elderly. These two groups have been chosen because of the potential cost savings associated with prevention of premature births and prevention of premature morbidity in the elderly. Furthermore, policy makers are now recommending and supporting major federal efforts to reduce the risks to health commonly seen in these groups as a way of controlling the upward spiral of health care costs.

If major legislation and funding increasingly supports programs for the elderly and maternal care, the allied health professions will need to be ready to act. Allied health professionals will also have to understand public policy, specific health concerns of these groups, fashion new roles in new settings, and be able to predict future needs of these clients.

Thus a great deal depends on our ability to accurately read, anticipate and respond to significant movements within the health care sphere and society at large. Such movements now portend substantial changes in health policy, which, in turn, may translate into a fundamental reshaping of the day-to-day practice and education of allied health professionals. Health care cost containment, the dramatic rise in the volume of home care, increases in variety and quality of preventive services, and varying responses to the geriatric imperative are among the movements which hold such potential.

Crosscutting these movements and the allied health professions is the policy issue of substitution, that is, the substitution of lower cost, yet high quality allied health services for more expensive medical or institutional care.

## HEALTHY BABIES

Priscilla D. Douglas

### Background

The 1982 infant mortality rate of 11.5 infant deaths per 1,000 live births was the lowest rate ever recorded for the United States. Although improving, this rate is higher than in other westernized and developed countries. Furthermore, the drop in infant mortality is primarily attributed to advances in neonatology, not to the availability and use of quality prenatal care and preventive services (U.S. Dept. HHS, Prevention 1985).

The many risk factors associated with the worse pregnancy outcomes appear to be a consequence of low socioeconomic status and race. These include: low income and inadequate insurance coverage, pre-existing disease conditions, poor nutrition, inadequate housing, limited maternal education, stressful work environments, lack of social supports within the family, and problems of transportation and child care that interfere with use of community services (Heckler 1985).

No doubt, one way to lower infant mortality is to improve services. For instance, black women are less likely to receive prenatal care early in pregnancy, and although not clearly correlational, the infant mortality rate for black infants continues to be twice that for white infants (13.4 per 1,000 live births). It is alarming to note that in 1983, 11,060 black babies died before the age of one (Heckler 1985).

Low birth weight is a major determinant of infant mortality and also increases the probability of illness in infants who survive (Institute of Medicine 1985). The risk factors associated with bearing a low birth weight infant have been studied. These risk factors in many cases can be identified before pregnancy occurs with possible intervention taking place. Smoking, alcohol and

substance abuse, and poor nutrition are good examples of behaviors that can be targeted for change.

Adolescent pregnancy is also a serious problem in the United States mainly because teenage mothers begin prenatal care later than older mothers; were twice as likely to get no or late prenatal care; and were more likely to have a low birth weight baby. Educational subnormality, visual defects, hearing loss and impaired language development are frequent sequelae of low birth weight. These outcomes frequently require medical care and treatment which necessitate extensive financial support from federal sources (Taffel 1976).

Certainly, policymakers and health professionals have enough information to support programs that reduce the incidence of low birth weight in infants and improve the health of mothers and infants. The Committee to Study the Prevention of Low Birth Weight, using a numerical formula, has concluded that the expanded use of prenatal care would reduce low birth weight rate and result in cost savings (Institute of Medicine 1985).

The lack of public funds for prenatal services continues to be an issue. A change in the Medicaid program, which now helps to finance care for many high risk clients, is still a controversial subject. Proponents of expanded use of Medicaid believe that more women should be enrolled in the program and that eligibility standards and program policies should be expanded.

### Challenge

In designing health promotion and disease prevention programs for mothers, consideration for differences in ages, ethnicity, race and socioeconomic status need to be addressed. For instance, programs and outreach activities for pregnant adolescents must be different in design and scope that for older mothers. Health promotion activities must also be expansive enough to include instruction in personal and family living, nutrition and child care. Resources and education need to be provided at the community level with emphasis on training peer leaders who can assist mothers in learning about health and disease prevention (Institute of Medicine 1985).

The provision of health promotion and disease prevention services within the traditional context of prenatal care is also an issue. The availability of maternity care providers is inadequate in many parts of the country, especially for high risk, low income women. There is evidence that the participation of obstetricians in Medicaid is decreasing, thus leaving this high risk population unserved. Some say that a partial solution to this problem of

access would be through the increased use of nurse-midwives and nurse practitioners. These allied health providers have been very effective in managing the care of pregnant women, not only in this country but throughout the world. It is also possible that these care providers might be more inclined to use the services of other allied health professionals, thus providing comprehensive and preventive care for pregnant women at risk. The challenge may be the availability of certified nurse-midwifery programs for the training of these professionals and supporting legislation for this kind of practice.

Whenever new programs such as those in health promotion and disease prevention are tried, the use of research on the efficacy of treatment and valid techniques to monitor the impact of various strategies is critical. In order to create a system of accountability a research component needs to be developed and monitored. Consensus about the need for research, hypotheses to be addressed, and the federal government's role in this process is extensively critical.

Accessibility to health promotion is also a challenge. Accessibility means not only that help is close by, but that the client perceives this information to be helpful. Such care must also be congruent with cultural beliefs and values, and providers must be responsive to the immediate concerns of the client.

