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Differing health promotion behaviors and practicing barriers to health promotion between physicians and nurse practitioners in the practice of ambulatory obstetrics and gynecology

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San Jose State University, 1991

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DIFFERING HEALTH PROMOTION BEHAVIORS AND PRACTICING BARRIERS TO HEALTH PROMOTION BETWEEN PHYSICIANS AND NURSE PRACTITIONERS IN THE PRACTICE OF AMBULATORY OBSTETRICS AND GYNECOLOGY

A Thesis

Presented to

The Faculty of the Department of Nursing

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

By

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December, 1991

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ABSTRACT

DIFFERING HEALTH PROMOTION BEHAVIORS AND PRACTICING BARRIERS TO HEALTH PROMOTION BETWEEN PHYSICIANS AND NURSE PRACTITIONERS IN THE PRACTICE OF OBSTETRICS AND GYNECOLOGY

by Pamela M. Richard-Torke

The purpose of this study is to determine whether differences exist between ob/gyn physicians and ob/gyn nurse practitioners in the importance of health promotion behaviors, frequency of discussion of health promotion topics, and perceived barriers to discussing health promotion. The study used a cross-sectional survey design with a sample of (n=46) ob/gyn physicians and (n=55) nurse practitioners.

The analysis found statistically significant differences in means for the importance of health promotion behaviors. Nurse practitioners were lower than physicians in annual mammograms and higher in stress reduction. For discussion of health promotion topics, statistically the mean frequency was lower for nurse practitioners on mammograms and weight reduction and higher on sleep habits. Finally, on frequency of barriers to health promotion, both groups ranked time and client motivation as the most frequently encountered barriers.

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To the faculty for

their perseverance

and educational opportunities

and

to my husband, Sam,

and

my parents,

thanks for

supporting my

quest for knowledge.

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Chapter 1

INTRODUCTION

In the health care profession, the greatest number of primary health care providers are physicians and nurse practitioners. Major roles have been identified for primary care providers: screening for risk factors and disease, providing early treatment, advising, counselling, and referring. They can have an influence on organizations, the community, and the government as well as the individual patient when providing these services (Simons-Morton & Simons-Morton, 1987). Health care providers have furnished information to groups like the American Heart Association, American Cancer Society, American Diabetic Association, and other similar groups in order to reduce risk of diseases. Physicians and nurse practitioners have been cited by the public as the single best, most stable and believable resource for health information (Khoiny, 1987; Valente, Sobal, Muncie, Levine, & Antlitz, 1986).

The Department of Health and Human Services' 1990 objectives are for disease prevention and health promotion (Office of Disease Prevention, 1987). In the ambulatory setting, the greatest number of primary care providers are physicians, with nurse practitioners being the second most frequent. Therefore, physicians and nurse practitioners have

the greatest opportunity to achieve this objective. This research will analyze the differences between two groups of health care providers in the specialty of obstetrics and gynecology in reporting: (a) the importance of health promotion behaviors, (b) the frequency of discussion of health promotion topics, and (c) barriers to the discussion of health promotion topics.

The Problem

Economically, the health care bill is inflating swiftly. In 1965, Americans spent $41.7 billion in health care costs. In 1985, the costs had climbed to $425 billion (Asmusson, 1985). Currently the nation's emphasis in health care is on improving the health status of its population. Through the efforts of a 1980 meeting of the Office of Health Information, Health Promotion, Physical Fitness and Sports Medicine (OHP), a document called Promoting Health/Preventing Disease: Objective for the Nation and Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention was produced. One of the goals, identified in this document, is to increase concentration on disease prevention and health promotion (Office of Disease Prevention, 1987).

Physicians traditionally have been educated in the medical model which focuses on curative rather than preventative practice. Curry (1986) stated that:

> The American Association of Medical Colleges and most medical schools have failed to respond to the identified educational needs of students and practitioners for the knowledge, skills, and behavior necessary to identify risks and alter behavior of their patients. The reasons behind this lack of enthusiasm for the swift adoption of these changes are multiple and are of equal importance to other disciplines such as allied health. Without economic benefits to one's practice, the educational imperative becomes less critical. Physician licensure and board certification standards, except for the specialty of preventative medicine, do not currently emphasize prevention. Medical school accreditation standards also do not place any importance on prevention in the curriculum. And finally, the faculty with expertise in the clinical practice of prevention are almost nonexistent. Thus, the likelihood that physicians will practice and employ prevention measures in the immediate future appears small (p. 344).

However, in the 1990 health objectives for the nation, physicians were identified to be the key to accomplishing the health promotion objectives. Yet physicians remain unfamiliar and uncommitted about health promotion and public health policy development (Fried, 1987). A survey performed of medical practice in the United States found that diet

and/or exercise was prescribed in only 3% to 7% of office visits encountered by primary care practitioners (Mullen & Katayama, 1985).

Since the conception of the role, the nurse practitioner has been a convincing supporter of health promotion and disease prevention (Lindberg, 1987). The nurse practitioner, who is grounded in health education through nursing, comes from a background of preventative health care. The Nurses' Association of the American College of Obstetricians and Gynecologists defines the role of the obstetric/gynecologic (ob/gyn) nurse practitioner as having acquired special knowledge and skills in health promotion and maintenance, disease prevention, psychosocial and physical assessment, and management of health-illness needs in the primary care of women (1984). "... it is important that physicians collaborate in the education and practice necessary to allow the ob/gyn nurse practitioner to be maximally productive in dealing with the primary health-care needs of women" (p. 3).

The problem of inadequate health promotion is increased when the number of physicians outweigh the number of practicing nurse practitioners. Therefore, the incidence of education in an office visit on health promotion, risk reduction, and disease prevention is more remote given this imbalance.

The Question

The question for this study was: what are the differences between obstetrical/ gynecological physicians and obstetric/ gynecologic nurse practitioners in their reported importance of health promotion behaviors, frequency of discussion of health promotion topics, and barriers to discussion of health promotion topics?

Hypotheses

The following hypotheses were examined in this study:

1. Ob/gyn nurse practitioners and ob/gyn physicians report similar importance of health promotion behaviors.
2. Ob/gyn nurse practitioners will report a greater frequency of discussion of health promotion topics than ob/gyn physicians.
3. Ob/gyn physicians will perceive different barriers to discussing health promotion topics than ob/gyn nurse practitioners.

Purpose and Need

The purpose of this study was to determine whether differences exist between ob/gyn physicians and ob/gyn nurse practitioners discussing health promotion topics, the frequency in which this is done, and the perceived barriers to discussing health promotion. In organized health care settings, like health maintenance organizations, community based clinics, as well as hospital-based clinics, the

economics of scale allow health promotion to become a feasible venture. This happens when the organization has enough of a profit margin to employ nurse practitioners to see the patients for their "well check-ups" and minor health care needs as well as to function as a primary screener of more hazardous health issues. In addition, the nurse practitioner allows the corporation to engage an individual whose background includes health education.

In the private practice of a physician, the perceived need for health promotion may not be acknowledged as important in the day to day practice usually because of lack of time and manpower. Physicians may not have the resources to devote time to health promotion. Forty-three percent of office visits to OB/GYN physicians are by well patients. Yet, only 2% of the OB/GYN patients interviewed in a study by Mullen and Katayama, reported that diet and exercise were prescribed (1985). If 43% of the patients seen do not have a serious problem, would they not benefit from a discussion on maintaining this state of well being?

