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A CONTENT ANALYSIS OF WOMEN IN PHARMACEUTICAL ADVERTISEMENTS

Earlene A. Riser, MA December, 1987

Physicians' perceptions of their female patients impact the delivery of health care. An indirect measure of the most popular current and historical view of women is the manner in which they are portrayed in pharmaceutical advertisements. Drug companies have an interest in depicting women in ways that coincide with the consumer-physician's view. In the past, researchers have critized the stereotypical negative portrayal of women in the patient role. The purpose of this retrospective descriptive study was to determine if changes in the portrayal of women in pharmaceutical advertisements have taken place over the last two decades.

Five hundred and twenty three pharmaceutical advertisements were searched for the presence of an adult female patient depicted in a manner such that the setting, the physical activity, the physical appearance, the psychological appearance, the age range, the race, and the type of drug could all be determined and coded.

This study also examined the number of advertisements depicting women as appropriate recipients of medication. A content analysis of 143 advertisements featuring 157 women patients meeting the coding criteria was performed on a stratified random sample of three medical journals representing the target years of 1965, 1972, 1979, and 1985.

A chi-square test for significance was used with crosstabulation tables to record the frequency of each variable. The results showed significant changes in the area of frequency of females used in advertisements.

There were no significant changes in setting, physical activity, physical appearance, age range, race, or type of drug prescribed. There were significant shifts in the direction of portraying women as more unhappy.

The conclusion was drawn that although women were depicted less frequently in pharmaceutical advertisements, they were still negatively stereotyped. It was also concluded that women's roles may have continued to change and expand at a faster rate than the advertisers' or physicians' responses during the 20-year period.

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CHAPTER 1

INTRODUCTION

In ancient societies, patterns of acceptable interactive behavior between men and women were established. Out of these early interactions grew a system which specified that men take leadership roles in the home and market place, and women take subordinate roles (Lovell, 1981). Inherent in such a system of sexual stratification was that women depended upon men for economic care and physical protection. In ancient societies, this was thought to increase the chance for survival since men were stronger and leadership often required physical risk. Men were hunters and fighters and later negotiators in the market place. Women, accepting more sheltered tasks, were keepers of the homes and the children (Collins, 1971).

Although leadership no longer requires the same level of physical risk, early nonegalitarian separation of roles has been preserved in many modern economic and social arenas (Horner, 1972). An ancient manifestation of unequal relationships still operative is the right of one to give orders to the other. With few exceptions, "women take orders from men but do not give orders to them; hence only men can give orders to other men, and women can give

orders only to other women" (Collins, 1971, p. 5). In business and industry the top executive positions are still dominated by men as are those positions in religious institutions (Crocker & McGraw, 1984). The American Medical Association, exclusively male at its formation in 1847, is another example of a patriarchal system in which men still occupy the most powerful positions while relegating the subordinate ones to women (Fee, 1975).

Of particular interest to this study are the roles, both current and historical, adopted by physicians and patients as they interact within the health care system. The medical system replicates a family wherein the father-doctor, assisted by the nurse-wife-mother, ministers to the patient-child leaving the experience for the patient an infantilizing one (Stephenson & Walker, 1979).

In agreement, Feinbloom (1985) contended that in the past an unequal relationship existed between the doctor and patient, affecting the treatment orientation of both and further reinforcing traditional crisis-oriented health care. This relationship presents a problem because, according to the Boston Women's Health Collective (1970), such an orientation interferes with the ability to appreciate preventive and informed treatment and

encourages the acceptance of care only with illness.

Lovell (1981) claimed that such a system usually defined the actions of the subordinate female and, thereby, limited her growth by viewing her as less than equal with her physician and less responsible for her own health care. Growth in the patient-physician system requires that women be taught about their bodies and about preventive care. They can then present themselves to their physicians as informed persons who wish to stay healthy (Billings & Stoeckle, 1977; Boston Women's Health Collective, 1970).

Research Question

While women's positive attitudes about themselves contribute to improvement in their care, the physicians' views of women are of great importance. These views are shaped by the popular images of women in the pharmaceutical media (Prather & Fidell, 1975). This study will attempt to determine the most popular current and historical portrayals of female patients in pharmaceutical advertisements. Seidenberg (1971) believes that these images are stereotypical and, therefore, problematic. Since physicians' attitudes toward women are shaped by the way females are depicted in pharmaceutical advertisements, he warned that "the inordinate use (quantitatively) of

pictures of women as sick or disturbed can create an image of them not only as the weaker sex, but the sicker sex" (p. 22).

A precedent for such portrayals was found in the popular media (Busby, 1975; Courtney & Lockeretz, 1971; Courtney & Wipple, 1974; Kain & Luster, 1982; Silverstein & Silverstein, 1974). Earlier images intimated that women were men's domestic adjuncts, did menial chores to the exclusion of having careers, were dependent on men, were submissive, were sex objects, and were unintelligent. According to Stimson (1977) a physician is potentially exposed to more than 1,300 pharmaceutical advertisements every month. Frequent images of women as sick, create an unequal power relationship between the physician who is dispensing health care and the female patient who is the recipient of it. This imbalance is operationalized by the medical profession "assigning women childlike characteristics and the physician godlike ones" (Weiss & Meadow, 1979, p. 110).

This research assessed not only portrayals of women in pharmaceutical advertisements, but it examined for changes over time in the role of female patients.

Seidenberg (1971, 1974) reasoned that such role changes could be assessed in advertisements since drug companies

must be particularly sensitive to the characterization of female patients in such a way that the physician can relate to the advertisement and, therefore, to the drug. The economic health of a drug company can depend upon a visual representation of women in the patient role that is compatible with physicians' perceptions and expectations. In a study rating the importance of drug advertisements, 73% of physicians rated advertisements in medical journals as somewhat or very important as sources of drug information (Prather & Fidell, 1975).

If the physician does not feel that the drug enhances or reflects his or her socially-endorsed role with the patient, then it is likely the drug will not be prescribed. These advertisements serve as visual representations of the most popular medical view of women at any one time in history. It is also recognized that advertisements not only reflect the view of the advertiser (Kain & Luster, 1982), but that a serious attempt must be made by the company to describe the physicians' views as well.

In view of the seriousness of past crisis-oriented medical care reinforced by the depiction of women in childlike patient roles and of physicians in "godlike" roles, it is the contention of this study that current

research is required to determine if negative sexual stereotyping of women continues into the 1980s. This study attempted to assess the current and historical portrayals of women patients and to determine if these portrayals showed a change over time, as Feinbloom (1985) contended they have. The pharmaceutical advertisement, a social artifact, was used as a visual gauge in determining the most popular physician-endorsed and physician-influencing characterizations of women.

Sample

A retrospective view of change over time in the portrayal of women was assessed by sampling pharmaceutical advertisements in randomly selected issues of three nonspecialty medical journals. Nonspecialty journals are those that would appeal to a physician without regard to a particular area of medical expertise. Therefore, such a journal might be of equal interest to a psychiatrist as well as a gynecologist.

Included in the sample population was one issue from each journal from each of the following years: 1965, 1972, 1979, and 1985. Due to unavailability of advertising data in 1965, the 1967 issue of Medical Aspects of Human
Sexuality was used. A random number table (Babbie, 1983)
was used to obtain a random selection of numbers which

would correspond to the months in a year. The first five numbers obtained while moving to the left across the table were 10, 7, 6, and 5. These determined that the October, 1967; July, 1972; June, 1979; and May, 1985 issues of Medical Aspects of Human Sexuality would be used in the sample population. The next four numbers obtained were 3, 5, 5, and 6. They determined that the March, 1965; May, 1972; May, 1979; and June, 1985 issues of Medical Times would comprise the sample population. The June, 1985 issue was not available, and the next number moving left on the random number table was a 5. Therefore, the May, 1985 issue of Medical Times was selected. The last numbers obtained from the table were 8, 1, 2, and 6. As a result, the August, 1965; January, 1972; February, 1979; and the June, 1985 issues of Medical World News were selected for inclusion in the sample population.

Although it was the purpose of this study to detect change rather than specific causes of it, the target years of 1965, 1972, 1979, and 1985 were chosen because they represented the very earliest years of the women's movement as well as those years when a more mature movement could have increasingly impacted the health care industry. Formation of health maintenance organizations, tightening of controls by insurance companies on third

party payment, and depressed economic conditions in large sections of the United States are examples of social and economic phenomenon that might also have effected changes in the attitude of physicians toward their patients.

Each advertisement making reference to women patients by showing at least the adult female face was coded by recording the setting in which she was portrayed, her physical activity, physical appearance, psychological appearance, age, race, and type of drug advertised.

The setting variable had three categories. They were "in the household," "out of the household," and "undetermined." The physical activity variable included four categories. These were "work," "leisure," "health care," or "inactive/decorative." Physical appearance was judged to be either "neat" or "sloppy." Psychological appearance was categorized as "happy," or "unhappy." The variable, age, was described by three range categories to include "adult" years from 19 to 44, "middle age" years from 45 to 64, and "aged" from 65 years to death. Race was coded as "Caucasian," "Black," "Hispanic," "Oriental," or "other." The category "other" would mean any race other than the four already mentioned. Finally, type of drug was divided into the "psychoactive" or "nonpsychoactive" categories. A frequency count was made

of the percentage of advertisements containing women as compared to the total number of advertisements appearing in all journal issues in all years.

Design

This retrospective descriptive study permitted the analysis of the manifest or visible surface content of drug advertisements in order to determine how women were characterized. Using a random number table (Babbie, 1983), one issue of three nonspecialty medical journals was selected for each of the years 1965, 1972, 1979, and 1985. All advertisements in each of the 12 randomly selected journal issues (4 years X 3 journals) featuring at least the face of a female adult patient was coded. From this stratified random sample, each woman in each advertisement was coded separately. Although more than one woman appeared in an advertisement, each adult female patient was individually coded. Some nurses were shown to be assisting physicians or other patients. Female nurses were not coded as they were not displayed in the patient role.

The variables which included setting, physical activity, psychological appearance, physical appearance, age range, race, and type of drug determined the visual aspects that were recorded. This method provided 156

advertisements for analysis. Medical Aspects of Human Sexuality, Medical Times, and Medical World News were surveyed because they address general medical issues without requiring knowledge of a particular specialized field of medicine. Even though each medical specialty has its own journals, all physicians, without regard to specialty, would be likely to read the above journals. Another important reason for choosing these publications was the availability of advertising data.

Unlike many journals whose advertising pages were removed during the binding process prior to the 1970's, these journals retained their advertisements as early as 1965. There was an exception in that Medical Aspects of Human Sexuality did not retain its advertisements until 1967. Therefore, 1967 will be the first year analyzed for that journal. A chi-square statistic was used with crosstabulation tables to assess whether differences in the portrayals of women at four points in time were statistically significant (Jendrek, 1985).

In summary, a measure of the change over time in the historical and current most popular characterization of female patients was studied through the analysis of the manifest content of their portrayal in drug advertisements.

Assumptions

- Pharmaceutical advertisements accurately portray
 the current acceptable and expected view of the female
 patient by the reader-physician.
- 2) Current and culturally acceptable portrayals of women can be characterized through analysis of the setting, physical activity, physical appearance, psychological appearance, age range, race, type of drug prescribed, and number of advertisements that depict women.
- 3) It is possible to determine, through the observation of pharmaceutical advertisements, the acceptable medical and social views with regard to appropriate characterization of women.

Variables

In order to analyze the data, independent and dependent variables were identified. The independent variable was time divided into four target years.

Dependent variables were setting, physical activity, physical appearance, psychological appearance, age range, race, drug type, and number of advertisements depicting women.