Last, a system to serve hard-to-reach women is needed. The use of referrals through other services such as the WIC (Special Supplemental Food Program for Women, Infants and Children) program may be one answer; expanding prenatal education through television, radio, and telephone may also be a viable strategy.

An integrated and systematic approach to health promotion and disease prevention is critically needed. Prenatal care providers need to work together and organize their programs to manage a wide variety of preventive services including nutritional counseling, psychosocial counseling and strategies to manage stress and substance abuse.

All levels of health care and education must direct their resources to this common goal or the United States may continue to have infant mortality rates higher than other western nations.

### **Successful Models**

Successful models of health and educational care directed towards the prenatal client have shown that smoking cessation resulted in improved birth weight (Sexton and Hebel 1985). "Quitting for Two" (Whilner et al. 1983) included materials directed at partners and

encouraged women to stop smoking before pregnancy.

The WIC Program has resulted in decreases in the percentage of low birth weight infants and increases in mean birth weights (Kennedy et al. 1982).

Several programs have tried to reduce the levels of stress experienced by pregnant women. The focus of one program was the utilization of social support systems to reduce life crises (Nuckolls, Cassel and Kaplan 1972).

Specific programs in health promotion and disease prevention were:

**Healthy Mothers, Healthy Babies.** A cooperative effort to provide information that promotes healthy behavior for pregnant women and women planning pregnancy. Participants include the March of Dimes Birth Defects Foundation, the American Academy of Pediatrics, the Red Cross, the American Nurses Association and others.

**Adolescent Family Life Program.** Model care and prevention projects that are designed to demonstrate effective ways to deal with the problem of adolescent pregnancy.

**National Infant Mortality Surveillance Project.** Utilizes epidemiologic studies to determine maternal and infant factors related to birth weight associated with infant mortality.

**Maternal and Child Health Services Block Grant.** Provides states with funds to support health services for mothers and children.

### **Emerging Roles**

As a result of the health promotion and disease prevention movement, the role of the allied health professional is expanding. Emerging roles of health educator and counselor are becoming integrated into the practice of many allied health practitioners. Strategies for teaching, learning and communicating are vital skills for these new roles in health promotion and disease prevention.

As a health counselor, intervention strategies that utilize counseling theory and psychodynamics could be developed and used for well clients. Emphasis on specific health care and wellness issues relevant to the prenatal client and her child would also be emphasized. Understanding of cultural differences and values would also be an important component of practice.

In addition to becoming more proficient in counseling and education, the allied health professional will become more multicompetent in areas that were not originally part of specific disciplinary training. Nutrition knowledge, exercise counseling, substance abuse and stress reduction may eventually be included in the training and practice of this multicompetent professional.

### **Predictions for the Future**

As individuals assume a greater share of the responsibility for their own well being, health care workers will be asked to provide the kinds of services that support client decision making about personal health and health care. Roles and responsibilities for both the client and health professional will either shift or become modified.

Specific predictions are as follows:

1. The allied health professions will be called upon to provide new and expanded services in disease prevention and health promotion methods (NCAE 1980). New roles will include those of educator and counselor.
2. Allied health professionals will expand their knowledge base in nutrition, family relations and birth control, in order to be more responsive to the needs of the prenatal client.
3. Federal monies will continue to support prenatal programs, especially for black women in order to prevent the negative outcomes associated with low birth weights.
4. Schools of education will rebuild their health education programs and compete with schools of allied health for federal monies and support.
5. The federal government will provide more research monies for projects that assess cost savings associated with prenatal preventive services.
6. The need to increase the number of minorities in allied health will result in federal incentives for recruitment and retention.
7. Schools of allied health curricula will expand in health promotion content and knowledge needed to effect change.
8. Sub-specialties in health promotion will develop within disciplines.

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## HEALTH PROMOTION AND DISEASE PREVENTION FOR OLDER PERSONS

Leopold G. Selker

### Background

As the proportion of older persons in American society continues to grow larger more than three decades into the next century, a major factor in their prolonged well-being will be the success of programs for health promotion and disease prevention. While most programs are typically targeted at younger persons, such programs could also yield health dividends if targeted at older persons. Improvements in methods of health promotion and disease prevention, which also means improvements in the advice given by allied health professionals to older people could yield dividends of less premature disability, a shortened term of expensive medical services and reduction in long-term care.

People are, indeed, living longer, but not necessarily better. Attempts to improve the quality of life in the years saved or extended, however, will require a greater understanding of health risk factors and the efficacy of strategies to decrease those risks for older persons. Most research on risk factors and interventions has concentrated on younger populations (Wingard, Berkman and Brand 1982; MRFIT-RG 1984; Berkman and Breslow 1983). However, policy research on reimbursement for preventive services has an altogether different focus. Recently funded federal health promotion and disease prevention demonstration grants have as their target the Medicare population (Greenlick et al. 1983).

There is much more that can be done with the information we now have if only there were consensus on what constitutes the risk factor knowledge base and what interventions remain. Lack of agreement about which interventions benefit older persons, and to what extent, stymies appropriate development and use of preventive strategies and services for the elderly population. Evidence is not much better on the validity of health risk factors.