Dr. Stephen Lee Taller, director of the nurse practitioner program at Kaiser-Permanente Medical Center in Oakland, California, stated that the program permitted a great expansion of the health care services that Kaiser could give. The program's major goal, like other existing programs for the education of nurse practitioners, is to emphasize

health promotion and health maintenance (Kweskin, 1979). Dr. Taller felt that with the emphasis on patient education, care could be directed from "episodic, crisis-oriented sick care to directing patients into lifetime health monitoring" (p. 195).

Studies on health promotion have repeatedly demonstrated the benefits of education through preventative health care and risk reduction. Third party payers, employers, and individuals themselves have noted an increase in savings through health promotion programs such as weight reduction, smoking cessation, and exercise programs (Cogswell, Alusie, Bogdewic, Melton, & Shahady, 1985).

Definition of Terms

For the purpose of this study, the following definitions will be used.

1. Health Promotion is "... the first phase of primary prevention, a prepathogenic level of intervention directed at enhancing the general well being and performance of the individual" (Taylor, Ureada, & Devham, 1982, p. 2). "Health promotion consists of activities directed toward increasing the level of well being and actualizing the health potential of individuals, families, communities, and society" (Pender, 1987, p. 4).

2. Obstetrics and Gynecology (ob/gyn) is that specialty within the field of medicine and nursing that is devoted to

but not limited to women's reproductive health care.

3. Ob/gyn physicians are physicians certified by the American College of Obstetrics and Gynecology whose specialty is limited to the practice of obstetrics and gynecology.

4. Ob/gyn nurse practitioners are nurses licensed by the State Board of Nursing but, may vary with states, whose practice is limited to normal ambulatory ob/gyn care under the supervision of an ob/gyn physician.

Research Design

The study used a cross-sectional survey design to measure the difference in the importance of health promotion behaviors, frequency of discussion of health promotion topics, and barriers to discussion of health promotion between ob/gyn physicians and ob/gyn nurse practitioners. The independent variable is whether the practitioner is an ob/gyn physician or ob/gyn nurse practitioner. The dependent variables included the reported importance of health behaviors, incidence of health lifestyle discussion, and barriers to providing health promotion.

A questionnaire was mailed to 250 ob/gyn certified physicians and 150 ob/gyn nurse practitioners who have been randomly selected. A list of practicing ob/gyn physicians in the State of California was obtained at the California Medical Board of Licensure. Likewise, the 150 ob/gyn nurse practitioners were randomly selected from a list from the

California Board of Registered Nursing, which licenses nurse practitioners. The names were selected from the list using a table of random numbers.

The instruments used for measurement of the importance of health promotion behaviors and frequency of discussion of health promotion topics were adapted from Wechsler, Levine, Idelson, Rohman, & Taylor's, (1983) survey of primary-care practitioners' role in health promotion. The first instrument (Appendix A) consists of a list of 10 phrases that measure the importance of health promotion. The second tool (Appendix B) measures the practitioners' discussion of a list of 10 health promotion topics frequently discussed in office visits. The third tool (Appendix C) developed by the researcher, consists of a list of statements asking the practitioner to report barriers to discussing health promotion topics. In addition, personal demographic data (Appendices D & E) was obtained from the practitioners.

Data was analyzed first with descriptive statistics. Demographic data was described. Differences between provider groups on importance of health behaviors and frequency of health promotion topics were analyzed with a *t*-test. Finally, the reported barriers to health promotion were analyzed with descriptive statistics.

Limitations

The study is limited by the sample and the design.

The sample size is relatively small compared to all ob/gyn physicians and ob/gyn nurse practitioners in the state of California and may not be representative. Also, it may not be representative of other geographic areas.

The sample is limited to the specialty of obstetrics and gynecology and may not be generalized to the health promotion attitudes and behaviors of other providers. There may be some differences between the sample who responded and those who did not respond.

Finally, the nonexperimental design does not allow the researcher to manipulate the variables of interest; therefore, the causal relationship between variables is unable to be determined (LoBiondo-Wood & Haber, 1986). Hence, the results should be generalized with caution.

Chapter 2

CONCEPTUAL FRAMEWORK AND REVIEW OF RELATED LITERATURE

Conceptual Framework

This study used Pender's Health Promotion Model (1987) as a conceptual framework. This model and the term, health promotion, build on an earlier attempt by Dunn (1959) to answer the question: What is health? Over the years, theorists from different fields of studies have contributed many definitions of health. All of these definitions have some commonalities in words. For example, most definitions of health have individuals in balance and in a positive framework.

Halbert Dunn (1959), a leading health theorist of modern science, coined "high-level wellness" as a synonymous term with health. He further defined high-level wellness as "an integrated method of functioning which is oriented toward maximizing the potential of which the individual is capable. It requires that the individual maintain a continuum of balance and purposeful direction within the environment where he is functioning" (p. 447). With this in mind, Dunn (1975) classified nine essential points to promoting high-level wellness, three of which are pertinent to this research. One, education is necessary to sustain individuals and families in exercising health promotion. Two, the

intellectual growth of individuals in leadership positions is necessary for health promotion of the community. Three, the encouragement of caring relationships and concern for the welfare of others is necessary for an individual's wellness.

A second definition of health promotion was proposed by Nola Pender, the author of the Health Promotion Model (Pender, 1987). Health promotion includes expanding an individual's well being and actualizing their health potential. From this description of health promotion and wellness behaviors grew Dr. Pender's "Health Promotion Model" (HPM) portrayed in Figure 1. This study on Differing Health Promotion Behaviors and Practicing Barriers to Health Promotion between Physicians and Nurse Practitioners in the Practice of Ambulatory Obstetrics and Gynecology used the Health Promotion Model (HPM), as its conceptual framework.

According to Pender (1987), the development of the HPM produces three important benefits. The model (a) organizes concepts that illuminate the development of health-promoting behavior, (b) propagates the testing of hypotheses, and (c) blends disjointed research findings into a logical paradigm.

Pender (1987) describes health-promoting behavior as "an expression of the actualizing tendency" (p. 59). Health promoting behaviors are a product of health promoting attitudes. Through self-knowledge, self-gratification, and diversion behaviors, individuals can function towards health