Hypotheses

This study tested eight hypotheses at the .05 level of significance:

- 1) There are no significant differences over time when specified pharmaceutical advertisements are coded for the setting in which the adult female patient is portrayed.
- 2) There are no significant differences over time when specified pharmaceutical advertisements are coded for the physical activity in which the adult female patient is involved.
- 3) There are no significant differences over time when specified pharmaceutical advertisements are coded for the physical appearance of the adult female patient.
- 4) There are no significant differences over time when specified pharmaceutical advertisements are coded for the psychological appearance of the adult female patient.
- 5) There are no significant differences over time when specified pharmaceutical advertisements are coded for the age range of the adult female patient.
- 6) There are no significant differences over time when specified pharmaceutical advertisements are coded for the race of the adult female patient.

- 7) There are no significant differences over time when specified pharmaceutical advertisements are coded for type of medication prescribed for the adult female patient.
- 8) There are no significant differences over time in the frequency of advertisements that depict women in order to describe their products.

A confidence level of .05 was set. This level indicated that 95% of the time the expected frequency corresponds to the actual frequency of women being portrayed in the ways specified by the variables. Conversely, there was a 5% possibility that the actual results were obtained by chance. Because multiple comparisons were made in this study, the alpha level was adjusted downward to apply a more stringent criterion. The result was essentially the application of the .01 level of confidence.

Operational Definitions of Terms

1) <u>Setting</u> was defined by three categories: "in the household," "out of the household," and "undetermined."

The appropriate category was chosen according to the visual clues that described the environment in which the female patient was portrayed.

- 2) Physical activity was defined by four categories:
 "work," "leisure," "health care," and
 "inactive/decorative." The appropriate category was
 chosen using visual clues that described the physical
 activity in which the female patient was engaged.
- 3) Physical appearance was defined as either "neat" or "sloppy." The appropriate category was chosen according to visual clues that described the physical appearance of the female patient.
- 4) <u>Psychological appearance</u> was defined as "happy," or "unhappy." Visual clues in pharmaceutical advertisements dictated the appropriate category choice.
- 5) Age was defined by three age range categories.

 They were: "adult" from ages 19 to 44, "middle age" from ages 45 to 64, and "aged" from 65 years and over. The appropriate category choice was made according to visual clues indicating the age of the female patient.
- 6) Race was coded using "Caucasian," "Black,"
 "Hispanic," "Oriental," and "other" as categories. Visual
 clues in the pharmaceutical advertisements dictated the
 appropriate category choice.
- 7) <u>Drug type</u> was categorized as either "psychoactive" or "nonpsychoactive." Appropriate category choice was made according the manner in which the female patient was

portrayed and according to the caption clues.

- 8) Role is the recurrent pattern of behavior by which individuals fulfill a function (Gurman & Kniskern, 1981).
- 9) <u>Gender Role</u> is a set of functionally interdependent, culturally patterned relations involving duties and personal rights between social persons (Lopata & Thorne, 1978).
- 10) System is a set of objects together with the relationships among the objects and among their attributes. An example is a dyadic system which explains behavior based on the interactions between two persons (Broderick & Smith, 1979).

Theoretical Framework

The doctor-patient dyad is an important one in American culture, and can be explained as interactional within the general systems approach. Although there are many variations within the systems framework, the work of Bertalanffy (1969), reputed to be the "father" of systems "theory" as it is interpreted by Broderick and Smith (1979) was used to support the contentions of this study. Drawing upon another variation of the systems approach, family process work (Haley, 1963; Watzlawick, Weakland, & Fisch, 1974) was used to introduce the concept of reciprocity in interacting units. The work of Ferreira

(1981) provided additional support in that it expanded upon the concept of role maintenance through homeostasis. Broderick and Smith (1979), with some acknowledgement of its broad scope, use Hall and Fagan's definition of a system. "A system is a set of objects together with relationships between [or among] the objects and between [or among] the attributes" (p. 112).

The Concept of Roles in a System

In this study, the system is a dyad composed of two individual units, or objects. They are the physician and the female patient. The health care community serves as a proximal environment surrounded and impinged upon by the larger social and economic culture. In this system, as is common with all systems, its members will have increased interaction as they act out their perceptions of the appropriate physician and patient roles. Even though the system is defined in terms of the "here and now," present interactions are directed by past memories, traditions, and attitudes of both the physician and patient.

Therefore, the past is acted out in the present. Roles can be flagrantly inappropriate, even counterproductive, yet as long as all members subscribe to them, they are difficult to challenge.

Broderick and Smith (1979), in their explanation of the important concept of role acquisition in systems, recognized that members "adopt a standardized set of positions or roles" (p. 113). Stephenson and Walker (1979) and Fee (1975) contend that the role of physician and patient replicates the middle class family either as physician-husband interacting with patient-wife or as physician-father parenting a patient-child. These roles are maintained through a homeostatic mechanism. It operates in a system by pressing participants into the "maintenance of certain forms of equilibrium among members" (Ferreira, 1981, p. 106). It is the homeostatic mechanism to which all members of a system contribute and try to maintain. The mechanism sustains the identified roles of the participants.

The Concept of Feedback in a System

If the identified roles become counterproductive, then it is the task of the healthy system to resist homeostasis and activate mechanisms for making adjustments. Ludwig Von Bertalanffy (1969), who developed general systems "theory," believed that living organisms were open systems which maintained themselves (and changed themselves) with continuous output to and feedback from the environment. Elaborating on the concept of input and

output, Broderick and Smith (1979) explained:

A system may be characterized as having feedback if it has the ability to perceive its own output at one point as input as some subsequent point. A system's capability to monitor its own progress toward a set goal, to correct and to elaborate its response, and even to change its goals depends upon the complexity of its feedback structure. A system without such a capability is intrinsically static. (p. 115)

Feedback can originate and operate between members of a system, or it can be stimulated by environmental demands outside the system. Both sources of feedback activation are present in the physician-patient relationship. This study predicted that the dyadic system has experienced metamorphosis over the last 20 years because the input from the larger environment held that it was no longer appropriate to play "dominant-submissive" roles. If women internalized this message, stimulated by information from the women's movement (Weiss & Meadows, 1979) and by the resulting women's health movement (Fee, 1975), then it can influence the feedback between female patients and physicians.

Broderick and Smith (1979) delineated four levels of feedback. Level 1 is simply input being discharged as output, and output once again entering the system as input. The process is circular although it can spiral upward or downward in a deviating amplifying or dampening configuration.

Level 2 introduces a standard, policy, or criterion that must be met and that adds structure to the output such that the spiraling process does not become extreme enough to destroy the system. There is also the advantage in Level 2 of having a variety of "rules of transformation" or response options which can be applied to input as needed.

Level 3 feedback would apply to the phenomenon that occurs when persons change traditional roles with regard to each other, making it necessary to negotiate, learn, and adopt new ones. This level is activated when a system receives new input requiring changes in a relationship for which there are no rules. New relational rules between patient and physician and between the dyad and the surrounding environment can be acquired in a process called morphogenesis. Morphogenesis is the generation and application of new rules within the system. Cultural input impinging upon the physician-patient dyad may

present a need for the generation of new rules. Level 4 is the dramatic reorientation of units within a system which are interesting but not applicable to this study.

The family process literature, consisting of therapeutic applications of the general systems approach, focused upon the concept of reciprocity when defining a system as a set of interacting units wherein one part affects the behavior of the other(s) (Haley, 1963; Watzlawick et al., 1974). Applying this definition, each member of the physician-patient dyad will have a reciprocal effect on the other (Weiss & Meadow, 1979). Hoffman (1971) says that the effect can be measured by each according to the feedback one receives from the other member of the dyad, and feedback will, in turn, shape the responses in the next transaction.

The Effects of Reciprocity and Feedback

If patients are encouraged by the women's movement to take a more responsible role in their own health care by educating themselves about their bodies, about medications, and about preventive health measures, then they are no longer playing the traditional "submissive" role. Physicians cannot and need not play the "authoritarian" role if there is no one to play its counterpart. If, in the last two decades, women have

become more successful in assuming greater responsibility for their health care, then the physician must respond in less parental and more egalitarian ways. Bertalanffy (1969) asserted that since a system behaves as a whole, change in any one part of a system will result in change in the entire system. It is never easy for one member of a dyad to allow the other a more equal role if that has not been their previous way of relating. A great deal of time and number of negotiations are required to implement a new relational configuration.

As patient feedback prompts change in physicians' treatment philosophies with regard to women, then changes in the portrayals of women in the pharmaceutical advertisements might be required to correspond with physicians' new views. Kantor and Lehr explained that there is a "bounding" process in systems that serves to keep a level of system purity. Any goals or policies that are not in harmony with the larger system's goals are filtered out. In this case, the goal is to provide quality medical care to women who require egalitarian relationships with their caretakers. Any examples of unequal relationships in health care would create a state of dissonance within the system and, as a result, be gradually eliminated.

Seidenberg (1971, 1974) contended that physicians are influenced by the pharmaceutical advertisements portraying women. Drug advertisements also reflect the current most popular attitudes of physicians toward women. This study assumed physician endorsement of advertisements because the pharmaceutical companies market their products to physicians. The company must describe the drug and its uses in ways which the reader-physician finds most appropriate. If women are depicted in ways that are incongruent with the physician's perception of the "proper" portrayal, then the advertisement would not be a good vehicle for the sales of the product. The financial success of the drug company depends upon its ability to visually communicate the most popular medical views held by doctors. Changes in the dyadic relationship, facilitated by the generation of new rules, would be reflected in the advertisements in which women are portrayed.

According to systems theoretical perspective,
physicians and their female patients assume reciprocal
roles as they interact within the health care system.
Changes in the role of one participant automatically
alters the role of the other. Changes in the roles of the
system can be assessed through the study of visually

depicted portrayals of women in pharmaceutical advertisements (Seidenberg, 1974).

Summary

This was an exploratory study which examined the current and historical portrayals of female patients at four points in time. It assessed if changes had occurred over time in the drug advertisements of three nonspecialty medical journals. Eight hypotheses were tested at a .05 level of significance. A content analysis was conducted by coding and comparing the frequencies of eight variables and their categories.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

The characterization of female patients in the health care setting, their portrayal in pharmaceutical advertisements over the past two decades, and the reader-physician's attitude toward women that such portrayals represent (Seidenberg, 1971) are addressed in the literature review. One will note digressions to an earlier era of medicine, but these will be made for purposes of historical comparison rather than for review.

Early Attitudes In Medicine

The Victorian era, with its requirement of modesty at all costs, left females in the precarious position of being unable to discuss their gynecological problems with their physicians (Blake, 1965; Smith-Rosenberg & Rosenberg, 1973). Physicians, in an effort to do their work within the existing moral codes, sometimes resorted to extreme measures. An Alabama physician practicing in the mid 1800s suggested that female patients be anesthetized to overcome embarrassment and pain during the gynecologic examination (Weaver, 1984). Examples such as the previous one, coupled with the growing need for further training in midwifery, prompted women to

begin to apply to medical school. They contended that women physicians would be less threatening to female patients.

Before men became important in medicine, women, in accordance with earlier American and European tradition, exercised their healing arts. Women were midwives and general practitioners who practiced medicine based on information passed by spoken word and example from mother to daughter. During this time, it was considered obscene for a man to deliver a baby (Thompson & Thompson, 1980). Yet, in 1847, with the formation of the exclusively male American Medical Association, the philosophy was reversed. It became obscene for a woman to deliver a baby. Since most physicians were male and most of their patients were female, speculation regarding the most appropriate way to view the feminine gender became the subject of much study.