Unfortunately, periodic comprehensive updates of the risk factor evidence do not exist nor does information about gaps in the risk factor knowledge base.

Attempts to prioritize the health concerns of this population have been numerous: The Office of Health Information of the Office of Disease Prevention and Health Promotion (PHS-DHHS 1981), the Board on Health Promotion and Disease Prevention of the Institute of Medicine - National Academy of Sciences (NAS 1984), the Office of Technology Assessment and its Technology and Aging Advisory Panel (OTA 1985) and the NIH Prevention Coordinators (Kalberer 1985) have each attempted to set health priorities for the older population. Health priority areas appearing in two or more of the above attempts include: osteoporosis, sensory deprivation (sight, hearing and other senses), incontinence, depression and pseudodementia, hypertension, nutrition, oral health, infectious disease (immunization), improper use of medication (polypharmacy) and osteoarthritis.

Both the projection that between the years 2020 to 2030 approximately seventy-five percent of health provider time will be spent with older persons (Allan and Brothman 1981) and the continuing federal emphasis on alternatives to institutionalization suggest an increasing demand for allied health professionals who understand the needs of the elderly (NCAE 1980). Policy changes already underway portend significantly enlarged roles for allied health providers. For example, rapidly developing options in long term care insurance are resulting in expanded coverage which, in turn, is reshaping the service mix and heightening demand for a wider variety of allied health services.

The eventual growth in reimbursement for preventive services is also likely to lead to expanded roles for allied health providers. Moreover, the drive to rally improved support systems for informal caregivers of the elderly is fueling the already explosive growth of home care, a market in which health providers hold a significant market share. Yet, to date, research about the implications of these movements for allied health education and practice are almost non-existent.

### Challenge

The greatest challenge to those interested in health promotion and disease prevention for older persons lies in research to firm up the risk factor and intervention knowledge base. What is required to enhance the viability and effectiveness of health promotion and disease prevention programs for older people? Again, attention to work on the knowledge base. Perhaps more than any other objective, improvements in the knowledge base lead, in turn to

enhancements in the quality of program planning for this population.

Several barriers to acquiring the type of scientific evidence upon which to plan programs are inherent to any prevention research, watch as the difficulty in establishing that a particular intervention causes the non-occurrence of already rare events, or the fact that the effect of an intervention may depend on a long chain of events to the desired outcome. Even more so for the elderly, while it is possible to measure changes in quality of life and levels of disability, these variables are difficult to value economically (Kane, Kane and Arnold 1982).

Researching health risks and the effectiveness of interventions in an elderly population has other hazards. Recent work suggests that studies of middle aged adults may not be generalizable to older populations (Branch and Jette 1984; Vallbona and Baker 1984). However, if our study population is older persons are we not studying a population of survivors? Perhaps we ought to be studying what older cohorts are doing right, not what they are doing wrong.

If there is one thing that can be said about the elderly population, it is that one thing cannot be said about the elderly population. The logical exception to this is that the elderly are heterogeneous. This has also been emphasized another way: just as infants are not "miniature adults," older persons are not just "old adults" (Rowe 1985). Added to this heterogeneity is the fact that the health problems of the elderly are typically multi-factor and interactive. Thus, researchers immersed in studies on the older population find themselves challenged to sort out and explain the effects of intervention in the heterogeneous population with highly interactive, multifactor health problems. Moreover, most of our data on older people is data on the aggregate, not at all useful in tracking changes in an individual's risk factors over time. Thus, much more longitudinal data is needed to establish and validate the important linkages among medications in risk factors and prevention of premature morbidity and mortality.

### Successful Models

Successful models of prevention research on older populations are not plentiful. The Framingham studies (Kannel and Gordon 1980) and the Alameda County studies (Berkman and Breslow 1983) are examples of longitudinal studies that can be used to address some questions about risk factors for older persons. Four new longitudinal panels established by the National Institute on Aging

(NIA) to examine risk factors should bring about improvements in the risk factor knowledge base. Recent work at the National Cancer Institute (NCI) (Kane, Kane and Arnold 1983) which examined risk of occurrence and reoccurrence of malignancy in older persons, should further strengthen this base. The Centers for Disease Control's (CDC) risk factor update project and statewide risk factor surveys, (CDC 1982) and the National Center for Health Statistics' (NCHS) National Health and Nutrition Examination follow-up surveys (Corroni-Huntley et al. 1983) are also important additions. Moreover, public and private experiments in prepayment arrangements that provide incentives for health promotion and disease prevention, such as Health Care Financing Administration (HSFA), CDC sponsored demonstrations (Greenlick et al. 1983), and the INSURE (1980) and ON LOK (Ansak and Lingheim 1983) projects, will enrich the knowledge base greatly. The Kaiser Family Foundation's new Community Health Promotion Grant Programs also holds great promise.