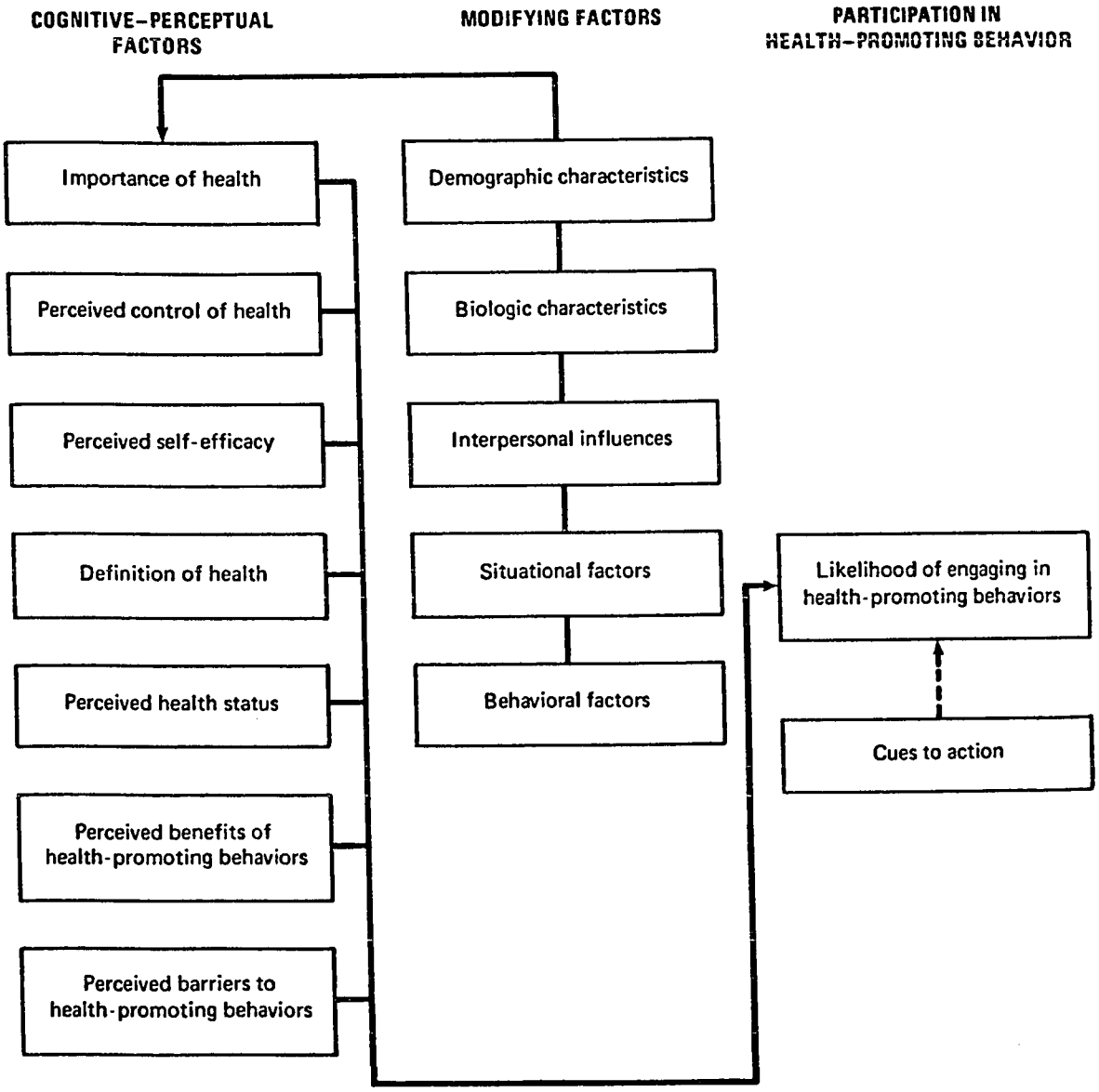

Figure 1. Health Promotion Model

Note. From Health promotion in nursing practice (2nd ed.) by N. J. Pender (1987, p. 58).

promotion in their surroundings. The HPM is organized into seven cognitive-perceptual factors with five modifying factors which will determine the likelihood of an individual engaging in health-promoting behaviors. The seven cognitive-perceptual factors are importance of health, perceived control of health, perceived self-efficacy, definition of health, perceived health status, perceived benefits of health-promoting behaviors, and perceived barriers to health-promoting behaviors. The modifying factors of the HPM are demographic characteristics, biologic characteristics, interpersonal influences, situational factors, and behavioral factors.

This study examined two of these cognitive-perceptual factors, the importance of health promotion and the perceived barriers to health-promoting behaviors. Modifying these cognitive-perceptual factors are demographic characteristics of physicians and nurse practitioners.

In cognitive-perceptual factors, the importance of health promotion to a practitioner has a significant impact on the frequency of teaching clients health-promoting behaviors. This has been demonstrated in numerous studies in which providers who placed high value on health were the same individuals who taught health promotion most frequently (Brown, Muhlenkamp, Fox, & Osborn, 1983; Redeker, 1989; Wallston, Maides, & Wallston, 1976). For the practitioners,

practice values and perception of the importance of health promotion will influence how and what they teach their clients.

Barriers to health-promoting behaviors are continuously encountered by the individual who struggles to perform the health-promoting behavior. For example, the pregnant female who is a heavy smoker is considered to be in a high risk pregnancy for preterm delivery and/or intrauterine growth retardation. If the female delivers an intrauterine growth retarded infant, then the practitioner may attribute that outcome to the client's inadequate motivation to stop smoking or the insufficient knowledge base for the practitioner in counselling adverse health behaviors. Again, studies have shown evidence that identifying perceived barriers for implementing health promotion by practitioners may move practitioners from treating illness to preventing disease (Henry, Ogle, & Snellman, 1987; Orleans, George, Houpt, & Brodie, 1985).

Literature Review

The Health Promotion Model is based upon The Health Belief Model, a 1950s model cultivated by Rosenstock, Hochbaum, and Kegeles (Becker, 1974). The HPM is a new conceptual model so it has not received as much attention as the older model has.

In 1985, Northern Illinois University awarded Pender

and three of her colleagues, a three year cluster grant to test the proposed model. This grant funded four research projects, all with a common theme of testing the HPM. The research topics included exercise adherence among working adults, health promoting behavior among working adults, exercise adherence after myocardial infarction, and ambulatory cancer clients' health promoting behaviors (Frank-Stromborg, 1986).

Frank-Stromborg tested the HPM with ambulatory cancer clients. She used a health diary to help cancer clients keep track of their health-related activities. Her findings supported the model. "The surveyed sample was engaging in behaviors representative of the dimensions of health-promoting lifestyle" (p. 42).

Walker, Volkan, Sechrist, and Pender (1988) looked for health-promoting lifestyles of older adults as compared to young and middle-aged adults. The Health-Promoting Lifestyle Profile (HPLP) instrument and a personal data sheet were used in the study. This study identified cognitive and perceptual characteristics as primary motivation mechanisms for health-promoting behaviors, supporting the HPM.

There were no studies found in the literature review which studied the role of nurse practitioners in health promotion, utilizing the HPM as the conceptual model. Numerous articles have been published in the last decade to

look at the current role of primary health care providers and the need to focus on prevention. Primary health care providers, who include physicians and nurse practitioners, are in the frontline as health care givers. They are seen as the individuals most likely to have an impact on individuals receiving care.

How do the primary health care providers think they are doing? Gemson and Elinson (1986) performed a telephone survey of 120 randomly selected primary care physicians in New York City; 87% agreed that more preventative medicine is needed than is presently done. These physicians were also asked what barriers they felt contributed to the failure to practice more prevention. Seventy percent of the physicians felt that it was due to a lack of time; 60% stated that there was inadequate reimbursement for preventative teaching; and 58% believed that there were unclear recommendations.

Rosen, Logsdon, and Demak (1984), through the INSURE Project on Lifecycle Preventative Health Services, surveyed 74 primary care physicians in group practice on their attitudes and practice of preventative services. These physicians reported that they were aware of the need to educate clients on the importance of decreasing hazardous health behaviors, but reported they spent little time in doing so. The physicians also felt that provision of preventative services was hindered by the lack of insurance

reimbursement.