Attitudes Toward Normal Functions of Womanhood

According to a historical review of the literature by Ehrenreich (1974), the most normal functions of womanhood were to be seen as illnesses. Ehrenreich quoted Dr. W. C. Taylor from his book, <u>A Physician's Counsel To Women in Health and Disease</u>, published in 1871, to illustrate the typical belief of the day:

We cannot too emphatically urge the importance of regarding these monthly returns as periods of ill health, as days when the ordinary occupations are to be suspended or modified...Long walks, dancing, shopping, riding, and parties should be avoided at this time of month invariably and under all circumstances...Another reason why every woman should look upon herself as an invalid once a month is that the monthly flow aggravates any existing affection of the womb and readily rekindles the expiring flames of disease. (p. 284)

An important note concerning a woman's social class was the belief that class placement had an effect upon how physically frail she was thought to be. The above commentary was probably aimed at the upper class women who did indeed attend parties and dances and had time and money to shop and ride. The working-class woman could reasonably "work 10 to 16 hours a day in sweat shops and factories and as household servants - whether they were pubescent, menstruating, pregnant, or menopausal" (Ehrenreich, 1974, p. 617).

Another popular belief was that intellectual endeavors and a healthy uterus were mutually exclusive. Dr. Edward Clark (1873) of Harvard University noted:

"Higher education might literally cause women's uteruses to atrophy" (Ehrenreich, 1974, p. 619). Additionally, most diseases of unknown origin were thought to be the result of a malfunctioning womb. In 1869, Dr. M. E. Dirix wrote:

Thus, women are treated for diseases of the stomach, liver, kidneys, heart, lungs, etc; yet in most instances these diseases will be found, on due investigation, to be, in reality, no diseases at all, but merely the sympathetic reactions or the symptoms of one disease, namely, a disease of the womb. (p. 23-24)

Modern Views of Medical Practitioners

With the passage of more than a century, one would expect that attitudinal changes would have accompanied the great technological changes in medicine. Yet, in some instances, the view of women remained basically unaltered. In the gynecological text books of this century, the matter was once again addressed. Gardiner (1966) spoke of a woman's need to be approved by "an authoritarian figure into whose care she has placed completely herself and her baby-to-be" (p. 342). Wilson stated "The traits that compose the core of female personality are feminine narcissism, masochism, and

passivity" (Weiss & Meadows, 1979, p. 110). While the female patient was seen as passive and dependent, the physician was characterized as rather more splendid. Russell said, "If, like all human beings, he, the gynecologist, is made in the image of the Almighty, and if he is kind, then his kindness and concern for his patient may provide her with a glimpse of God's image" (Weiss & Meadows, 1979, p. 110).

Physician Patient Relationships

In response to feminist writings of the 1970s the characterization of women in relationship with their physicians was critically examined. Most found that troubled women were viewed negatively to the degree that their treatment was affected (Levine, Kamin & Levine, 1974; Rice & Rice, 1973). Stephenson and Walker (1979) described the therapeutic relationship between psychiatrist and female patient as "superior-subordinate" and replicating the middle class marriage by reinforcing women's dependency on the authority and knowledge of males" (p. 9).

According to Fee (1975), radical feminist writers reported that they experienced the medical profession as yet another system which replicated the partiarchal pattern established in the family. In this view, the

patient played the part of the child rather than that of the middle class wife that Stephenson and Walker (1979) depicted in their marriage metaphor.

The doctor-father runs a family composed of the nurse (wife and mother) and the patient (the child). The doctor possesses the scientific and technical skills and the nurse performs the caring and comforting duties; these roles, of course, replicate relations within the patriarchal family. Visiting a doctor is indeed an infantilizing experience. (p. 403)

Dependence upon the authority of the psychiatrist was reinforced through guilt. In a critique of psychotherapy, Rice and Rice (1973) offered that the theories of Freud which explained children's psychological and social problems such as delinquency, mental retardation, dwarfism, depression and affectionless psychopathology cited maternal deprivation as causal. Psychoanalytic tradition was criticized for thwarting the attempts by the wife and mother to individuate by working outside the home (Voth, 1977). These women were accused of having castrated their families through their strivings for paying jobs. Additionally, dependency was fostered by the

participation of both the physician and woman patient in the view that normal stages of development, such as menstruation, pregnancy, coping with child rearing, and menopause were not normal but signs of illness (Zola, 1972).

Physician bias may have begun in medical school.

Howell (1974), a female physician drawing upon her own medical training, remembered that the process of professionalization included learning the "approved" attitude about one's patients. The message delivered was that women are of little value. Such stereotypical views of women created problems "because women are involved in so many physician-patient encounters, medical school teaching of attitudes about women is of major importance in determining the quality of health care services delivered" (p. 304).

Effects of Negative Stereotyping

Negative stereotypes brought from early training and reinforced by the media's portrayal of women negatively effected the patient's satisfaction with the doctor-patient relationship and ultimately with the quality of health care. If she had negative feelings about her physician and could not fully discuss her sexual concerns with him/her, then her health care needs

were not fully addressed. In a study of 75 community college female students and faculty members who completed a questionnaire exploring their attitudes toward gynecologic procedures, their physicians, and the discussion of sexual concerns, it was found that 85% reported negative feelings toward the pelvic examination (anxiety, vulnerability, humiliation, and dehumanization). Negative feelings toward the physician were expressed by 41%. As many as 72% would not discuss sexual concerns with their physicians. Eighty-seven percent of the participant's recommendations addressed themselves to the doctor-patient relationship rather than procedural matters (Weiss & Meadows, 1979).

Negative stereotypes of patients may have a profound impact on some clinical decisions. In 1982, Najman, Klein and Munro reported a study in which the patient's gender was a relevant factor in treatment decisions made by the physician. The records of 52 couples who used physicians in a group practice were examined for treatment of five complaints. The researchers were interested in any differences in diagnostic efforts expended by the doctors. For all five complaints (back pain, headaches, dizziness, chest pain, and fatigue) men received more extensive diagnostic efforts.

Women felt the family practitioner did not have the time, understanding or experience to talk about their problems. In an exploratory study designed to discern women's impression of their experience as patients, Broverman, Broverman, Clarkson, Rosenkrantz, and Vogel (1970) interviewed 25 women. One woman said, "I feel that, essentially, when a doctor prescribes a pill for me, it's to put him out of my misery" (p. 3).

Shuy (1976) was concerned about communication barriers established when patients have a negative impression of their physician. According to a questionnaire administered randomly to 105 patients in the waiting rooms of various clinics and private medical practices during a two-week period, physicians were thought to be: of superior I.Q., busy, information withholders, sometimes unfriendly, inhibiting, overpaid, condescending, patronizing, and impersonalizing. Shuy was concerned about the quality of health care delivered in such an atmosphere of mistrust. It was his opinion that poor communication was compounded by the use of medical jargon at the expense of, rather than for the benefit of, some female patients.

According to these opinions and studies, if women patients accepted a submissive position in relationship

to a dominant physician, they were viewed as playing traditional roles in the medical community. However, a nonegalitarian role brought with it a certain bias. Women had been viewed negatively to the degree that their treatment had been affected. They did not warrant the same diagnostic efforts as did men. They were more often viewed as mentally ill, and, accordingly, prescribed more psychoactive drugs. Women were found to feel that they could not talk with their doctors about sexual concerns. They were inclined to feel dissatisfied with their medical care in general and with the physician-patient relationship in particular.

Attitudes Expressed in Pharmaceutical Advertisements
An important visual arena in which modern stereotypes
of patients were displayed was in the pharmaceutical
advertisements. The vehicle, through which this study
will evaluate the image of women as considered
appropriate by the reader-physician, will be a sampling
of the drug advertisements as they appeared in selected
medical journals over the past 20 years. The literature
indicated that the female patient stereotypes were
visually presented in advertising layouts.

Traditionally, the physician was shown to be "the white-coated male....who is always dependable and available" (Offenbach, 1982, p. 103). In contrast, Stephenson and Walker (1979) found:

Drug advertisements are aimed at bad woman characteristics, with the goal of returning her to good woman status. Women are depicted as irrational, emotional, weak-willed, self-centered, unable to fulfill their duties as wife or mother, and shrewish." (p. 7)

Sexual Biasing in Advertising

Treatment modes were thought to be influenced by pharmaceutical advertisements. Stresses emanating from normal life stages were often treated with psychotropic drugs which had been highly advertised in the medical journals to which the physicians subscribed (Mintz, 1968; Seidenberg, 1971). Stephenson and Walker (1979), in a review of the literature, expressed concern over the fact that two and one-half times more psychotropic drugs were prescribed for women than for men. They suggested that role stress for women was not sufficient to explain increased usage. They concluded that physician bias and drug industry advertising may be the determining factors.

Prescribing drugs was one way to resolve a crisis rather than to encourage personal growth and problem-solving skills without drugs. They maintained that the doctor's use of drugs may appear to be compassionate and problem solving, but that the drug companies may benefit more than the women themselves. Seidenberg (1974) was aware that drug companies feel they can sell more products to physicians if women are portrayed as troublesome and in need of medication. He found demeaning images of women indicating they were bad tempered, nagging, vain, selfish, and "irrationally" unhappy with their role in life.

In 1974, an advertisement in Medical World News
began by suggesting the use of Bellergal Spacetabs (a
sedative): "When you see the same patient over and over
with functional complaints...consider Bellergal
Spacetabs. Most doctors have a number of patients who
complain of vague symptoms such as menopausal
disorders...premenstrual tension...palpitations... G.I.
disorders...'nervous stomach'...recurrent throbbing
headache" (p. 12F). Advertisements tended to encourage
doctors to diagnose somatic complaints as psychosomatic
and to dismiss them with a prescription for a sedative
(Ehrenreich, 1974). Sir Derrick Dunlop, chairman of the

Ministry of Health's Committee on Safety on Drugs as cited in Seidenberg (1971) noted: "The average physician cannot make a critical evaluation of a drug; he has only his impression, conditioned by pharmaceutical claims. This leads to prescription by suggestion rather than information" (p. 23).

Researchers found sexual biasing in advertising when 23 psychiatrists responded to a questionnaire packet containing xerox copies of all pages from the December 1973 issue of The American Journal of Psychiatry that advertised psychotropic drugs. Seventy-four percent of the respondents felt these specialty ads might influence physicians to perpetuate the trend of thinking that women are weaker, sicker, and crazier. They felt, also, that those advertisements might, "imprint the male physician with the impression that mental illness and femaleness go together" (McRee, Corder, & Haizlip, 1974, p. 1274). The study also detected a tendency of drug companies to use young attractive females to sell their products. Responding physicians felt the reason more women than men were used in advertisements was that a young female was more likely to catch the eye of the reader than would a male patient, and that such layouts reflected that physicians were comfortable with the depiction of a

male-oriented culture in which women were subservient and vulnerable to illness.

Another study found age and activity or pose of the portrayed female to represent an advertising trend.

Between 1968 and 1972 medical advertisements were studied from randomly selected issues of four widely circulated journals. The findings showed sex differences in the ages of male and female patients depicted. Women were shown as younger than men portrayed in the age range between 20 and 40 years (Prather & Fidell, 1975). These researchers replicated the findings in the McRee study in the number of advertisements that showed, "young, attractive female patients in poses which might be considered alluring or provocative and with captions which might be considered suggestive" (p. 25).

Analyzing Advertisements

Techniques for analyzing advertising varied.

Courtney and Whipple (1974) were interested in role stereotypes found in popular magazines appealing to the general readership. In 1974, Courtney and Whipple, in response to feminists' criticisms of the characterization of women's roles in advertising, compared the results of four studies which analyzed women in television commercials. Their comparative analyses showed that men

and women are presented in their traditional roles.

Women were not shown to be capable of performing responsibly outside the home. Women were not presented in types of occupations outside the home that reflected their true role in the labor force; they were shown to be young and worried about various household dilemmas. The conclusion was drawn that advertisers were not reflecting the role changes that had taken place for women.