Two HCFA health promotion and disease prevention demonstrations have been funded to date: one housed in the Department of Social and Administrative Medicine and Health Services at the University of North Carolina at Chapel Hill, the other at Blue-Cross/Blue Shield of Massachusetts. The former, entitled, the Economy and Efficacy of Medicare Reimbursement for Preventive Services, is concerned both with the demonstration of implementation feasibility of clinical screening and health promotion services and with their cost effectiveness evaluation (UNC, 1986). This randomized trial will test two major hypotheses: (1) in the short term (two years) clinical screening and/or health promotion will reduce risk behavior and increase perceived health related quality of life, but without significant cost savings; (2) in the long term (five years) clinical screening and health promotion will reduce risk behavior, increase perceived health related quality of life and significantly reduce the total costs of health care.

### Emerging Roles

Emerging roles for allied health professionals in this area abound and are being driven by a number of significant movements within our health care system and our society. Health care cost containment, the geriatric imperative, home care and reimbursement for preventive services are forging new possibilities for allied health professionals. Each of these four causes alone is potent enough to dislocate traditional education and practice. In concert they represent the strongest nexus for change in several decades.

The relevant policy issue at this intersection is substitution, i.e. the substitution of less expensive yet high quality allied

health services for more expensive medical and institutional care. The emerging roles are enlargements of the roles of educator and practitioner, the setting more often the home. The way to be there is through full participation in the development and validation of the knowledge base undergirding preventive services.

### Predictions

1. Allied health professionals will be called upon to provide new and expanded preventive and health promotive services.
2. Allied health professionals will increasingly recognize the importance of their full participation in the conduct of research to strengthen the health promotion/disease prevention knowledge base.
3. Allied health professionals will increasingly recognize the importance of multidisciplinary approaches to care of older persons.
4. The array of preventive services covered or reimbursed will expand greatly as research demonstrations validate their efficacy.
5. The volume of care provided in the home is experiencing explosive growth; this trend will continue and will impact greatly on allied health education and practice.
6. Informal caregivers will become a major target population for health promotive/disease preventive interventions as federal policy makers zero in on the possibility for a "two-fer," i.e., promoting the health of the older, informal caregiver frequently prevents two institutionalizations.
7. Gerontology will become an essential content area within allied health curricula over the next decade.

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**PROMOTING WELLNESS FOR PERSONS WITH DISABLING CONDITIONS:  
ENTREE FOR ALLIED HEALTH PROFESSIONALS**

Hannah L. Hedrick

For generations, health educators have attempted to convince the public to make lifestyle choices to enhance their health. But it took the current emphasis on cost containment to get a powerful federal initiative that finally seems to be resulting in more positive health behaviors on the part of people who are generally healthy and able-bodied.

What will it take to get policy makers and health care practitioners to understand that these same principles and activities should be as assertively promoted on behalf of those persons with chronic or life-threatening illness or with disabling conditions? And what will it take to demonstrate to allied health practitioners that the most logical entree to the areas of health promotion and disease prevention, wellness and fitness is to promote these concepts and related activities with their current clients? As Donald Ardell reminds us in his landmark High Level Wellness, "It is possible to be 'well' at the same time that one has an illness. One can still accept life at its fullness and strive for its highest potential." (1978, p.9)

**Positive Impacts: Door Opening Activities**

**Objectives for the Nation:** We are seeing and hearing many references to the 1979 report on Healthy People and on subsequent implementation plans for the five national health goals, all of which are generally related to improving health and reducing deaths among five populations segregated by age. The follow-up document, Promoting Health/Preventing Disease: Objectives for the Nation, includes references to the contributions of allied health professionals in "a (broad) range of preventive activities."

**Invitational Workshops:** These contributions were again recognized when allied health professionals participated in the January and

July 1984 national invitational workshops in Bethesda, Maryland to develop recommendations for curricular changes in all fields of allied health education. Several recommendations focused specifically on the Essentials for educational programs, including one mandating that they include HP/DP content, because unless the standards require this content, educators will have no justification for including it in the curricula. Edmund J. McTernan reported in Radiologic Technology (Vol 56, No. 5) that the "final recommendations of the workshop series...will have a major impact upon the education and practice patterns of all health professions." And it is definitely true that the door has been opened at the national federal level for participation of allied health professionals in the wellness movement.

**Health Policy Agenda for the American People:** Significant impetus toward the realization that "the adoption of healthy lifestyles and the ability to make knowledgeable decisions on the utilization of health care services are dependent upon effective systems of information and education" is being provided through the Health Policy Agenda for the American People. "Health Information and Education," a section of the September 1985 draft report of Work Group Four, contains twenty-three recommendations under seven categories: general responsibility for health information and education and the roles and responsibility of the educational system, government, employers, payors, providers, and individuals. Of most encouragement to allied health professionals are those recommendations advocating inclusion of health promotion and patient education in the curricula of health professional educational programs and those which outline the role of health care professionals in providing information on healthy lifestyles and in assuming leadership roles in promoting health awareness.

The principles underlying the development of the recommendations included the declaration that health care providers need to be involved in (1) making "the most efficient and effective use of available health care resources;" (2) developing and promoting "safe and healthful life styles for all Americans;" (3) preparing and providing "educational information, incentives, and services to individuals and the public to promote health and prevent disease and disability;" and (4) informing "the public of environmental factors that influence their health." Although no specific attention is paid to the special needs of persons with chronic illness or disabling conditions, they are certainly included in the category of "all Americans," so it is possible to make a case that allied health professionals should be performing these activities while providing regular services to current clients, many of whom are in tertiary care settings.