Mullen and Katayama (1985) reviewed approximately 17 articles that dealt with physician attitudes, behaviors, practices, and barriers to practicing health promotion in the office-based setting. In summarizing the data from these articles, trends in practicing in an ambulatory setting among physicians and their speciality were noted. There has been a steady rise in group practices since 1932. Approximately 18% of the physicians practicing in 1975 were involved in a group practice. Forty-three percent of visits to obstetricians and gynecologists were by well patients, the highest of any specialty group. An average office visit to a primary care physician other than an internist lasted 11 minutes. The internist spent an average 18 minutes with his clients. Counselling on health hazards occurred in approximately 12 to 20% of the office visits. In comparison, 43 to 56% of the office visits to a primary care physician included a prescription of a drug. Fifty-eight percent of the physicians felt that they were prepared to counsel patients, but only 43 to 65% believed that they were somewhat successful. This literature on medical practices and health promotion raises important issues. To increase the amount of health promotion in medical practice, there is a need to further explore the attitudes, behaviors, and perceived barriers of health care providers.

In the late 1960s, the role of nurse practitioner was conceived. Health promotion and disease prevention is a fundamental role within the primary care practice of the nurse practitioner. Dr. Stephen Lee Taller, director of the nurse practitioner training program at Kaiser Permanante Medical Center in Oakland, California, stated in an interview that an increased awareness of the value of well care among both patients and physicians has occurred (Kweskin, 1979). Taller goes on to say that nurse practitioners have become a vital part of the primary health care system, expanding the availability of primary health care services as well as developing the health promotion and disease prevention services.

Studies which investigated nurse practitioners' attitudes, behaviors, practices, and perceived barriers to providing health promotion found a more positive response than in physicians. In addition, Thibodeau and Hawkins (1989) found that nurse practitioners had a higher degree of confidence in their skills.

Summary

The roles of physician and nurse practitioner can be competitative or complemenary. Few studies have looked at the difference in nurse practitioners' and physicians' attitudes, behaviors, and barriers to providing health promotion in the ambulatory setting. Zahnd, Coates, Richard,

and Cummings (1990) compared the ability of physicians and nurse practitioners to counsel medical patients on cigarette smoking. They found that nurse practitioners discussed smoking or made recommendations more often than physicians, although both physicians and nurse practitioners had the same training.

Few studies investigated the behaviors and barriers to practicing health promotion. No studies were found that compared the nurse practitioner to the physician in regard to these behaviors. This study was designed to examine the differences between physicians and nurse practitioners regarding the importance of health promotion behaviors, frequency of discussion of health promotion topics, and barriers to the discussion of health promotion topics.

Chapter 3

RESEARCH METHODOLOGY

The purpose of this study was to compare the differences between ob/gyn physicians and ob/gyn nurse practitioners in their reported importance of health promotion behaviors, frequency of discussion of health promotion topics, and perceived barriers to discussing health promotion topics with clients. The dependent variables of interest in this study were health promotion behaviors, frequency of discussion of health promotion, and barriers to providing health promotion. The study's independent variables are ob/gyn physicians and ob/gyn nurse practitioners. This study used as its conceptual model, the Health Promotion Model, developed by Nola Pender (1987, p. 58).

Research Design

The study used a cross-sectional survey design by way of a questionnaire mailed to its respondents. The cross-sectional survey design allows the researcher to examine data at one point in time.

There are some advantages and disadvantages to using the cross-sectional survey design. Advantages to using this design are that it is less time-consuming, less expensive, and more manageable for the researcher. The results are more readily available, since the data can be collected at one

time. The variable of maturation, resulting from the elapsing of time, is eliminated (Lo-Biondo-Wood & Haber, 1986). A disadvantage to this design is that subjects cannot be followed over time limiting dtermination of causal relationships.

Sample and Setting

The sample involved two groups of health care providers, physicians and nurse practitioners. All participants lived and practiced in the state of California. The physicians all specialized in ob/gyn and were selected from a mailing list provided by the California Medical Association (CMA), located in San Francisco. A total of 3,945 labels were received. Surveys were mailed to 250 physicians randomly selected from the address labels. Forty-six surveys were returned, resulting in an 18% return rate for physicians; all were usable.

The nurse practitioners were selected from a mailing list provided by the Board of Registered Nurses (BRN), located in Sacramento. A total of 1,442 nurse practitioner address labels were received, and surveys were mailed to 150 nurse practitioners randomly selected from the labels. Fifty-five surveys were returned, at a 37% returned rate; all were usable. Unlike the CMA, the BRN did not differentiate by specialty. The mailing went to nurse practitioners of several specialities. Of the 55 surveys returned by nurse

practitioners, 15 (27%) specialized in ob/gyn and 40 (72.7%) had other specialities.

Human Subjects Approval

This study received approval from the Human Subjects Institutional Review Board at San Jose State University (Appendix F).

Instruments

The self-administered questionnaire consisted of four parts and took approximately 20 minutes to complete. The four instruments use in this study were (a) importance of health promotion, (b) frequency of discussion of health promotion topics, (c) barriers to providing health promotion, and (d) demographics.

Prior to mailing the questionnaires, they were pilot tested with two ob/gyn physicians and two ob/gyn nurse practitioners. The purpose of this was to determine clarity and ease of completion of the instrument. As a result of pilot testing the questionnaire, some format and grammatical changes were made so that the items were easier to interpret-which changes validity/reliability of the original.

Importance of Health Promotion

The instrument to be used for the measurement of the importance of health promotion behaviors was adapted from Wechsler, Levine, Idelson, Rohman, & Taylor's (1983) survey of primary-care practitioners' role in health promotion.

There was no information in this article regarding its validity/reliability. This tool included 10 statements regarding the health promotion beliefs of primary care providers about women's health issues found in (Table 1). A Likert-type response used choices from one to four; one indicated "strongly disagree" with the statement, two indicated "disagree" with the statement, three indicated

Table 1

Items of the Importance of Health Promotion

It is very important to me that...

1. cigarette smoking be eliminated.
2. caffeine consumption be reduced.
3. excessive calories be decreased to maintain well being.
4. aerobic activity 3 times per week be maintained for wellness.
5. pap smears be obtained annually.
6. women over the age of 50 have annual mammograms.
7. high fat/cholesterol foods be reduced for good eating habits.
8. stress be reduced for a healthy lifestyle.
9. 6-8 hours of sleep a night is necessary for a healthy lifestyle.
10. women examine their breasts on a monthly basis.

"agree" with the statement, and four indicated "strongly agree" with the statement. A Likert scale is a fixed response format to a questionnaire.

Incidence of Health Lifestyle Discussions

This measurement tool was developed for this study and based on the topics in the importance of health promotion tool. There was no established validity/reliability for this measurement tool. The tool asked the respondents how

Table 2

Items of the Incidence of Health Lifestyle Discussions

How often do you :

1. encourage clients who smoke to stop.
2. discuss alcohol use with clients.
3. discuss the importance of regular self breast exam.
4. recommend regular weightbearing exercise.
5. discuss the importance of regular mammograms depending on their age and history.
6. discuss limiting caffeine consumption with clients.
7. discuss some aspect of health promotion with the client at her office visit.
8. discuss sleep habits.
9. discuss a weight reduction program.
10. discuss limiting high fat/cholesterol foods with clients.

frequently they discussed 10 women's health promotion topics with their clients during an office visit (Table 2). Again, a Likert-type response used choices from one to four, one indicated always, two indicated often, three indicated sometimes, and four indicated never.