The above study represented follow-up research by Courtney and Lockeretz (1971). In the earlier work, the researchers were interested in the occupational and nonworking roles of men and women as portrayed in advertisements. They coded 312 advertisements for product type, number and sexes of all adults, and their occupations or activities. Their occupational categories included high-level business executives, professional, entertainer/professional sports, sales/semi-professional, nonprofessional white collar, blue collar, and soldiers/police. They found that women were rarely shown working outside the home. Over half of the working women were entertainers and none were professional or business executives. Nonworking roles were classed as family, recreational, and decorative. Women were seen as primarily decorative when they were without men in the

male world. For example, they were shown as attractive and elaborately dressed in order to sell an automobile. These categories were used as guidelines in the present study when describing the setting and physical activity variables.

The study of changes in the number of males and females depicted in pharmaceutical advertisements (Krupka, 1985) found that there was a trend toward graphic representations with the use of fewer human subjects. Through the examination of 5,016 advertisements, a relationship was discerned between the leading drugs advertised and the leading prescriptions filled. It was concluded that advertising does have some effect on the prescribing behavior of practitioners. Their findings suggested that great investments in advertising were necessary in order to achieve high levels of sales for such drugs as Valium, which does not have a clear-cut ameliorative effect on a specific physiological condition. The present study looked at changes over time in the number of women present in pharmaceutical advertisements.

Silverstein and Silverstein (1974) studied the portrayal of women in television advertising as a source

of visual data. They employed several coding criteria which appeared as variables in this study. Those included occupational/leisure roles (translated into setting and physical activity for current use), physical appearance, and psychological appearance. A judgment of physical appearance was made by employing the two indicators "neat" and "sloppy." Sloppiness and, by process of elimination, neatness, included: improperly fitted clothing, incorrectly worn clothing, uncombed hair, improperly applied makeup. These categories and indicators were adopted for use in the current study.

Prather and Fidell (1975) coded for sex and type of drug to assess if women were more often prescribed drugs than were men. When coding the content of four leading American medical journals, they discovered that advertisements for psychoactive drugs more often pictured women while men were shown using nonpsychoactive preparations. Similarly, a variable with "psychoactive" and "nonpsychoactive" drug categories was used in the current study but with a broader time span of 20 years as opposed to that of five years.

Assessments of psychological appearance have been made on the basis of gestures, posture, activity (Fast, 1971; Scheflen, 1973; Silverstein & Silverstein, 1974),

and facial expression (Eckman, Levenson, & Friesen, 1983; Scheflen, 1973; Silverstein & Silverstein, 1974). Judgments were made as to whether the actors appeared happy or unhappy. Eckman et al. (1983) studied facial prototypes of six target emotions by instructing the exact facial muscles the subjects were to manipulate in order to produce the emotions. Two of these emotions included happiness and unhappiness. They found it was possible to identify emotions by studying the facial expressions of photographed (videotaped) faces. researchers found additional indicators for happiness to including erect posture, smiling, whistling, singing, or dancing. Expressions such as frowning, grimacing, and crying were judged as unhappiness, as were looks of frustration and disappointment characterized by slumped shoulders, bowed heads, the appearance of shouting, pounding fists, kicking, or throwing objects. All such indicators were coded as "happy" or "unhappy" when found in drug advertisements.

Scheflen (1973) also used visual data to discern emotional states. He considered body language such as gestures, facial expression, and posture to be one of the multiple forms of metacommunication. Gestures were communicative body movements formed by the hands, face,

feet, or even the whole body. His studies revealed that "people do learn to perform facial displays in order to indicate their attitude about an ongoing event. Facial displays can be used as a type of commentary or metacommunicative behavior" (p. 125). He believed that facial expression could indicate how a communicated message was received. For example, "a listener may look down or away with a blank expression when his complimentary partner speaks. Behavior like this seems to cast doubt on the credibility of the statement" (p. 117).

Body posture, according to Fast (1971), "can signal depression, excitement, courtship, anger, or even an appeal for help. The entire body is to body language as speech organs are to the spoken language" (p. 109).

Scheflen concurred when noting "the way people hold their bodies has a great deal to do with what is going on when two or more people get together" (1973, p. 183). For example, congruent postures convey agreement or emotional support between persons. Fast (1971) contended that a standing posture in the presence of a seated person indicates power. He felt there was a definite order of dominance in social hierarchy that manner and bearing defined. He used the example of the patient as the

lowest order and the nurse with the medical doctor as the highest social rank. As Silverstein and Silverstein (1974) note, these evaluations are at times subjective. The use of a pilot study in the current research attempted to compensate for the subjective element by determining the degree of interrater reliability among coders, and thus the efficacy of such criteria. The results of the pilot study are found in Chapter 3.

Summary

The research regarding the most socially endorsed role, historical and current, of the female patient had been conducted by both medical and non-medical scholars who maintained that women have been negatively characterized. They noted that women have been asked to play subordinate roles such as "dependent wife" or "sick child" when participating in the medical system. The result was that women were viewed as "sickly", but they did not warrant the diagnostic efforts as did men with the same complaints. The literature held that many normal somatic complaints have been viewed as evidence of emotional problems. Consequently, the quality of the physician-patient relationship suffered as did the quality of health care. Pharmaceutical advertisements were one gauge by which the current most "popular"

physician attitude about women could be studied. It had been documented that these advertisements simultaneously reflected the physician's attitude while influencing it.

Although drug literature depicted women as predominately young, attractive, sometimes provocative, irrationally unhappy, possessing poor coping skills requiring treatment with psychoactive drugs, it was not alone in its negative characterization of women. Smith (1975) asserted that women are socialized to think of themselves in the ways that men have formulated for them. These views are reinforced by the stereotypical depiction of women in the popular media. Examples were seen in magazines, and television commercials which showed predominately Caucasian women in traditional household work roles as opposed to professional paid positions in the workforce. It was the contention of this study that current research was necessary to determine if negative sexual stereotyping of women patients continued into the mid 1980s.

CHAPTER 3

METHODOLOGY

Introduction

The purpose of this study was to examine both the current and historical portrayals of women patients in three non-speciality medical journals. Pharmaceutical advertisements were used as a visual means to assess these popular social and medical views about women at four specific time periods within a 20-year time span. Additionally, this retrospective descriptive study described and compared changes in popular views of women between the years 1965 (1967 issue of Medical Issues In Human Sexuality), 1972, 1979, and 1985. These time parameters were chosen because they encompassed some important cultural changes such as the women's movement, tightening of controls by insurance companies on third party payment, the formation of health maintenance organizations, and depressed economic conditions. It is possible that any one of these conditions could have effected changes in the attitude of physicians toward their patients.

Selection of Sample

Pharmaceutical advertisements from randomly selected issues of each of three nonspecialty medical publications and representing the years 1965 (1967), 1972, 1979, and 1985 were coded for analysis. Medical Aspects of Human Sexuality, Medical Times, and Medical World News were chosen for their wide readership without regard to specific specialty, and because the advertisements were bound with these journals as early as 1965. An exception was Medical Aspects of Human Sexuality which did not retain its advertisements until 1967. Medical journal advertisements were not included in most other bound issues until the early 1970s.

It was assumed that advertisements in these publications would represent the portrayal of women most accepted by a crosssection of physicians. The random selection of one target issue per journal per time period was made using a random number table (Babbie, 1983). This procedure enabled the researcher to avoid the bias that might be introduced from the conscious or unconscious selection of certain issues (Babbie, 1983). A total of 12 journal issues were coded. An analysis of all advertisements in each of the 12 issues that depicted at

least an adult face of a female patient were included in the sample population. Advertisements that displayed only sex-stereotyped pharaphernalia (e.g., a purse or wallet) or that displayed only non sex-distinguishing body parts (e.g., a heart, lung, or liver) were not used in this study. Cartoon drawings of women were used if they met the other criteria for inclusion in the study.

Instrumentation

A content analysis of drug advertisements was conducted by coding the manifest content of each picture depicting adult female patients. Classification by sex was made according to accompanying photographs or sketches. A head with distinguishable facial features was the minimum requirement for inclusion in the sample population.

Once gender requirements were met, the advertisements were coded according to the setting in which each adult female was depicted, the physical activity, the physical appearance, the psychological appearance, the age, the race, and the type drug advised. All variables and their categories are described in the "Operational Definition of Terms" section of Chapter 1 and justified in the "Analyzing Advertisements" section of Chapter 2. The setting variable had three categories: "in the household,"

"out of the household," and "undetermined." The physical activity of the adult depicted included four categories:

"work," "leisure," "health care," or

"inactive/decorative."

Physical appearance was judged to be either "neat" or "sloppy." Psychological appearance was categorized as "happy," "unhappy," or "undetermined." Other variables included age with categories of "adult" (19-44 years), "middle age" (45-64 years), and "aged" (65 years and over). Race was coded as "Caucasian," "Black," "Hispanic," "Oriental," or "other." Finally, whether the recommended drug was "psychoactive" or "nonpsychoactive" was classified.

Procedures

A random sample of drug advertisements was coded for the frequency of eight variables and their categories. Prior to the main study, a pilot study to determine the appropriateness of the specific attributes assigned to the variables was conducted (McGuigan, 1968). This procedure allowed for the inclusion of new codes and the deletion of former codes until at least an 80% level of interrater reliability had been achieved. After a final selection of codes had been made, the advertisements pertaining to the main study were coded for analysis.

Pilot Study

A pilot study was conducted in the summer of 1987 to determine the reliability of the coding process and to establish the degree to which the work of one coder positively compared to that of another. It was particularly important to this study to know that descriptions of the variables and their categories would be interpreted in a predictable manner by most coders.

Nine graduate students in a statistics class read the variable descriptors as listed in the "Operational Definition of Terms" section of Chapter 1. Each participant independently coded the women patients depicted in 10 pharmaceutical advertisements. Previously, the researcher had coded the same 10 advertisements.

Levels of interrater reliability for the variables were obtained as follows: setting ("in the household," "out of the household," or "undetermined") = 90%; physical activity ("work," "leisure," "health care," or "inactive/decorative") = 86%; physical appearance ("neat" or "sloppy") = 87%; psychological appearance ("happy" or "unhappy") = 92%; race ("Caucasian," "Hispanic," "Black," "Oriental," or "other") = 96%; drug type ("psychoactive" or "nonpsychoactive") = 100%; and age range ("19-44," "45-64," and "65+") = 83%.

A standard of 80% was established as an acceptable level of interrater reliability before the pilot study. Although all variable descriptors met that standard, some useful suggestions from the participants were incorporated into the main study. For example, when coding the advertisements that depict women, the captions were found to be useful in making category judgments.

The three category descriptors for the setting variable were chosen because of their prior use in a study by Kain and Luster (1982). Specific changes in the code definitions involved adding "the presence of household furnishings" to the other indicators in order to facilitate a category choice. Some examples of family settings which would warrent the choice of "in the household" included women who were shown on the lawn with a home in the background, or women who were shown inside a home with furniture, kitchen appliances, or young children in the background. Women were sometimes shown to be engaged in family-centered activities. Women feeding babies, women playing games with children in front of a fireplace, or women mowing the lawn were noted.

"Out of the household" settings included those which did not picture the home or a home activity. The pilot study revealed working in a job setting in which the home

was not depicted, being present in a church, a restaurant, and a doctor's office were common "out of the household" settings. "Undetermined" was chosen when there were no visual clues that allowed either of the other two categories to be chosen.

The code categories of "work," "leisure," "health care," and "inactive/decorative" were chosen because of their use in a previous study by Courtney and Lockeretz (1971). "Work" was defined as any setting, clothing, or other paraphernalia which suggested an occupation. Although these were not coded separately, some of the work roles commonly seen in the pilot advertisements were household worker, business executive, nurse, teacher, waitress, or entertainer. "Leisure" activities were judged to be present if the subject was engaged in travel, playing sports, social activities, or was at rest. "Health care" was defined by the depiction of a patient in a medical setting such as a physician's office or a hospital. The wearing of a hospital or examination gown and the using or applying of medicine or medical equipment was also defined as a "health care" activity.