## **Challenges in Developing Roles for Allied health Professionals**

**Objectives for the Nation:** Unfortunately, the focus of health promotion used in the development of the objectives for the nation applied primarily to "people who are basically healthy." That is probably why persons with chronic illness or disabling conditions are not highlighted as special populations among the categories in Healthy People and why they do not receive special attention in the fifteen priority areas of concern. The program does not address the fact that persons with one or more disabling conditions or diseases need as much if not more education than healthy, able-bodied persons, both in order to prevent unnecessary side effects related to the condition as well as to enhance the quality of life that has already been seriously impaired.

**Invitational Workshops:** We do not seem to be seeing as much attention to the recommendations emanating from the Bethesda workshops as Ed McTernan anticipated, at least with regard to building them into accreditation processes and professional organization priorities. Although some general health promotion issues were presented by Ed to the October 1984 meeting of the Committee on Allied Health Education and Accreditation (CAHEA) with the Panel of Consultants, they have not been presented as a major agenda item to CAHEA or to the other bodies involved in reviewing and revising Essentials. To my knowledge, the Bethesda recommendations have not been officially distributed to accrediting bodies, with suggestions for how they may be incorporated in accreditation standards and procedures.

**Curriculum Requirements in Essentials:** I know something about developing and revising the Essentials that guide the development of curricula in twenty-three allied health professions, and I am not aware of any current or proposed Essentials that reflect these recommendations in general or in a way that might address the health promotion needs of chronically ill or disabled persons. However, some efforts are being made to open the door for these possibilities. Because Essentials may require only the development of knowledge and skills necessary to enter the profession, any references to health promotion and education must be related to a specific role assumed by or task performed by the professional. The communities of interest involved in revising the Essentials and Guidelines of an Accredited Education Program for the Diagnostic Medical Sonographer have attempted to encourage programs to include health promotion/disease prevention concepts in their curricula by proposing two competence statements in the Essentials supported by recommended curriculum content in the Guidelines. The Essentials state that students must be competent in anticipating and providing basic care and comfort and in demonstrating knowledge and skills necessary for general function and operation of the ultrasound department. Guidelines indicate

that the curriculum designed to instill these competencies should instruct students in principles of personal health, patient information resources and support resources.

**Health Policy Agenda (HPA):** The final HPA report, with strategies for implementing the recommendations, will not receive widespread dissemination for a year or more, at which time organizations will have to devote a lot of effort to determining which strategies are appropriate for them. And as Ed McTernan reminds us, "the discipline of preventive medicine, both as an organizational entity and as a concept of curricular content, has a long way to go before it might claim preeminence in comparison to its fellow departments of the medical school, or with curative and rehabilitative content in medical curricula." The same may certainly be said of allied health.

### **Successful Models**

**ASAHP HP/DP Interest Section:** But as many of you know, in spite of the challenges indicated above, allied health professionals are beginning to take advantage of those "teachable moments" they share with patients. The strategic positions that make such moments possible are reflected in the position statement developed by the ASAHP Interest Section on Health Promotion/Disease Prevention in 1983. This statement declares in its introductory paragraph on the "Strategic Positions of Allied Health Professionals" that "allied health practitioners, educators, and advocates, in their continuous interaction with both ill and well consumers, are strategically positioned to participate in institutional and community based educational and informational activities. They are therefore both qualified and able to help the consumer make 1) appropriate use of health services and 2) reasonable decisions about personal health behaviors, lifestyle choices and environment factors."

The document further points out that while practicing their regular duties, allied health professionals should assume "leadership initiatives in developing health promotion/disease prevention activities for faculty, students, practitioners, and the public by sharing information on these activities with allied health and other professional organizations, with educational institutions and with public and private sector agencies." "Cooperative catalytic efforts" are advocated through the development of "strong working and communication relationship with other health professionals and their organizations, public and private sector health agencies, educational institutions, self-help groups and business and other community organizations." Individual allied health professionals, as well as professional organizations and educational institutions, can become active in

the Interest Section and work together to devise strategies for promoting HP/DP activities in the environments in which allied health professionals already find themselves. You could encourage ASAHP to endorse and promulgate the position statement, and you could encourage your professional organization, nationally and regionally, to develop a position statement to serve as the basis for by-laws and to guide other organizational activities, such as seminars, workshops, and similar programs. Several professional organizations have developed such statements.

**Interest Section on Advocates of Disabled Persons in Allied Health:** The 1984 and 1985 issues of Advocate, the newsletter of the Interest Section on Advocates of Disabled Persons in Allied Health, have contained sections on HP/DP resources and activities for persons with disabling conditions, including the chronically ill and the infirm elderly. The November 1985 Annual Meeting presented a special forum on "Health Promotion for Persons with Disabilities," which included speakers on the Independent Living Research Utilization Project in Houston and on the Vinland National Center, a fitness and recreation program in Loretto, Minnesota. We continue to receive requests for information in the areas of HP/DP for the elderly, disabled and chronically ill.