Barriers to Providing Health Promotion

The third part to the questionnaire, named Barriers to Providing Health Promotion, asked the respondents to rank seven barriers in order of significance to their practice. This instrument was developed for this study and is based on the experience of a ob/gyn nurse practitioner and an article by Henry, Ongle, and Snellman (1987). The barriers were ones that do not allow the primary care provider to discuss with

Table 3

Items to the Barriers to Providing Health Promotion

Shortage of time/ practice too busy
Insufficient reimbursement for existing healthcare services
Health promotion services available elsewhere
Inadequate facilities' resources for health promotion
Need for training in counselling clients in health promotion
Need for client motivation to change health behavior
I do not feel it is important to my practice of healthcare

their clients health promotion topics (Table 3). A blank line allowed the respondants to an eighth barrier if so desired.

Demographics

The final part of the questionnaire was comprised of demographic items (Appendices D & E). This part was the only section that was slightly different for each of the two sample groups, physicians and nurse practitioners. The groups differed in education and type of certification.

Data Collection

The questionnaires and a self-addressed envelope were mailed to the list of 250 randomly selected physicians and 150 randomly selected nurse practitioners. In addition, a cover letter was included with the questionnaire inviting participation in the study, explaining the purpose of the survey, and assuring the respondents that their participation was totally voluntary and that their anonymity would be maintained (Appendix G).

Data Analyses

As the questionaires were returned, they were examined for completeness, then the answers were coded and entered on computer coding sheets to facilitate ease in tabulating the data for statistical analyses. Descriptive statistics, means, ranges, frequencies, and percentages, were computed for each individual statement as well as for the sum of Part

II and Part III. The analyses were done separately for ob/gyn nurse practitioners, other nurse practitioners, all nurse practitioners, and ob/gyn physicians. In scoring Part IV, the reported rankings of the items were analyzed.

The Statistical Package for the Social Sciences (SPSS) was the program used to analyze the data from the code sheets. Descriptive statistics (frequency and percent occurance) were calculated for the demographic data. Correlations and *t*-test were used to analyze the remainder of the data. Probability values were calculated as an estimate of the likelihood the correlation occurred by chance.

Chapter 4

DATA ANALYSES AND INTERPRETATION

This study's purpose was to compare the differences between ob/gyn physicians and ob/gyn nurse practitioners in their reported importance of health promotion behaviors, frequency of discussion of health promotion topics, and perceived barriers to discussing health promotion topics. The study used health promotion behaviors, frequency of discussion of health promotion, and barriers to providing health promotion as dependent variables. The study's independent variable was type of provider: ob/gyn physicians and ob/gyn nurse practitioners. This study uses as its conceptual model, the Health Promotion Model, developed by Nola Pender (1987, p. 58).

This chapter is a summary of the data collected from the survey of ob/gyn physicians and nurse practitioners in the state of California. The results of this study will be described in four sections. The first section highlights the demographics of the subjects surveyed. The second section compares the importance of health promotion behaviors of the two sample groups. The third section compares the frequency of discussion of health promotion topics. The final section will compare these two sample groups on how they rated barriers to providing health promotion.

Demographics

The demographic data included such items as age, gender, number of years since graduation, certification, practice type, and practice size. In addition, data were obtained regarding the number of hours the practitioner worked per week in an ambulatory setting, number of patients seen in an ambulatory setting per day by the practitioner, and the number of other practitoners working in the same setting as the subject. A total of 101 subjects participated in the study.

Among the sample of 101 ob/gyn physicians and nurse practitioners, ages ranged from 29 to 75 years as shown in Table 4. The mean age for nurse practitioners was 41.6 years, and for physicians it was 47.0 years. Physicians were 82.6% male and nurse practitioners were 96.4% female, (Table 5). The number of years since the practitioner had graduated from his/her specialty program varied as shown in Table 6. The mean number of years since graduation for nurse practitioners was 7 and for ob/gyn physicians, it was 29 years.

In Table 7, the number of hours per week in an ambulatory setting for both ob/gyn physicians and nurse practitoners was approximately the same. The most frequent category was 31-40 hours per week for physicians (n=19, 41.3%) and nurse practitioners (n=28, 50.8%). Table 8 shows

the practice settings for nurse practitioners (private = 20%, HMO = 23.6%, and other = 54.5%) and for the physicians (private = 73%, HMO = 15.2%, and other = 10.9%).

Table 4

Subject Age Categories (N = 101)

Age	NP (n=55)		MD (n=46)	
	Frequency	Percent	Frequency	Percent
Under 30	1	1.8	1	2.2
30 - 39	25	45.4	13	28.2
40 - 49	18	32.6	11	23.9
50 - 59	6	10.8	13	28.2
60 - 69	4	7.3	7	15.2
70 - 79	0	0	1	2.2
Missing data	1	1.8	0	0
Total	55	100.0	46	100.0

Table 5

Sample Gender (N = 101)

Gender	NP (n=55)		MD (n=46)	
	Frequency	Percent	Frequency	Percent
Male	2	3.6	38	82.6
Female	53	96.4	8	17.4
Total	55	100.0	46	100.0

Note. Mean age for NP= 41.6, MD= 47.0.

Table 6

Years Since Graduation (N = 101)

Years	NP (n=55)		MD (n=46)	
	Frequency	Percent	Frequency	Percent
1 - 5	24	43.7	4	8.7
6 - 10	20	36.4	9	19.7
11 - 15	8	14.6	4	8.7
16 - 20	2	3.6	8	17.4
21 - 25	0	0	5	10.9
26 - 30	0	0	6	13.1
Over 30	0	0	9	19.6
Missing data	1	1.8	1	2.2
Total	55	100.0	46	100.0

Note. Mean years for NP= 7, MD=29.

Table 7

Hours Per Week In Ambulatory Setting (N = 101)

Hours	NP (n=55)		MD (n=46)	
	Frequency	Percent	Frequency	Percent
1 - 10	3	5.4	3	6.6
11 - 20	8	14.4	3	6.6
21 - 30	9	16.3	13	28.2
31 - 40	28	50.8	19	41.3
41 - 50	3	5.4	2	4.3
Over 50	0	0	6	13.1
Missing data	4	7.3	1	2.2
Total	55	100.0	46	100.0

Table 8

Practice Type (N = 101)

Type	NP (n=55)		MD (n=46)	
	Frequency	Percent	Frequency	Percent
Private	11	20.0	34	73.9
HMO	13	23.6	7	15.2
Other	30	54.5	5	10.9
Missing data	1	1.8	0	0
Total	55	100.0	46	100.0

Table 9

Practice Size (N = 101)

Size	NP (n=55)		MD (n=46)	
	Frequency	Percent	Frequency	Percent
Solo	11	20.0	15	32.6
Small group	17	30.9	14	30.4
Large group	23	41.8	16	34.8
Missing data	4	7.3	1	2.2
Total	55	100.0	46	100.0

The practice size, as described in Table 9, varied little between groups. The large group category was chosen most frequently by both physicians (41.8%) and nurse practitioners (34.8%).