The physical appearance variable was defined by judging the patient to be either "neat" or "sloppy." Sloppiness and, by process of elimination, neatness,

included the following descriptors used by Silverstein and Silverstein (1974): improperly fitted clothing, incorrectly worn clothing, uncombed hair, and improperly applied makeup. The pilot study yielded some additional characteristics of neatness. These included the presence of clean, pressed, and stylish clothing as appropriate to the activity. Also, neatly trimmed hair and evidence of proper dental care was judged to be "neat." It was also found to be necessary to add to the "physical appearance" definition. Originally, the definition of "neat" required the depiction of clothing that was properly fitted and correctly worn, combed hair, properly applied makeup, and evidence of good dental hygiene. It became clear during the coding process that a woman involved in a sports activity may have uncombed hair or soiled clothing, but she still exhibited an appropriate physical appearance based on her activity.

Psychological appearance was categorized as "happy" or "unhappy." These were assessed on the basis of posture, gestures, activity, and facial expression (Ekman, Levenson, & Friesen, 1983; Silverstein & Silverstein, 1974). Indicators for happiness included erect posture, smiling, whistling, singing, dancing, clear bright eyes, and the absence of unhappy or neutral facial

characteristics as judged by popular Western notions of those emotions (Scheflen, 1973). Those expressions not judged as "happy" were labeled as "unhappy." Neutral facial countenances, as well as, those expressions such as frowning, grimacing, and crying, were judged as unhappiness (Fast, 1971). Also, looks of frustration and disappointment characterized by slumped back or shoulders, bowed head, the appearance of shouting, pounding fists, kicking, or throwing objects were judged as "unhappy" (Scheflen, 1973; Silverstein & Silverstein, 1974).

The age variable encompassed three age range categories. They were: "adult" from ages 19 to 44, "middle age" from ages 45 to 64, and "aged" from 65 years and over. These age delineations were used because they replicated those used to describe the content of medical literature when it is classified by age range (National Library of Medicine, 1986).

The race variable was coded using "Caucasian,"

"Black," "Hispanic," "Oriental," and "other" as coding categories. Facial features, hair and skin color, and costumes were used as differentiating clues. The drug type variable was categorized as either "psychoactive" or

"nonpsychoactive." "Psychoactive" drugs were those which affect the mood, the behaviors, or the intellect (Prather & Fidell, 1975).

Analysis of Data

Content Analysis (Babbie, 1983) was used to analyze the numerical data gathered from the coding procedure. Content analysis is a research technique for the objective, systematic, and quantitative description of the content of communication. Content analysis is a phase of information-processing in which communication content is transformed, through objective and systematic application of the categorization of variables, into data that can be summarized and compared (Holsti, 1969). Content analysis is the application of the scientific method to documentary evidence.

The unit of analysis was the individual female patient in each advertisement. Chi-square, an inferential statistic, was employed to test the hypotheses. This test assessed whether the relationships were statistically significant, but it did not indicate whether a relationship was weak, strong, or perfect. This test was used because the dependent variables are nominal (setting, physical activity, physical appearance, psychological appearance, race, age range, drug type, and number of

advertisements depicting women) and the independent variable (time) having four categories was measured in independent samples (Jendrek, 1985). The independent variable was paired with each of the eight dependent variables. As a result, the interaction between year and each of the other variables as impacted by gender could be studied. Significance was set at the .05 level of confidence.

Summary

A stratified random sample of drug advertisements at four specified periods in history, drawn from three major nonspecialty medical publications, was used to determine physicians' current and historical socially and medically-endorsed portrayals of women patients as they were reflected in pharmaceutical advertisements. The content of each was coded according to eight dependent variables (setting, physical activity, physical appearance, psychological appearance, race, age range, type of drug, and number of advertisements depicting women) and one independent variable (time). A content analysis was used to organize the data, and the chi-square determined the acceptance or rejection of the null hypotheses.

CHAPTER 4

FINDINGS

Introduction

A statement of the problem, the theoretical framework, the design and methodology, and a review of pertinent literature was presented in the previous chapters. This chapter will describe the actual sample, present the findings for all hypotheses, and justify the decisions concerning the acceptance or rejection of each null hypothesis.

The Sample

Pharmaceutical advertisements were drawn from randomly selected issues from the following three nonspecialty medical journals: Medical Aspects of Human Sexuality, Medical Times, and Medical World News. A random number table was used to determine the particular issue that was used. Each journal was represented in the target years of 1965 (1967 for Medical Aspects of Human Sexuality because previous issues were not bound with advertisements), 1972, 1979, and 1985. Of 523 advertisements represented in the 12 journal issues, 143 advertisements depicted a total of 156 adult female patients that met the coding criteria for this study. Female nurses were not coded, since the focus of this work

was to study the current and historical views of women patients as endorsed by physicians. There were two cartoon caricatures which were coded because they met the standard for inclusion in the sample.

An adult female head with distinguishable facial features was the minimum requirement for inclusion in the sample population. Any adult female who was acting upon the advice of her physician either by administering prescription drugs to herself or to her children, or who was depicted through picture or caption to be a possible beneficiary of a pharmaceutical product was analyzed. Advertisements which showed graphic representations of women whose facial expressions were not discernible, which displayed only sex-stereotyped pharaphernalia (e.g., a purse or wallet), or depicted only nonsex-distinguishing body parts (e.g., a heart, lung, or liver) were not coded.

The format varied from small black and white advertisements of less than 1/4 page to colorful glossy four-page advertisements. The smaller less colorful advertisements tended to be displayed in the earlier target years, while the lengthy more colorful ones were frequently seen in 1979 and 1985 issues.

Twelve advertisements were repeated at least once in the same year throughout the three journals. On two

occasions, an advertisement was duplicated in the same journal issue. These were coded only the first time they appeared in any year or journal issue.

Analysis of Hypotheses

The present study examined the relationship of time to setting, physical activity, physical appearance, psychological appearance, race, and age range of adult female patients. It also examined the type of drug depicted with women as the intended recipient as well as the total number of advertisements using women.

Hypothesis 1: Relationship of Setting to Time

The first hypothesis examined for changes over time in the setting in which women were portrayed in pharmaceutical advertisements. Previous studies indicated that women were traditionally associated with the home. The null hypothesis was as follows:

Hypothesis 1: There were no significant differences over time when specified pharmaceutical advertisements were coded for the setting in which adult female patients were portrayed.

Table 1 presents the results of the analysis.

Table 1

The Relationship of Setting to Time

	Time					
	P. Control of the Con				Row	
Setting	1965	1972	1979	1985	Total	
In Household	10	14	11	5	40	
Row %	25.0	35.0	27.5	12.5	25.5	
Col. %	27.8	22.6	30.6	21.7		
Out of Household	11	30	33	9	61	
Row %	18.0	49.2	18.0	14.8	38.9	
Col. %	30.6	48.4	30.6	39.1		
Undetermined	15	18	14	9	56	
Row %	26.8	32.1	25.0	16.1	35.7	
Col. %	41.7	29.0	38.9	39.1		
Column	36	62	36	23	157	
Total %	22.9	39.5	22.9	14.6	100.0	

Chi-square (6, \underline{N} = 157) = 4.80, \underline{p} >.05

Three categories, "in the household," "out of the household," and "undetermined" described the setting variable. Table 1 shows no significant differences over time or between setting categories. The chi-square test for changes in the relationship between setting and time was not significant at the .05 level of confidence. The null hypothesis was retained.

Relationship of Physical Activity to Time

The second hypothesis examined for changes over time in the physical activity in which female patients were engaged. Four categories were delineated to include "work," "leisure," "health care," and "inactive /decorative." The literature was critical of advertisements which had previously depicted women in inactive/decorative roles. It was expected that a response to the criticism would be to show women as less decorative and engaged in a significantly greater number of work, leisure or health care activities in 1985 than in 1965. The null hypothesis was as follows:

Hypothesis 2: There were no significant differences over time when specified pharmaceutical advertisements were coded for the physical activity in which the adult female patients were portrayed.

Table 2 presents the results of the analysis.

Table 2
Relationship of Physical Activity to Time

Physical Activity		Time				
	Activity	1965	1972	1979	1985	Total
Work		10	9	6	6	31
	Row %	32.3	29.0	19.4	19.4	19.7
	Col. %	27.8	14.5	16.7	26.1	
Leisure	9	13	13	12	5	43
	Row %	30.2	30.2	27.9	21.7	27.3
	Col. %	36.1	21.0	33.3	21.7	
Health	Care	2	15	12	5	27
	Row %	7.4	55.6	18.5	18.5	17.2
	Col. %	5.6	24.2	13.9	21.7	
Decorat	tive	11	25	13	7	56
	Row %	19.6	44.6	23.2	12.5	35.7
	Col. %	30.6	40.3	36.1	30.4	
	Column	36	62	36	23	157
	Total	22.9	39.5	22.9	14.6	100.0

Chi-square (9, \underline{N} = 157) = 11.26, \underline{p} >.05

The chi-square test for changes in the relationship between physical activity and time was not significant at the .05 level of confidence. The null hypothesis was retained.

Table 3
Relationship of Physical Appearance to Time

	770	Time					
Physical Appea		1972	1979	1985	Row		
Neat	30	43	30	20	123		
Row %	24.4	35.0	24.4	16.3	78.3		
Col. %	83.3	69.4	83.3	87.0			
Sloppy	6	19	6	3	34		
Row %	17.6	55.9	17.6	8.8	21.7		
Col. %	16.7	30.6	16.7	13.0			
Column	36	62	36	23	157		
Total	22.9	39.5	22.9	14.6	100.0		

Chi-square (3, N = 157) = 5.01, p > .05

Relationship of Physical Appearance to Time

The third hypothesis examined for changes in the relationship between physical appearance which was defined by "neat" and "sloppy" categories and time. Previous research was critical of the depiction of women as sloppy. The expectation was that if the criticism was responded to there would be fewer examples of sloppy women in 1985 than in 1965. The hypothesis stated in the null form was:

Hypothesis 3: There were no significant differences over time when specified pharmaceutical advertisements were coded for the physical appearance of adult female patients.

The chi-square test for changes in relationship between physical appearance and time was not significant at the .05 level of confidence. The null hypotheses was retained.

Hypothesis 4: Relationship of Psychological Appearance to Time

Hypothesis 4 examined for changes over time between psychological appearance with categories of "happy" and "unhappy" by time. Previous studies were critical of the depiction of women as unhappy,

Table 4

Relationship of Psychological Appearance to Time

		Time				
	3				Row	
Psych. Appear.	1965	1972	1979	1985	Total	
Нарру	17	15	20	10	62	
Row %	27.4	24.2	32.3	16.1	39.5	
Col. %	47.2	24.2	55.6	43.5		
Unhappy	19	47	16	13	95	
Row %	20.0	49.5	16.8	13.7	60.5	
Col. %	52.8	75.8	44.4	56.5		
Column	36	62	36	23	157	
Total	22.0	39.5	22.9	14.6	100.0	

Chi-square (3, \underline{N} = 157) = 11.01, p<.05

and the expectation was that the content of advertisements would change in response to the objections.

The null hypothesis was as follows:

Hypothesis 4: There were no significant differences over time when specified pharmaceutical advertisements were coded for the psychological appearance of adult female patients.

The chi-square test for changes in the depiction of psychological appearance over time was significant at the .05 level of confidence. Because of multiple comparisons, the alpha level was adjusted downward to apply a more stringent criterion. The actual result was p=.0117. The null hypothesis was rejected.

Hypothesis 5: Relationship of Age Range to Time

Hypothesis 5 examined for change over time in the age range of women as they were depicted in pharmaceutical advertisements. Ages 19-44 were defined as "adult," ages 45-64 were defined as "middle aged," and ages 65 and over were defined as "aged." The literature was critical of past depictions of a preponderance of pretty adult women in an age range of 20 to 40 years.