**Publications and Programs:** Recent publications, such as the Importance of Physical Fitness for Persons with Disabilities (Nosek and Nofi 1984) demonstrate that the need for physical fitness among persons with disabilities is equal to or greater than that of the able-bodied population. There are numerous publications on subjects such as teaching yoga, breathing and exercise techniques to persons with disabling conditions or chronic illness, and allied health professionals who include these activities in their own lives do not need additional formal education to share what they know.

Perhaps the most exciting model is the national meeting on Health Promotion for Persons with Disabilities, sponsored by the School of Allied Health Sciences, University of Texas Medical Branch, Galveston Island, Texas, on August 10-12, 1986. I urge you to attend that meeting, which addresses in detail several of the topics presented at the 1985 ASAHP meeting. Designed to increase the knowledge and skills of health professionals in delivering health promotion programs and services to persons with disabling conditions, the program is built around three themes: perception of health and health promotion; developing health promotion programs that include persons with disabling conditions; and overcoming barriers to implementing programs.

## **Future Trends/Recommended Activities**

**Creating the Change We Wish to See:** Each of us can follow the lead of the University of Texas Medical Branch in creating the change we wish to see. In order to strengthen the possibility that the recommendations from the invitational workshops and the Health Policy Agenda project will receive serious attention, allied health professionals should encourage their educational institutions, professional organizations and accrediting agencies to focus attention on them now.

With regard to the recommendations emanating from the individual workshops, educational institutions need to be kept informed about activities being conducted by the nine institutions that received HP/DP grants as well as about activities in staff and curriculum development that other institutions are undertaking on their own. You can then make sure that activities in which you are involved place special emphasis on the wellness needs of those who frequently receive only sick care. Professional organizations and accrediting bodies need to be provided with guidance and motivation about considering the recommendations related to them. A similar process needs to be followed when the final HPA report is disseminated; and in the meantime, information should be shared through publications, at meetings, etc.

The activities described or recommended above are not only mechanisms for allied health professionals to assume leadership roles in promoting health and preventing disease and injury of people with disabilities or chronic illnesses. A number of other strategies have been and are being devised to get allied health practitioners recognized as major contributors to supporting behavioral change that will encourage the public, including those with chronic illness or disabling conditions, to assume responsibility for their own health.

**A Different Approach:** Thus far I have been talking about what we can do with regard to promoting wellness activities for persons with chronic illness or disability. Now let's look at the other side of the coin: what can those with chronic illness or disability contribute to the wellness movement? This subject is eloquently and convincingly covered in "Opportunities for Health Promotion: Including the Chronically Ill and Disabled," by N.A. Brooks (1984).

Brooks points out that "persons already afflicted with chronic conditions adhere to many of the lifestyle principles espoused by health promotion and have organized social systems to support their health interests. In particular, the US independent living movement has had to address many of the central health promotional concerns, including:

Recognizing the need for a comprehensive concept of health, including the social-psychological, physical, and spiritual dimensions subject to individual choice;

Achieving one's highest potential through individual rather than standardized goals;

Modifying individual behavior and lifestyle through acceptance of individual responsibility for assuming the initiative and self-control required for self-care, as reflected in the "consumer management" aspect of independent living programs; and

Recognizing that health maintenance is responsive to social influences and that creating social support is a legitimate wellness activity, reflected in efforts of independent living participants to modify architecture, educate the public, organize support groups and similar activities.

If health promotion leaders were to establish systematic links to chronically disabled and ill persons and with the independent living centers serving such persons, shared interests could add strength to the development of more comprehensive, long-term health care and wellness programs. Such systems would definitely enhance the quality of life and, in spite of increased life span, might be less expensive in actual dollars than the current sick care system.

**Addressing the Invisible Barrier:** The involvement of allied health professionals in all of the above efforts, especially the joint venture with independent living participants, can produce even more esteemable effects than cost containment and healthier lifestyles. A major publication in the health field, with a circulation to hundreds of thousands of professionals, recently reported on a session on "government efforts to alleviate the financial burden of caring for its most hopeless dependents: the infirm elderly, the mentally retarded and the victims of cerebral palsy, epilepsy, and other developmental disabilities." Whether this comment reflects the attitude of the presenter, the author, or the publication is not important; what is important is the social climate that would permit anyone in any of those positions to publicly demonstrate such a gross and insensitive inaccuracy. Most people in the categories are not "hopeless dependents," and most prefer not to be perceived as "victims."

So as you assume the initiative in promoting implementation of the recommendations emanating from the Bethesda workshops and from the HPA, in becoming active in ASAHP Interest Sections, and in establishing links with organizations representing and advocating

for individuals with chronic disabling conditions and illnesses, keep in mind that every activity will help to overcome the most difficult barrier preventing such individuals from full participation in society, including the wellness movement: the barrier of attitudes that look at what "differently abled" individuals cannot do rather than at what they can do.

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INTERNATIONAL PERSPECTIVES ON HEALTH PROMOTION  
AND DISEASE PREVENTION

Nanci C. Rice

The focus of most of this conference has been largely on the health promotion and disease prevention movement in the United States. It is important to recognize however, that what we have learned in the past few years can be shared with health professionals throughout the world. Equally important is to remember that we, in this country, have much to learn from other nations and we must continue to facilitate the exchange of information and skills among our international colleagues.