Table 10

Importance of Health Promotion Topics (N = 101)

Topic	NP (n=55) M (SD)	MD (n=46) M (SD)	t	p
1. Eliminate smoking	3.7(.5)	3.8(.5)	-0.9	.399
2. Reduce caffeine	3.0(.6)	2.8(.6)	1.7	.093
3. Decrease calories	3.2(.5)	3.8(.5)	-0.8	.455
4. Aerobic activity	3.3(.6)	3.3(.6)	0.6	.531
5. Annual pap smears	3.5(.5)	3.7(.6)	-1.3	.189
6. Annual mammograms	3.6(.6)	3.9(.3)	-2.3	.023*
7. Reduce high fat	3.5(.5)	3.5(.5)	0.4	.653
8. Reduce stress	3.5(.5)	3.2(.6)	3.0	.003*
9. Sleeping 6-8 hours	3.2(.6)	3.0(.6)	1.5	.146
10. Monthly SBE	3.6(3.1)	3.7(.5)	-1.1	.276
11. Total score	34.7(3.1)	34.3(3.0)	0.6	.539

Note. * $p < .05$

** 1= strongly disagree to 4= strongly agree

Importance of Health Promotion

In Table 10, the two sample groups were compared on the subject of importance of health promotion using a two-tailed *t*-test. For this comparison, the nurse practitioner group contained all who responded to the questionnaire including all clinical specialties. The physician group included only the ob-gyn specialty. Statistically significant differences were found on the topics of annual mammograms and stress reduction. It was found that physicians (*M*= 3.9) agreed more often than nurse practitioners (*M*= 3.6) that women over the age of 50 should have annual mammograms. But with stress reduction behaviors, nurse practitioners (*M*= 3.5) agreed more often than physicians (*M*= 3.2) to its importance in health promotion.

To further analyze the reported importance scores in Table 10, the nurse practitioner sample was divided by clinical specialty (Table 11). A comparison of ob/gyn nurse practitioners and other nurse practitioners on items 5 and 6, annual pap smears and annual mammograms respectively, showed a statistically significant difference between ob/gyn nurse practitioners and other nurse practitioners. The ob/gyn sample was significantly higher on the two items from all topics which are particularly relevant to an ob/gyn practice.

Frequency of Health Promotion Discussions

With respect to frequency of health promotion

Table 11

Comparison of Ob/Gyn NPs and other NPs on Items 5 and 6 of Table 10 (N = 55)

Topic	Ob/Gyn NP (n=15) M (SD)	Other NP (n=40) M (SD)	t	p
5. Annual pap smears	3.9 (.3)	3.5 (.5)	3.2	.003*
6. Annual mammograms	3.9 (.3)	3.5 (.6)	2.4	.020*

Note. * p <.05.

discussions, nurse practitioners and physicians were compared with each other,(Table 12), using a two-tailed t-test. Again the nurse practitioner group included all clinical specialities who responded to the questionnaire. The physician group included only the ob/gyn specialty. Statistically significant differences were found on the topics of mammograms, sleep habits, and weight reduction. It was found that physicians (M= 1.3) more often discussed mammography with their patients than did nurse practitioners (M= 1.7). In the discussion of sleep habits, nurse practitioners (M= 2.7) often discussed sleep habits with their patients during office visits as opposed to physicians (M= 3.0) who sometimes discussed this subject. Finally, physicians (M= 2.3) often discussed weight reduction

Table 12

Frequency of Health Promotion Discussions (N = 101)

Topic	NP (n=55) M** (SD)	MD (n=46) M** (SD)	t	p
1. Stop smoking	1.3 (.6)	1.4 (.6)	-1.1	.283
2. Discuss alcohol	2.1 (.8)	2.3 (.7)	-1.2	.232
3. Self breast exam	1.6 (.9)	1.3 (.6)	1.8	.070
4. Recommend exercise	2.3 (.9)	2.4 (.7)	-0.3	.797
5. Mammograms	1.7 (1.0)	1.3 (.5)	2.5	.015*
6. Limiting caffeine	2.5 (.7)	2.7 (.7)	-1.5	.133
7. Health promotion	1.5 (.7)	1.5 (.7)	0.1	.969
8. Sleep habits	2.7 (.7)	3.0 (.6)	-2.2	.028*
9. Weight reduction	2.6 (.6)	2.3 (.6)	2.2	.030*
10. High fat	2.2 (.9)	2.3 (.7)	-0.2	.857
11. Total score	20.6 (4.7)	20.6 (3.7)	0.1	.935

Note. * $p < .05$.

** 1= always to 4= never.

with their patients in contrast to nurse practitioners (M= 2.6) who sometimes discussed this subject during the office visit.

Table 13 portrays a comparison of items 3, 5, and 7 between ob/gyn nurse practitioners and other nurse

practitioners. A statistically significant difference was noted between these two groups. Ob/gyn nurse practitioners reported a higher frequency of self breast exam, mammogram, and over all health promotion topics than nurse practitioners from other clinical specialties.

Table 13

Comparison of Ob/Gyn NPs and Other NPs on Items 3, 5, and 7 of Table 12 (N = 55)

Topic	Ob/Gyn NP (n= 15) M** (SD)	Other NP (n=40) M** (SD)	t	p
3. Self breast exams	1.1 (.4)	1.8 (1.0)	-2.6	.014*
5. Mammograms	1.1 (.4)	1.9 (1.1)	-2.7	.010*
7. Health Promotion	1.2 (.4)	1.6 (0.8)	-1.7	.041*

Note. *p < .05.

** 1= always to 4= never.

Frequency of Barriers to Health Promotion

A weighted score was computed for reported barriers to health promotion in the following way. Table 14 lists the seven questionnaire items. A ranking of most frequent (1) received 7 points, next most frequent (2) received 6 points, and so on through all 7 items. Then the total points for each item were added for all 101 questionnaires. The total

weighted scores are shown in Table 14. The analysis was a simple visual comparison. Both groups were similar in listing the most frequently encountered barriers. Both sample groups classified shortage of time (NP=1, MD=2) and the need for client motivation (NP=2, MD=1) as their most frequently perceived barriers to providing health promotion. Both groups listed not important to practice as the least frequent barrier.

Table 14

Frequency of Barriers to Health Promotion (N = 101)

Barrier	NP (n=55)		MD (n=46)	
	WS	Rank	WS	Rank
Shortage of time/Practice too busy	302	1	203	2
Need for client motivation	262	2	233	1
Inadequate facilites	195	3	149	4
Insufficient reimbursement	185	4	155	3
Need for training	175	5	125	6
Services available elsewhere	141	6	144	5
Not important to practice	56	7	49	7

Note. WS= weighted score.

Chapter 5

CONCLUSIONS AND RECOMMENDATIONS

Summary of Study

The purpose of this study was to determine whether differences existed between ob/gyn physicians and ob/gyn nurse practitioners in their reported importance of health promotion behaviors, frequency of discussion of health promotion topics, and perceived barriers to discussing health promotion topics. This chapter draws conclusions from the study and provides the reader with recommendations for further research.

This study used a cross-sectional survey design and a mailed questionnaire data collection method. The sample size included 101 ob/gyn physicians and nurse practitioners. Originally, the study methodology limited the population to ob/gyn physicians and ob/gyn nurse practitioners. Unfortunately, the nurse practitioner mailing list did not differentiate among specialties; therefore, the questionnaire was mailed to nurse practitioners in all specialties.

The findings demonstrated some statistically significant differences between physicians and nurse practitioners in the importance of health promotion topics, frequency of discussion of health promotion topics, and perceived barriers to discussing health promotion topics. With the original intent of this study to compare the differences between

ob/gyn physicians and ob/gyn nurse practitioners, there proved to be statistically significant differences only on a few items between the two groups on the three topics.