Table 5
Relationship of Age Range to Time

		Time				
					Row	
Age	1965	1972	1976	1985	Total	
19-44 years	25	37	20	14	96	
Row S	26.0	38.5	20.8	14.6	61.1	
Col.	8 69.4	59.7	55.6	60.9		
45-64 years	10	18	11	5	44	
Row S	22.7	40.9	25.0	11 4	28.0	
Col.	% 27.8	29.0	30.6	21.7		
65+ years	1	7	5	4	17	
Row	5.9	41.2	29.4	23.5	10.8	
Col.	% 2.8	11.3	13.9	17.4		
Colum	nn 36	62	36	23	157	
Tota	22.7	39.5	22.9	14.6	100.0	

Chi-square (6, \underline{N} = 157) = 4.43, \underline{p} >.05

The null hypothesis was as follows:

Hypothesis 5: There were no significant differences over time when specified pharmaceutical advertisements were coded for the age range of adult female patients.

The chi-square test for changes in the relationship between age range and time was not significant at the .05 level of confidence. Table 5 presents the results of the analysis. The null hypothesis was retained.

Hypothesis 6: Relationship of Race to Time

The sixth hypothesis examined for changes over time in the depiction of women patients by race.

Differentiating categories were "Caucasian," "Black,"

Hispanic," "Oriental," and "other." Previous studies have shown that very few minorities were used in advertising in order to enhance product sales. The expectation was that if the prior research was impactful upon advertising policy, there would be a significantly greater percentage of minority women depicted in 1985 advertisements than in 1965 advertisements. The null hypothesis was as follows:

Hypothesis 6: There were no significant differences over time when specified pharmaceutical advertisements were coded for the race of adult female patients.

Table 6
Relationship of Race to Time

	Time				
	-				Row
Race	1965	1972	1979	1985	Total
Caucasian	36	59	33	23	151
Row %	23.8	39.1	21.9	15.2	96.2
Col. %	100.0	95.2	91.7	100.0	
Black	0	3	3	0	6
Row %	0	50.0	50.0	0	3.8
Col. %	0	4.8	8.3	0	
Column	36	62	36	23	157
Total	22.9	39.5	22.9	14.6	100.0

Chi-square (3, N = 157) = 4.51, p > .05

The chi-square test for changes in the relationship between race and time were not significant at the .05 level of confidence. Table 6 presents results of the analysis. The null hypothesis was retained.

Hypothesis 7: Relationship of Drug Type to Time

The seventh hypothesis examined for changes over time in the type of drug prescribed to female patients.

Categories were "psychoactive" and "nonpsychoactive".

Previous studies have criticized drug companies for the large number of advertisements associated with psychoactive drugs. The expectation was that a significantly smaller percentage of psychoactive drugs would be advertised for prescription to women in 1985 than in 1965. The null hypothesis was as follows:

Hypothesis 7: There were no significant differences over time when specified pharmaceutical advertisements were coded for type of drug prescribed the adult female patients.

The chi-square test for changes in the relationship between drug type advertised and time was not significant at the .05 level of confidence. Table 7 presents the results of the analysis. The null hypothesis was retained.

Table 7
Relationship of Drug Type to Time

	Time				
					Row
Drug Type	1965	1972	1976	1985	Total
Psychoactive	12	13	13	9	47
Row %	25.5	27.7	27.7	19.1	29.9
Col. %	33.3	21.0	36.1	39.1	
Nonpsychoactive	24	49	23	14	110
Row %	21.8	44.5	20.9	12.7	70.1
Col. %	66.7	79.0	63.9	60.9	
Column	36	62	36	23	157
Total	22.9	39.5	22.9	14.6	100.0

Chi-square (3, N = 157) = 4.16, p > .05

Hypothesis 8: Relationship of Frequency of Advertisements Portraying Women to Time

Hypothesis 8 examined for changes over time in the number of advertisements depicting women as appropriate recipients of their products. It was expected that advertisers sensitive to criticism would respond by using fewer women in the advertisement content. Previous studies have been critical of the disproportionate number of advertisements portraying women in them. The null hypothesis was as follows:

<u>Hypothesis 8</u>: There were no significant differences over time in the number of advertisements depicting female patients.

The chi-square test for changes in relationship between number of advertisements portraying women and time was significant at the .05 level of confidence. Because of multiple comparisons, the alpha level was adjusted downward to apply a more stringent criterion (p<.002). The null hypothesis was rejected. There was a significant decrease over time in the percentage of advertisements that showed women.

Table 8

Relationship of Frequency of Advertisements

Portraying Women to Time

		Time		
Journal	1965	1972	1979	1985
Med. A. Human Sex.				
Total Ads	18	43	39	56
Total With Women	9	22	12	4
% With Women	50	51	30	7
Medical Times				
	50	98	36	24
	12	24	12	4
	24	24	33	16
Medical World News				
	55	45	39	20
	13	18	9	2
	24	40	23	10

Chi-Square (6, \underline{N} 523) = 172.08. \underline{p} <.05

Summary

A total of 523 advertisements were searched for adult female patients that met the coding criteria. Hypotheses 1 through 7 were tested using the 157 women found in 143 advertisements. Hypothesis 8 was tested by examining the frequencies of advertisements featuring women and by examining proportional variations as they occurred over time. As a result of data analysis, null Hypotheses 1, 2, 3, 5, 6, and 7 were retained. They stated that there would be no significant differences over time in the setting, physical activity, physical appearance, age range, race of the portrayed female patient, or in the type of drug prescribed. Hypotheses 4 and 8 were rejected for changes in psychological appearance over time and total number of advertisements over time portraying women in order to sell products. A discussion of findings will be provided in Chapter 5.

CHAPTER 5

DISCUSSION

Overview of Study

The present retrospective descriptive study examined for change over time in the portrayal of women patients when depicted in pharmaceutical advertisements. Role changes can be assessed in advertisements because the economic health of the drug industry depends upon the accurate visual representation of women in patient roles. Advertisements represent the most popular physician endorsed view of female patients at any one time in history. While pharmaceutical advertisements are endorsed by physicians, they also influence physicians.

There has been serious criticism leveled at past crisis-oriented medical care reinforced by the depiction of women in negatively stereotyped patient roles. The current research was attempted to determine if such stereotypes continued into the mid 1980s.

The general systems theoretical framework defined the relationship between physician and patient to be interactional. The dyadic system is defined as the reader/consumer physician interacting with the female patient as depicted in pharmaceutical advertisements. The health care community served as a proximal environment

surrounded and impinged upon by the larger social and economic culture. Characteristics of a system included the adoption or assignment of a standardized set of roles for each member (Broderick & Smith, 1979), the maintenance of roles through an operative homeostatic mechanism that served to press participants into system-defined behaviors (Ferreira, 1981), and at times, system activation in the presence of irrational role assignments (Bertalanffy, 1969).

Eight hypotheses were tested in regards to the theoretical premise that feedback can originate and operate between members of a system, or it can be stimulated by environmental demands outside the system (Broderick & Smith, 1979). Both sources of feedback activation could be present in the physician-patient relationship. This study predicted that the dyadic system had experienced entropy over the last 20 years. This prediction was based on the assumption that women had begun to take more responsibility for their health care, and because the input from the larger social and economic environment held that it was no longer appropriate for physicians and patients to play their respective "dominant-submissive" roles.

Hypotheses 1 though 7, stated in the null form, predicted that there would be no significant differences over time in the portrayal of women in drug advertisements in terms of their setting ("in the household," "out of the household," and "undetermined"), physical activity ("work," "leisure," and "inactive/decorative"), physical appearance ("neat" and "sloppy"), psychological appearance ("happy" and "unhappy"), age range ("adult 19-44 years," "middle aged 45-64 years," and "aged 65 years and over"), race ("Caucasian," "Black," "Hispanic," "Oriental," and "other"), and type of drug prescribed ("psychoactive" and "nonpsychoactive"). Hypothesis 8 predicted there would be no significant differences in the frequency of advertisements using women to promote their products.

Applying a stratified random sampling technique, 523 advertisements in each of three selected medical journals during 1965, 1972, 1979, and 1985 were examined for the presence of female patients. Hypotheses 1 through 7 were tested using the 157 women found in 143 advertisements that met the criteria for inclusion in the study. Hypothesis 8 was tested by examining the contents of all 523 advertisements for the presence of women. A content analysis was made of each qualifying advertisement. The above eight variables and their categories were coded for

frequency. Chi-square, an inferential statistic, was employed to test the hypotheses. The independent variable, time, had four categories ("1965," "1972," "1979," and "1985"), and each was paired with the eight dependent variables and their categories. Consequently, the interaction between year and each of the other variables as impacted by gender was studied. Significance was set at the .05 level of confidence.

As a result of data analysis, null Hypotheses 1, 2, 3, 5, 6, and 7 were retained. Hypotheses 4 and 8 were rejected for significant changes in psychological appearance and number of advertisements utilizing women to sell products.

Discussion of Findings Hypothesis 1: Relationship of Setting to Time

Null hypothesis 1 was retained. There were no significant differences in settings over time. Although rates of depiction of women in traditional household roles declined slightly when comparing the year 1965 (25%) directly to 1985 (12%), there were no significant differences at the .05 level of confidence (see Table 1 in Chapter 4). This finding with regard to pharmaceutical advertisements required further analysis in order to determine if it replicated those findings obtained from

the popular advertisements. Researchers looking at mass media advertising found an association between women and the household as the exclusive work setting. The present study found over all target years that the total population of women was associated with both setting categories. Those were "in the household" (26%) and "out of the household" (39%). As a result, this study did not find women to be associated exclusively with the household. An explanation of the difference in findings may be due to the focus upon activity within the household when analyzing women in the popular advertisements. An analysis of the setting variable as it related to the physical activity variable (Hypothesis 2) enabled the researcher to determine the type of activities in which women were engaged while in the household. These findings will be related following a discussion of Hypothesis 2. Hypothesis 2: Relationship of Physical Activity to Time

There were no significant differences in the physical activities of women over time. Over all target years, more women appeared to be at leisure (27% of the total population) than at work (18%). The largest number of women were seen as decorative (36%) (see Table 2 in Chapter 4). It was noteworthy that in all years except 1972 the proportion of health care activity to work,

leisure, or decorative activity was low.

In 1972, 56% of women were involved in health care activities as opposed to 7% in 1965 and 19% in both 1979 and 1985. This could have represented a consciousness raising concerning women's health issues stimulated by the original women's movement begun in the late 1960's and punctuated with the publication of Our Bodies Ourselves (1970). It was during these years that birth control and abortion issues were openly debated. It might be possible that concerns over these health issues presented the physicians with new drug needs. Pharmaceutical companies, sensing new market possibilities, may have responded to this need. A 1972 advertisement found in Medical Aspects of Human Sexuality illustrated the point (see Appendix B). It showed a somber-looking 19-year-old girl suffering from sterility due to the effects of gonorrhea. Additional Analyses: Relationship of Setting, Physical

Activity and Time

In order to determine the type of work activity occurring both in and out of the household, additional analyses were made. The variable of setting was compared to physical activity to determine the percentage of women shown to be working in the home as compared to out of the home. The study of popular advertising media, revealed an association between women and the household setting and between women and housework activities (Courtney & Lockeretz, 1971; Courtney & Whipple, 1974; Silverstein & Silverstein, 1974). This analyses answered at least two questions. What are women doing while they are in the household? Are they involved in housework, leisure, or health care activities, or are they portrayed as decorative? If they are found to be doing housework while in the household, then that finding may explain the findings of those made when analyzing popular advertisements.