Efforts to continue and enhance this exchange have been initiated by the International Interest Section of the American Society of Allied Health Professions (ASAHP). Last year, the Interest Section conducted a forum, "Health Promotion/Disease Prevention Around the World," which included model programs in these areas of health care from countries such as Japan, Trinidad and Tonga. In addition, this Section co-sponsored a special edition of the Promoter (a newsletter focused specifically on health promotion and disease prevention) which featured articles, resources, and a calendar of events related to international health promotion and disease prevention. Further, the task for the Interest Section this year includes developing strategies, via a steering committee, to increase communication and networking in many areas of international health, including health promotion and disease prevention.

In response to the Interest Section's efforts, ASAHP has taken a leadership role regarding the international concerns of health care through its current involvement with planning and conducting a World Congress in Allied Health. This activity is part of the plan set forth in the Kellogg Foundation Project which ASAHP recently received to promote leadership in the allied health professions. A task force, consisting of ASAHP members appointed by the Society's Board of Directors, has been established to

facilitate the planning of this congress.

Additionally, resources for designing and implementing international educational programs in health promotion and disease prevention are available through various organizations and agencies.

The author may be contacted by anyone interested in joining the International Interest Section or in assistance with resources for designing and implementing international HP/DP educational programs.

## HEALTH PROMOTION AND DISEASE PREVENTION IN THE MULTICULTURAL SETTING

Rose Y.L. Tseng

Editor's note: Drs. Helen S. Ross and Rose Y.L. Tseng are co-directors of the Multicultural Health Promotion Project in the School of Applied Arts and Sciences, San Jose State University. Dr. Ross chairs the department of Health Science; Dr. Tseng serves as Associate Dean and Director, Division of Health Professions.

### Introduction

Health promotion and disease prevention begins with a concern for the quality of life of all individuals. The Surgeon General's Report of 1979 accurately pinpointed the major health issue of our times--fifty percent of all deaths are caused by personal lifestyle or health behaviors. As health professionals in health promotion/disease prevention we are looking for ways to influence how individuals view their ability to affect their own health.

San Jose State University is located in the San Francisco Bay area, which is one of the most culturally diverse regions of our nation. Asians, Hispanics, Blacks, and Near Easterners make their home there. There are numbers of new immigrants both from Mexico and Southeast Asia. All bring with them distinct cultural beliefs about health and disease: many of the immigrants cling to their familiar health practices. Others combine them with the recommendations of the health agencies and clinics to which they are referred.

### Health Concerns for the Multicultural Population

One of our tasks for this workshop is to identify special health

concerns which have an impact on health promotion and disease prevention. We know that there is a clear pattern of lower use of preventive health services among minority adult populations, as reported by the Secretary's Task Force on Black and Minority Health. There are many reasons for this underuse, including availability and location of services as well as finances. One major cause with which we must deal is ethnic minorities' perception of the health care system as insensitive to their needs. In the past, allied health professionals have lacked the knowledge and sensitivity to cultural differences which would have allowed for the provision of caring service. Thanks to new understanding of multicultural health beliefs and practices, this insensitivity can be a ghost of the past. To quote David Hoover who spoke to the April 1984 workshop on allied health professions education, "Health professionals carry the burden of modifying patient behavior." We can only do this with a clear knowledge of the patient's point of view.

The most difficult part of designing and implementing health promotion in the multicultural environment is gaining a clear knowledge of the patient's point of view and interpreting it into behavioral objectives. As Helen Ross, co-director of the Multicultural Health Promotion Project at San Jose State emphasizes, the first step in developing an understanding of the multicultural patient's needs is a community needs assessment. To develop a successful model for the San Jose State Project, the needs assessment covered three major target groups: students, faculty and community. Our goal was to promote understanding of multicultural perspectives of health and disease prevention among allied health professionals. The results included recommendations for faculty and community workshops, and for a new course of multicultural health promotion.

In addition to the challenge of accurately assessing minority needs, there is a second challenge in multi-cultural health promotion: to bring increasing numbers of minorities into the allied health professions. By the year 2000 the state of California will have a population of which half will be minorities. Not only do these minorities have the right to equal employment in the health arena, their language ability and perspective on multicultural health enhance the effectiveness of all our endeavors.

### Successful Multicultural Models

Models for training allied health professionals in health promotion/disease prevention for the multicultural setting must turn the results of a needs assessment into viable education strategies. San Jose State University has developed two

successful models. One is a Health Careers Opportunities Program, which has been very rewarding. The program provides outreach into the community, which allows representatives to talk with counselors and students at high schools and community colleges. Young minority and disadvantaged students are encouraged to enter the health professions. Once the students are admitted to the University, they are helped with study skills, social activities, tutoring, counseling and social interactions, as needed.

The project funded by the Bureau of Health Professions which brings us there today is the Multicultural Health Promotion Project. Its emphasis has been development of sensitivity to multicultural concerns by faculty, students and community health professionals. This model involved three interdisciplinary teams with faculty from the departments of Health Science, Nutrition and Food Science, and Occupational Therapy.