Hypothesis one was that ob/gyn nurse practitioners and ob/gyn physicians will report similar importance of health promotion topics that they discuss with patients (Table 10). For eight of the 10 responses, there were no statistically significant differences between nurse practitioners and physicians, but on the other two responses (annual mammograms and reduce stress), the data did show statistically significant differences between the two sample groups. Therefore, the hypothesis was rejected on eight items and supported on two items. One apparent reason for this finding was that the nurse practitioner sample included other specialties. A secondary analysis revealed that ob/gyn nurse practitioners ranked pap smears and mammograms higher than other nurse practitioners.

Hypothesis two was that ob/gyn nurse practitioners will report a greater frequency of discussion of health promotion topics than ob/gyn physicians (Table 12). The hypothesis is supported on only one item, sleep habits. On all other items, this hypothesis was rejected. In fact, data on weight reduction and mammograms show the reverse; physicians more frequently discussed these two topics than nurse practitioners.

Hypothesis three was that ob/gyn physicians will perceive different barriers to discussing health promotion topics than ob/gyn nurse practitioners. A statistical analysis was not done. However, Table 14 shows that they are similar but not the same. The top two barriers were the same for both groups, although shortage of time/practice too busy was ranked number one for nurse practitioners and ranked number two by physicians.

Recommendations for Health Promotion

Health practitioners, both nurse practitioners and physicians, need to recognize the importance of preserving the health of our population through health promotion. In order for this to occur we need to teach caregivers how and when to educate the population. Health insurance companies need to see the long term benefits to health promotion in dollars and cents of investment. If shortage of time is the major barrier to health promotion discussions by health care providers, perhaps reimbursement from insurance for health teaching could reduce the barrier to some extent.

The nurse has often been seen as an educator in her daily practice. The physician has been seen as the healer. When the role of nurse practitioner evolved, the best of both professionals was created. Yet, constraints of time and economics may be preventing nurse practitioners as well as physicians from providing health promotion education to their

clients.

Recommendations for Further Study

As with any recommendation for further study, replication of this study is encouraged. The researcher recommends that the study be limited to similar specialty groups among nurse practitioners and physicians.

When sampling it is recommended that a representative sample of the population be obtained. The population size of the ob/gyn nurse practitioners was small requiring the researcher to combine all clinical specialties in order to have an adequate comparison group. In addition, the study should be replicated in other areas since the geographic location of the sample may vary the responses.

Finally, an interview of physicians and nurse practitioners followed by an audit of their charts may increase the usefullness of the data in addition to that collected through an anonymous questionnaire. Respondents often have a proclivity to provide socially desirable answers.

Conclusion

This study found that there were differences between nurse practitioners and physicians in their behaviors and discussions of health promotion. Might there have been a difference if the study had been limited to only ob/gyn nurse practitioners as the researcher had originally intended?

Perhaps shortage of time and a busy practice were more important reasons than client motivation for physicians' and nurse practitioners' not discussing health promotion.

Increasing skills, resources, and reimbursement to primary care practitioners may improve the effectiveness of health promotion. More clients are being seen on "routine check-ups" than ever before, and this is the ideal opportunity to encourage health promotion. The need to focus on keeping individuals healthy has never been so apparent with the skyrocketing costs of health care.

References

References

Asmussen, R. (1986). The employer-purchaser impact on health care delivery and financing. Henry Ford Hospital Medical Journal, 34(4), 241-246.

Becker, M. H. (Ed.). (1974). The health belief model and personal health behavior. New Jersey: Charles B. Slack.

Brown, N., Muhlenkamp, A., Fox, L., & Osborn, M. (1983). The relationship among health beliefs, health values, and health promotion activity. Western Journal of Nursing Research, 5(2), 155-163.

Cogswell, B. E., Alusie, J. J., Bogdewic, S. P., Melton, J., & Shahady, E. J. (1985). Health care marketing-minicase. Journal of Health Care Marketing, 5(4), 51-57.

Curry, R. H. (1986). Health policy implications of health promotion and disease prevention for allied health. Journal of Allied Health, 15(4), 339-347.

Dunn, H. L. (1959). What high level wellness means. Canadian Journal of Public Health, Nov, 447.

Dunn, H. L. (1975). Points of attack for raising the level of wellness. Journal of the National Medical Association, 49, 223-235.

Frank-Stromborg, M. (1986). Health promotion behaviors in ambulatory cancer patients: fact or fiction? Oncology Nursing Forum, 3(4), 37-43.

Fried, R. A. (1987). The family physician and health objectives for the nation. Journal of Family Practice, 25, 296-302.

Gemson, D. H. & Elinson, J. (1986). Prevention in primary care: variability in physician practice patterns in new york city. American Journal of Preventative Medicine, 2(4), 226-234.

Henry, R. C., Ogle, K. S., & Snellman, L. A. (1987). Preventative medicine: physician practices, beliefs, and perceived barriers for implementation. Family Medicine, 19(2), 110-113.

Khoiny, F. E. (1987). The role of the nurse practitioner in developing wellness promotion programs for employees in acute care hospital settings. Nursing Administration Quarterly, 11(3), 67-71.

Kweskin, S. (October 15, 1979). [Interview with Stephen Lee Taller, MD] Focusing on the benefits of nps in primary care. Patient Care, 13(17), 194-212.

Lindberg, S. C. (1987). Adult preventative health screening: 1987 update. The Nurse Practitioner, 12(5), 19-41.

LoBionde-Wood, G. & Haber, J. (1986). Nursing Research: critical appraisal and utilization. St Louis: C.V. Mosby.

Mullen, P. D. & Katayama, C. K. (1985). Health promotion in private practice: an analysis. Family and Community

Health, 8(1), 79-87.

Office of Disease Prevention and Health Promotion, Public Health Service, and U.S. Department of Health and Human Services (1987). Strategies for promoting health for specific populations. Journal of Public Health Policy, 8(3), 369-423.

Orleans, C. T., George, L. K., Houpt, J. L., & Brodie, K. H. (1985). Health promotion in primary care: a survey of U. S. family practitioners. Preventative Medicine, 14, 636-647.

Pender, N. J. (1987). Health promotion in nursing practice. Norwalk, CT: Appleton-Lange.

Redeker, N. S. (1989). Health beliefs, health locus of control, and the frequency of practice of self breast-examination in women. Journal of Obstetrics, Gynecology, and Neonatal Nursing, 18(1), 45-51.

Rosen, M. A., Logsdon, D. N., & Demak, M. M. (1984). Prevention and health promotion in primary care: baseline results on physicians from the insure project on lifecycle preventative health services. Preventative Medicine, 13, 534-548.

Simons-Morton, D. G. & Simons-Morton, B. G. (1987). Health promotion and disease prevention: roles for the primary care physicians. Postgraduate Medicine, 81(8), 235-242.

Taylor, R. B., Ureada, J. R., & Devhan, J. W. (1982).

Health promotion: principles and clinical application. Norwalk, CT: Appleton-Century-Crofts.

The Nurses' Association of the American College of Obstetricians and Gynecologists & The American College of Obstetricians and Gynecologists. (1984). The obstetric-gynecologic nurse practitioner. Washington, DC.

Thibodeau, J. A. & Hawkins, J. W. (1989). Nurse practitioners: factors affecting role performance. Nurse Practitioner, 14(12), 47-52.

Valente, C. M., Sobal, J., Muncie, H. L., Levine, D. M., & Antlitz, A. M. (1986). Health promotion: physicians', beliefs, attitudes, and practices. American Journal of Preventative Medicine, 2(2), 82-88.