The chi-square was applied to test for significant relationships between setting and physical activity within each of the four time frames. In all target years there was a significant association at the .05 level of confidence between the female patient's physical activity and her depicted setting. Because of multiple comparisons, the alpha level was adjusted downward to apply a more stringent criterion requiring the reporting of actual significance levels (in 1965, p = .0000; in 1972, p = .0000; in 1979, p = .0000; in 1985, p = .0002).

36) = 45.05, p<.05]. A second survey of the target advertisements showed only one nonhousehold work role depicted in 1965. That woman was a waitress whose job skills were closely tied to those required in a home setting. All other work roles applied directly to the home. For example, one advertisement displayed in Medical Aspects of Human Sexuality (see Appendix A) showed a discouraged-looking young woman surrounded by mops, scrub brushes and other household cleaning and maintaining accounterments. Activities outside the home were found to be leisure in 81% of the cases rather than work related.

A majority of women (73%) in which the setting could not be determined were displayed in inactive/decorative roles. These poses were designed to catch the eye of the reader and exemplified the responses of 45% of physicians reported in a study by McRee et al. (1974). Physicians felt (since more physicians were men) that "female attractiveness" was the primary reason more women than men were used in pharmaceutical advertisements. Two elaborating comments were "An attractive girl in a photo certainly catches my eye" and "Drug companies, like auto dealers, know you will notice the girl in the ad first and their product second" (p. 1274).

dealers, know you will notice the girl in the ad first and their product second" (p. 1274).

In 1972, the interaction of physical activity and setting was significant at the .05 level of confidence [chi-square (6, N = 36) = 45.05, p = .0000]. In 1972, when compared to 1965, a greater percentage of women were shown in work roles out of the household (20%). A survey of work roles revealed a high school English teacher reputed to suffer from "literary hemorrhoids," a woman portrayed as Mother Nature keeping the air fresh for asthma sufferers, two women working in child-care centers, and a photographer's model. Although about the same percentage of women were shown working out of the household as in the household, a greater number (42%) were shown to be at leisure while at home.

The chi-square test for relationships between the variables proved significant at the .05 level of confidence in 1979 [chi-square (6, N = 36) = 34.48, P = .0000] and in 1985 [chi-square (6, N = 23) = 26.78, P = .0002].

Leisure activities both in the home and out of the home increased over 1972, and at a more balanced rate than in 1965 when the majority of leisure activities (81%) were seen outside the home. In 1985, there were no women shown

showed a broadcaster, a dancer, a computer operator, two teachers, and a school crosswalk guard. Physical activity was shown to be more balanced between leisure and health care than in the previous target years.

Hypothesis 3: Relationship of Physical Appearance To Time

Hypothesis 3 was designed to look at the depiction of women in terms of their physical appearance over time.

Appearance was categorized as either "neat" or "sloppy."

Although significance was not found at the .05 level of confidence, the largest differences between the two categories occurred in 1972 when 35% of the sample population was portrayed to be neat and 59% was portrayed to be sloppy.

The style of dress popular and considered to be neat in 1972 may be viewed in 1987 as sloppy. The influence of a different standard of dress was operative. Women's hair styles were long, straight, and uncoiffured. Their clothing and makeup preferences tended toward the more natural less stylized looks. See appendix B for the randomly selected advertisement representing a typical looking female patient in 1972. She is the 19-year-old girl suffering from gonorrhea-induced sterility.

Hypothesis 4: Relationship of Psychological Appearance To Time

Hypothesis 4, stated in the null, was rejected because there was found to be significant differences over time in the depiction of women in pharmaceutical advertisements with respect to their psychological appearance. Two categories, "happy" and "unhappy" described the variable. In all years happy and unhappy women were balanced with a variance of approximately 15 percentage points. The exception was in 1972 when 75% of the women appeared unhappy.

A possible explanation was the presence of less extreme portrayals of women found in 1972. Facial expressions in that year were not depicted as so extremely unhappy as in other years. Although the definition of "unhappy" included a neutral expression, if one were to define a separate "neutral" category, more women would have fit into it than the "unhappy" category. A separate category for "neutral" would have shown that of the 47 unhappy women patients in 1972, 57% would have been so classified. In comparison, neutral expressions were found in 1965 at a rate of 15%, in 1979 at rate of 31%, and in 1985 at a rate of 38%.

A further consideration is that in 1972, a somber look may have been in vogue and indicated a state of happiness, whereas, by the 1987 standards of the researcher that same look might be interpreted as being an unhappy one. The 19-year-old young woman pictured in Appendix B may be an example. This finding might also be explained by remembering that more women (24%) were shown to be involved in health care activities. Unhappiness may have indicated that there were more physical concerns facing women (venereal disease, birth control needs and their side effects, unwanted pregnancies, and abortion complications) made more glaring by the newly organized women's health care movement.

In general, results from Hypothesis 4 suggested significant differences over time in the depiction of psychological appearance of women patients. The literature supported these findings with regard to the advertising of psychoactive drugs in which women were depicted as sad and unable to cope. This point will be discussed further as it applies to Hypothesis 7 (type of drug prescribed).

Findings from popular advertisements supported speculations that some stereotypical notions about the effects of physical activity upon happiness or unhappiness

were present. Women were shown as unhappy at work in the popular advertisements. The present study speculated that involvement in health care activities might also be associated with unhappiness. In a effort to address these issues additional analyses were conducted which studied the relationship of physical activity to psychological appearance over time.

Additional Analyses: Relationship of Physical Activity, Psychological Appearance, and Time

Data indicated that the chi-square test was significant at the .05 level of confidence for 1965 [chi-square (3, N = 36) = 10.50, p = .0200] and 1979 [chi-square (3, N = 36) = 8.74, p = .0329]. Because of multiple comparisons, the alpha levels for significant relationships were adjusted downward to apply a more stringent criterion, and the actual significance values were reported. Findings were not significant at the .05 level of confidence in 1972 or in 1985. In the past, advertisements had been criticized for depicting women as unhappy, particularly, with respect to performing homemaking duties (Seidenberg, 1974; Stephenson & Walker, 1979). In 1965, 60% of women were shown to be unhappy at work. Since more women (90%) were depicted in the household, it is to be assumed they were unhappy when

involved in homemaking chores. A greater percentage of women were happy at leisure; all were unhappy at health care, and most (63%) were depicted as unhappy when decorative.

The second significant result found in 1979, revealed a shift indicating 83% of women were depicted as happy at work. Since 50% of women were portrayed as working out of the household in 1979, a new setting may have resulted in increase of work satisfaction. It is also possible that popular usage of household appliances such as automatic dishwashers, garbage disposals, microwave ovens, etc. which were not as evident in 1965 may account for greater happiness when at work in the household. Leisure happiness remained constant (66%) when compared to 1965, yet, more women (53%) than in 1965 (23%) were happy when depicted as decorative. Women were shown as equally unhappy in health care representing no change over 1965. It is possible that unhappiness in health care settings is associated with the perception of poor communication with physicians (Broverman et al., 1970; Shuy, 1976).

Although findings were not significant for 1972 and 1985, there appeared to be a trend for depicting women as unhappy at housework and health care.

Hypothesis 5: Relationship of Age Range to Time

Although there were no significant changes over time in age ranges represented in pharmaceutical advertisements, the results of the present study replicated other findings (McRee et al., 1974; Prather & Fidell, 1975) in that there was an overrepresentation of young adult women ages 19-44. In all years over 50% of women depicted were of the youngest age range. Ages of 65 years and older were least represented in every target year beginning with 1965 (2%), 1972 (11%), 1979 (13%), and 1985 (17%).

Over the years, there did appear to be a gradual trend in the direction of depicting more aged women. A high representation of young females in advertisements replicated the high representation of male physicians in the same age range. In 1983 there were 139,000 physicians under 35 years of age. There were 140,000 physicians ages 35-44. The next three decades numbered 95,000, 75,000, and 71,000 physicians respectively (American Medical Association, 1983). Young adult physicians may appreciate seeing young adult females in advertisements (McRee et al., 1974).

Another factor that might have impacted the preference for visual presentations of young women in advertisements is that there were many more male than female physicians (Hoffman, 1987). In summary, there has been no significant change in the age range of females preferred to represent pharmaceutical products. This finding may have been due to the age and interests of the advertisers target population.

Hypothesis 6: Relationship of Race to Time

The chi-square tested for significant relationships between Caucasian, Black, Hispanic, Oriental, and "other" races of women portrayed in pharmaceutical advertisements (see Table 6 in Chapter 4). Changes in frequency of representation over time were not significant at the .05 level of confidence. Null Hypothesis 6 was accepted. The results presented in Chapter 4 were greatly skewed for frequency of Caucasian women. Only six Black women were depicted in the sample journals from the 20-year period. No Hispanics, Orientals, or "other" races were seen.

Although the target population was a majority of white male physicians relating to their own race, the lack of visibility of other races might create concern in some groups. Only 2.6% of all physicians in the United States in 1980 were Black (American Medical Association, 1983).

It could be important, therefore, for white physicians to be flexible in their ability to relate to patients of all races.

Levy (1984) advocated that it was important that the relationship between white doctors and black patients be enhanced. If Black patients, as well as other races, are not represented in the approximately 1,300 pharmaceutical advertisements to which a physician might reasonably be exposed each month (Stimson, 1977), it might become more difficult to relate to nonwhites in a patient role. face-to-face contact an unconscious prejudice or negative countertransference impeding the doctor-patient relationship could develop, negatively impacting effective communication. In many teaching hospitals, according to Levy (1984), the doctor was commonly white and middle class and the patient Black and indigent. Racial differences, even in the absence of social class difference, may have a negative impact on the quality of the doctor-patient relationship.

In summary, the current study replicated earlier studies in that an overrepresentation of Caucasian women was depicted in journal advertisements. Such conditions automatically excluded important representations of women from other races.

Hypothesis 7: The Relationship of Drug Type to Time

The chi-square test for significant changes over time in the frequency of psychoactive to nonpsychoactive drug prescriptions did not meet the confidence level of .05 (see Table 7 in Chapter 4). As a consequence, null Hypothesis 7 was rejected. The literature (Seidenberg 1971, 1974) consistently objected to the use of women as appropriate candidates for psychoactive drugs.

Particularly offensive to prior researchers were messages that common frustrations emanating from normal life stages were in need of relief best derived from psychotropic drugs (see Appendix A). The ratio of advocation of psychoactive to nonpsychoactive drugs in advertisements depicting women remained relatively stable over time.

One must remember that the sale of psychoactive drugs represents a multimillion dollar industry which strives to maintain itself. Drug companies may not represent the view of physicians when they depict women as prime candidates for diet pills, tranquilizers, and antidepressants, but physicians may, at times, need to prescribe the drug even if they do not approve of the advertisements. McRee et al. (1974) found that all of physicians surveyed in their study realized that there was an important element of commercialism in drug advertising

for which wise consumers must adjust. There was still doubt, according to the researchers, that knowing there was a commercial motive was enough to keep physicians from being influenced by advertisements.

Though the frequency of psychotropic drug advertisements did not significantly change over two decades, there did appear to be a trend toward less purjorative characterizations of women over time. When advertisements were examined for content, it was found that contrasts could be made. For example, Sinequan, an antidepressant, was advertised in three of the target years allowing for the study of changes in advertising philosophy (see Appendix C).

In 1972, two gnarled female hands were clasping a wrinkled handkerchief in a stereotypically "anxious" pose. In 1979, an attractively manicured female hand rested on the shutter of an open window revealing sunshine and beautiful scenery beyond. In 1985, two advertisements appeared. One, in beautiful color, was a flowering plant glistening with dew drops. Buds were just emerging, contrasting vivid pink against the green of a young plant. The other 1985 advertisement for Sinequan showed a middle aged woman, accompanied by her male companion, riding a bicycle through a beautiful park. There appeared to be a

shift from selling by capitalizing on anxiety to selling by focusing upon the relief of symptoms. In three of the four advertisements, the woman was the intended recipient of the drug; the fourth advertisement did not specify by gender. The later advertisements reflected a trend toward colorful full page offerings.