**Student Professional Development:** Development of a course in multicultural health perspectives began immediately after the grant was received in October, 1983. The intent of the course has been to explore multicultural aspects of health. Originally there were no textbooks or materials designed to meet these objectives. However, in the five semesters that the course has been taught, a wealth of materials has been developed. The course has been team taught by faculty of the three participating departments.

Important aspects of course design emphasize "process" as well as "product" in classroom objectives. Student involvement and participation are essential, because straight lecture does not work as a method to promote attitude change and values. Instead, the community members come to the classroom as guest speakers, and students go to the community for interviews and cultural activities. As developed, the course will work as a training forum for any of the allied health professions. It is now titled "Introduction to Health Professions in a Multicultural Community" and is required for a health professions minor and for several majors in the allied health disciplines at San Jose State University.

**Faculty Training:** The ultimate goal of faculty training has been to promote sensitivity to multicultural issues and to integrate multicultural issues throughout the curriculum. Faculty training included five workshops which were evaluated favorably. Evaluations stated that the series had the following results:

Increased understanding of health practices and perspectives of minorities.

Increased understanding of minorities

Improved ability to cope with the individual differences of students, sensitivity to students, and insight into their behavior

Increased team comraderie

Improved curriculum and encouraged a more responsive teaching style

Training included faculty in the departments of Nutrition and Food Science, Health Science and Occupational Therapy. Although the Nursing Department was not part of the grant, nursing faculty have participated in grant activities.

One of the workshops was designed as an experiential exercise in cross-cultural concepts. It included a game entitled "Bafa Bafa." As one important aspect of the game, participants do not communicate in English. Instead, they use other forms of communication such as defined gestures or eye-blinking. Participants experience the frustrations common to immigrants learning English and begin to understand what it is like to try to communicate with their own "language" to a group whose "language" is a different communication system.

Besides workshops, other faculty involvement concepts were added to curriculum. After two and one-half years, each department has integrated multicultural learning objectives into their curriculum, and these are permanent additions.

Many benefits derive from the interdisciplinary aspects of this project. Faculty of each department have come to understand each other's approach to teaching, and to integrate alternate teaching techniques into their curriculum. Some are more "process-oriented," with an emphasis on group dynamics and class participation as educational strategies. Others are more "product-oriented," and emphasize lectures and a high factual content of course presentation. The cooperation of the various departmental faculty has resulted in cooperation on other projects. There is also increased cross-listing of courses, and a readiness to team-teach interdisciplinary courses in the future.

**Community Collaboration:** The third component of the Multicultural/Multidisciplinary Health Promotion Project was originally named "consultative" in anticipation of the university acting to promote multicultural consciousness among the community. The title, however, was soon changed to "collaborative," which more accurately reflected the interactive process between the university and community health professionals. A needs assessment

by questionnaire formed the basis for later workshops. A model was developed for multicultural health promotion which relates the practitioner and client and suggests that the two must share and communicate, and that the practitioner must be able to "step into the other's shoes."

### **Challenges for Health Promotion in the Multicultural Community**

The greatest challenge to health promotion in the multicultural community is understanding the client's point of view. In the multicultural context, belief and behavior must be interpreted together. It is essential to understand different health values and practices and to be able to relate to another individual's way of thinking. Without this understanding, it is impossible to develop effective health education strategies.

Another challenge is working with university faculty and community members who do not yet perceive or believe in the need for multicultural sensitivity. Inviting students and members of the community of various ethnic backgrounds to speak and showing movies and videos of the multicultural experience are much more effective at breaking this resistance to change than is the standard lecture technique. Also effective is any method which introduces people to each other, for example as joint participants in ethnic celebrations.

A third challenge is posed by the various health disciplines themselves: there are differences in perspective, treatment methods and health promotion orientation. At San Jose State we have found that one of the best ways to overcome this barrier is to work together as interdisciplinary health teams, and we have a program which puts student interdisciplinary health teams into the multicultural community for field placements.

A fourth challenge is known to all of us in health promotion: funding for projects. Fortunately, this project has brought us a model for multicultural health promotion that need not be expensive.

### **Future Role of Health Professions**

In order to reach the goals of health promotion/disease prevention and the Objectives for the Nation, the skills and functions of health professionals must change to include understanding of multicultural health values and practices. On the Multicultural Health Promotion Project we have tried to improve our understanding of the client's point of view. We have worked to increase the body of knowledge about multicultural health perspectives and to identify some strategies to apply this

knowledge by becoming better communicators. We have learned that to be flexible and sensitive to the needs of clients rather than our own agendas does not make us less professional. It actually makes us more effective in providing caring service in a multicultural community.

There have been side-benefits to this project. Interdisciplinary team-taught courses significantly increase the learning experiences of students. Interdisciplinary field placements in the multicultural environment prepare students to begin work as health professionals with a sensitivity to the needs of their clients.

Interdisciplinary cooperation at the university has also stimulated faculty morale and promoted a team approach to other projects. A Transcultural Task Force apart from the multicultural grant project is also functioning among the various disciplines within the Division of Health Professions at San Jose State University.

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