Walker, S. N., Volkan, K., Sechrist, K. R., & Pender, N. J. (1988). Health-promoting lifestyles of the older adults: comparison with young and middle-aged adults, correlates and patterns. Advance Nursing Science, 11(1), 76-90.

Wallston, K.A., Maides, S., & Wallston, B. S. (1976). Health-related information seeking as a function of health-related locus of control and health value. Journal of Research in Personality, 10, 215-222.

Wechsler, H., Levine, S., Idelson, R. K., Rohman, M., & Taylor, J. O. (1983). The physicians role in health promotion- a survey of primary care practitioners. The New England Journal of Medicine, 308(2), 97-100.

Zahnd, E. G., Coates, T. J., Richard, R. J., & Cummings, S. R. (1990). Counselling medical patients about cigarette smoking: a comparison of the impact of training on nurse practitioners and physicians. Nurse Practitioner, 15(3), 10-18.

Appendix A

Importance of Health Promotion

DIRECTIONS: This questionnaire contains statements regarding the importance of health promotion behaviors to you. Please respond to each item as accurately as possible, by circling the correct number.

1 - STRONGLY DISAGREE
2 - DISAGREE
3 - AGREE
4 - STRONGLY AGREE

It is very important to me that...	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
1. cigarette smoking be eliminated.	1	2	3	4
2. caffeine consumption be reduced.	1	2	3	4
3. excessive calories be decreased to maintain well being.	1	2	3	4
4. aerobic activity 3 times per week be maintained for wellness.	1	2	3	4
5. pap smears be obtained annually.	1	2	3	4
6. women over the age of 50 have annual mammograms.	1	2	3	4
7. high fat/cholesterol foods be reduced for good eating habits.	1	2	3	4
8. stress be reduced for a healthy lifestyle.	1	2	3	4
9. 6-8 hours of sleep a night is necessary for a healthy lifestyle.	1	2	3	4
10. women examine their breasts on a monthly basis.	1	2	3	4

Appendix B

Incidence of Health Lifestyle Discussions

DIRECTIONS: This questionnaire contains statements regarding how frequently you discuss health promotion topics with your clients. Please respond to each item as accurately as possible. Indicate by circling the correct number.

1 - ALWAYS
2 - OFTEN
3 - SOMETIMES
4 - NEVER

How often do you:	ALWAYS	OFTEN	SOMETIMES	NEVER
1. encourage clients who smoke to stop.	1	2	3	4
2. discuss alcohol use with clients.	1	2	3	4
3. discuss the importance of regular self breast exam.	1	2	3	4
4. recommend regular weightbearing exercise.	1	2	3	4
5. discuss the importance of regular mammograms depending on their age and history.	1	2	3	4
6. discuss limiting caffeine consumption with clients.	1	2	3	4
7. discuss some aspect of health promotion with the client at her office visit.	1	2	3	4
8. discuss sleep habits.	1	2	3	4
9. discuss a weight reduction program.	1	2	3	4
10. discuss limiting high fat/ cholesterol foods with clients.	1	2	3	4

Appendix C

Barriers to Providing Health Promotion

BARRIERS TO PROVIDING HEALTH PROMOTION

DIRECTIONS: Number the responses **1 thur 7** indicating <u>your</u> preception of barriers to health promotion.

1 = most frequent barrier

7 = least frequent barrier

_____ LACK OF TIME

_____ INSUFFICIENT REIMBURSEMENT

_____ SPECIALIZED SERVICES AVAILABLE ELSEWHERE

_____ INADEQUATE FACILITIES' RESOURCES

_____ LACK OF SKILLS TRAINING

_____ LACK OF PATIENT MOTIVATION

_____ LACK OF PROVIDER MOTIVATION

_____ OTHER_____

If you chose to add another barrier, please number 1 thur 8.

Appendix D

MD Demographics

MD DEMOGRAPHICS

Please complete the following:

Age_____

Sex:
Male _____ Female _____

Medical School:

Year of Graduation _____

Foreign Medical School Graduate
____ yes ____no

U.S. Medical School Graduate
____ yes ____no

Board Certification status:
____ yes ____no

Please check the appropriate response:

Practice type:

Private _____

HMO _____

Hospital-based _____

Practice size:

Solo _____

Small group
(2 - 4 MDs) _____

Large group
(> 4 MDs) _____

_____ Number of hours per week practicing in an ambulatory setting.

_____ Number of patients seen in the ambulatory setting by you in a typical work day.

_____ Number of midlevel practitioners (nurse practitioners) in your ambulatory setting.

Appendix E

NP Demographics

NURSE PRACTITIONER DEMOGRAPHICS

Please complete the following:

Age _____

Sex:
Male_____ Female _____

Nurse Practitioner School:

Year of Graduation _____

Method of obtaining NP license:

Certificate Program Graduate
____ yes ____no

Masters Program Graduate
____ yes ____no

NAACOG certification:

____ yes ____no

Please check the appropriate response:

Practice type:

Private _____

HMO _____

Hospital-based ____

Practice size:

Solo _____

Small group
(2-4 NPs)

Large group
(> 4 NPs)

_____ Number of hours per week practicing in an ambulatory setting.

_____ Number of patients seen in the ambulatory setting by you in a work day.

_____ Number of physicians in your ambulatory setting.

Appendix F

Research Approval from Human Subjects

Institutional Review Board

SJSU SAN JOSE STATE UNIVERSITY

A campus of The California State University

Office of the Academic Vice President • *Associate Academic Vice President* • *Graduate Studies and Research*
One Washington Square • San Jose, California 95192-0025 • 408/924-2480

To: Pamela M. Richard, Nursing
245 Rome Place
Hayward, CA, 94544

From: Charles R. Bolz
Office of Graduate Studies and Research

Date: May 29, 1990

As required by University policy, the Human Subjects Institutional Review Board has reviewed your proposed study entitled:

"Differing Health Promotion Behaviors and practicing Barriers to Health Promotion Between Physicians and Nurse Practitioners in the Practice of Ambulatory Obstetrics and Gynecology"

Our review has determined that your project will not be using people as human subjects, because your research is limited to the collection of professional opinions from professional workers. Therefore, you may proceed with this study without further review by the Human Subjects Institutional Review Board.

I, however, do caution you that whenever people participate in your research as human subjects, they should be appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity with regard to any and all data that may be collected from the subjects. If at any time a subject becomes injured or complains of injury, you must notify Dr. Serena Stanford immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information.

Please also be advised when people participate in your research as human subjects, each subject needs to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted.

If you have any questions, please contact Dr. Stanford or me at (408) 4-2480.

cc: Coleen Saylor, Ph.D.

Appendix G

Consent Letter

Dear Practitioner,

I need your help in conducting a study of health promotion behaviors and barriers for practitioners. The results of this study should identify some needs in the role of practitioners in health promotion.

Attached is a questionnaire asking you about your practice of health promotion. Would you please spend 15 minutes to complete this form and mail it to me before December 1, 1990.

You should be clear that your participation in this study is voluntary. Also, any information that could be identified with you will remain anonymous and could only be disclosed as required by law.

If you have any questions about this study, I would be happy to talk with you. I can be reached at 415-489-9390. I hope that you will find the time to help us understand better your medical needs.

Sincerely,

Pamela M. Richard
Graduate Student