In general, the frequency of psychoactive to nonpsychoactive advertisements depicting women has remained stable over 20 years. There were examples of some philosophical changes, perhaps in response to criticism, in the characterization of symptoms. Further research would be needed to determine significant trends. Hypothesis 8: Relationship of Frequency of Advertisements Portraying Women to Time

There was a significant association in the frequency of women appearing in pharmaceutical advertisements over time at the .05 level of confidence (see Table 8 in Chapter 4). Null Hypotheses 8 was rejected. Among all medical journals surveyed, there were significant decreases in usage of women in advertisements in 1985 as compared to those in 1965. This finding agreed with previous studies (Krupka & Vener, 1985) that indicated more advertisements depicted neither male nor female patients, but more nongender identifying graphics (see

Appendix A).

Decreases in usage of women in advertisements could be the pharmaceutical industry's response to criticism from researchers and consumer physicians. Findings from this study suggested, though, that they did not change the setting to reflect more professional work roles, nor did they use women less as decorative touches designed to sell drugs, nor were women portrayed to appear happier or better groomed than earlier years, nor was a larger spread of ages reflected, nor were more women of other races represented, nor were fewer psychoactive drugs suggested for women. Pharmaceutical companies did use fewer women, however, they had remained in the same postures for the past 20 years.

Theoretical Implications

The hypotheses posed in the present study were intended to explore the nature of the relationship between physicians and their female patients. The vehicle for study was the nature of the portrayal of women in pharmaceutical advertisements to which the physician was exposed. The assumptions put forth in this study intimated that advertisements were thought to perform two functions. They served as endorsements of physicians' philosophies about social roles and as influencers of that

philosophy. Krantzler (1986) affirmed those assumptions by contending that they were a visual reflection of physicians' "widely held beliefs, values, and stereotypes, and served as agents of socialization" (p. 933).

Given support for the basic assumptions of the study, the lack of support for six of the eight hypotheses required some answers to the following question. Why has input from the larger social and economic environment and from women patients themselves not resulted in wider change?

Theoretically, feedback is operative when a system has the ability to perceive its own output as subsequent input. A system has the ability to monitor its own progress toward a goal, correct and elaborate responses, and change goals. The inability to perform these functions implies stasis. One explanation could be, therefore, that a lack of movement existed. It may have been that output was perceived as input, but the homeostatic mechanism operative within the system was so powerful that change did not occur.

Hewlett addressed this possibility in her controversial book. She concluded that the progress of women in this country has been more illusory than real.

Lyttle (1986) explained that women could not be viewed as

leaders by men due to the traditional mandate that when men and women were together one is expected to back off. Traditionally, the woman was assigned and accepted the retreating posture. Male sanctioned role changes for women in the direction of egalitarianism may require a departure too dissonant from tradition.

Another explanation would have required one to view the current apparent state of homeostasis as a reflection of the traditional cautious attitude toward change which was encouraged by the scientific community and exhibited by physicians. There have been times when deliberation benefitted the recipient patient. An example was when drugs with potentially harmful side effects required extensive testing and experimental usage before they were offered to the public.

There were other examples when too much deliberation or skepticism cost the patient. One noted example was Lister's 10 year campaign for antisepsis (Hasley, 1965). His theories created a furor in the medical community, and many suffered needlessly from surgical contamination while Lister overcame a traditional conservatism. In the case of the patient-physician dyad, the output-input lag could look like an example of stasis, but could instead represent caution which accompanies slow change. Women's

roles may continue to change and expand at a faster rate than the advertisers' or physicians' response during the time period (Courtney & Lockeretz, 1971).

Physician generated paternalism does seem to be losing favor with some doctors. Speedling and Rose (1985), both physicians, conservatively offered that growing interest in various aspects of physicians' behavior was a reflection of a changing social attitude. Consumerism in health care has challenged some traditional notions about the doctor-patient relationship.

A third explanation could be associated with the output mechanism for the dyadic system in question. Since women represent the largest proportion of the patient population (Speedling & Rose, 1985), it follows, therefore, that they are the major consumers of health care for themselves and their children. Habits such as doctor "shopping" (Speedling & Rose, 1985) punctuate their power as consumers. It is possible that women have not considered themselves as consumers of health care but only as passive recipients of it. Consumers have the right to ask questions, to evaluate the product, to compare for better value, and to make changes if needs are not met.

Female patients' "output" roles may need to begin with requests that they be viewed as competent persons who function in the household and at leisure. They should also be viewed as having some capacity for action that insures their participation in meeting their health care needs. Actions in that area might resemble those that are used in other life areas when careful consumerism is required. Women may already possess the skills, but what is now required is that they be applied to the health industry.

An additional reason that changes in stereotypical role portrayals have not been reflected in the medical media could be because physicians need to prescribe certain drugs even though they do not approve of the advertising content. It might be possible that pharmaceutical companies rely on decreases in sales to signal that physicians no longer relate to the content of advertisements. Doctors who have no better prescription alternative may have to continue to use the product even though advertisers may not reflect modern thought.

Conclusions

One significant finding was the decrease in frequency of the number of advertisements featuring women. This result was contrasted with the important finding that

there were no significant changes in the setting, physical activity, physical appearance, age range, race, and drug type suggested to represent women. Often, lack of significance does not stimulate interest. However, in the present study, one might conclude that the drug companies appeared to have responded in only one of eight (given eight variables) possible ways.

The second significant finding which indicated that, at least in one time period, women appeared to be even more unhappy than in other years sampled, may indicate that drug companies lack contact with the literature which evaluates the portrayal of women in advertisements. Portraying unhappy women may also represent a need to remain very traditional in order to appeal to a very traditional readership. It is possible that unhappy women sell more drug products than do happy women. Examination of the relationship between the setting ("in the household," "out of the household," and "undetermined") and the physical activity ("work," "leisure," and "inactive/decorative") indicated a significant relationship between the two. Through the years, there appeared some acknowledgement of the possibility of nonhousehold work roles for women.

Limitations of the Study

A major limitation of the research lay in the inherent validity problems associated with the use of the content analysis procedure. The variable and category descriptions must be established such that the researcher is truly describing the elements one intends to describe. This study attempted to safeguard against the lack of validity by using a pilot study in which an interrater reliability of 80% on all descriptors was required.

It was possible, assuming a lack of validity, that conclusions with regard to physicians' stereotyped views of women might actually be physicians' negative views of other elements. For example, a physician may not dislike treating female paitents, but may dislike treating certain ailments instead. For example, most advertisements for weight preparations depicted sad women. Physicians may endorse such advertisements, not because they view women as unable to cope well, but because sad women acurately portray the view of physicians' concerning the treatment of resistant problems such as obesity. A physician might dislike a particular presentation of symptoms rather than the presenter. Therefore, rather than being biased toward women, the bias might be directed at an emotionally labile

presentation. Since most physicians are male, it is possible that they appreciate a more traditional stoic male approach to illness.

Another limitation of the study was the possibility that the time frame within which data was collected was too limited. Given that six of the eight hypotheses were not significant for change over time, it was possible that the target dates needed to be extended back in time in order to discern gradual changes that might have taken place over time. It was also possible that the three nonspecialty medical journals used in this study were not representative of all medical journals, and that sampling from a wider selection of journals would have been appropriate.

Associated with interrater reliability was the problem of observer drift. In this study the researcher, alone, collected the data and stood the risk of changing coding standards as the process progressed. In a future study, it is recommended that at least two persons code the actual sample and then compare responses to determine interrater reliability at the actual collection level.

Implications for Future Research

The identification of no change in a range of negative stereotypes should stimulate further research in a number of areas. There is a need for early intervention in medical school. The object would be to address female patient bias within the curriculum. It would be important to develop an understanding of the variables that contribute to the creation of stereotypes, and to construct interventions.

Howell (1974), a female physician, recognized a pressure to affirm the stereotypical views of women in order to belong to the medical fraternity. Female medical students have long been aware of the submissive role expected of women in the health care system. To stimulate research designed to isolate factors reinforcing stereotypical thinking in male medical students, the knowledge of female medical students might be collected and organized into a research design. Perhaps, factors could be isolated by interviewing male physicians with regard to their training about women patients and by asking them to compare those impressions with those gathered in the actual practice of medicine.

A natural progression of this research could involve interviewing practicing physicians in order to obtain their opinions about womens' most appropriate health care roles in the 1980s. It may be of value to investigate physicians' perceptions of their female patients' consumer skills. Some indicators of an informed consumer may include the number of questions women ask their physicians, the information they seem to possess about their health needs, the number of second opinions they solicit, and their rate of participation in and compliance with the treatment plans. These would all be possible areas for future research.

If the present study were to be modified and repeated to obtain expanded information, one might extend the time frames to include more years. Information could be gathered as far back as the 1940s when women began to enter the work force as a result of World War II. This would possibly allow for greater contrasts over time in the way women are depicted in the advertisements. One might also directly involve practicing physicians by asking them if their actual views of women correspond to those refected indirectly in the advertisements. The present study could be expanded by asking both medical doctors and nonmedical lay persons to simultaneously code

the same advertisements. The result would be to observe discrepancies in the responses of the two groups and to compare response rates that might indicate bias toward patients.

Summary

A total of 523 pharmaceutical advertisements were searched for the presence of an adult female patient depicted in a manner such that the setting, the physical activity, the physical appearance, the psychological appearance, the age range, the race, and the type of drug could be determined and coded. This study also examined the number of advertisements depicting women as appropriate recipients of medication. A content analysis of 143 advertisements featuring 157 women patients meeting the coding criteria was performed on a stratified random sample of three medical journals representing the target years of 1965, 1972, 1979, and 1985. The purpose of the study was to determine if changes in the portrayal of women in pharmaceutical advertisements had taken place over the last two decades.

A chi-square test for significance was used with crosstabulation tables to record the frequency of each variable. The results showed significant changes in the area of frequency of females used in advertisements.

There were no significant changes in setting, physical activity, physical appearance, age range, race, or type of drug prescribed. There were significant shifts in the direction of depicting unhappy women in pharmaceutical advertisements in some target years. Although women were depicted less frequently in pharmaceutical advertisements, they were still negatively stereotyped. It was concluded that women's roles may have continued to change and expand at a faster rate than the advertisers' or physicians' responses during the 20-year period.

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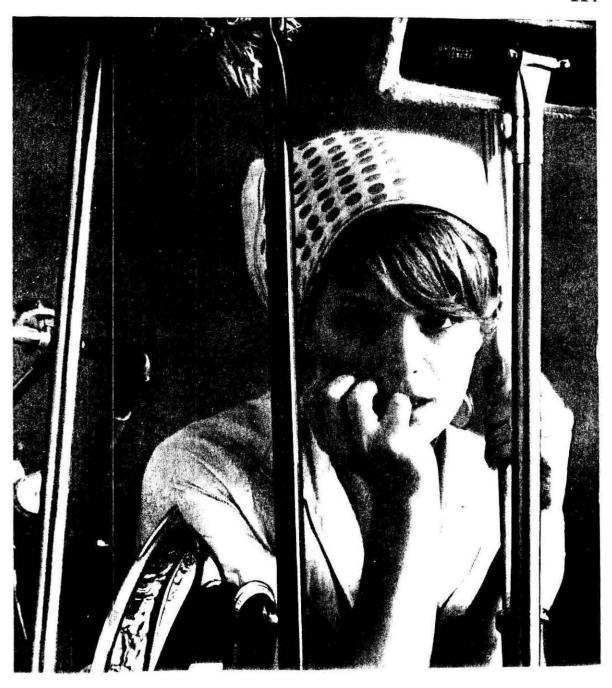
 37, 103-104.
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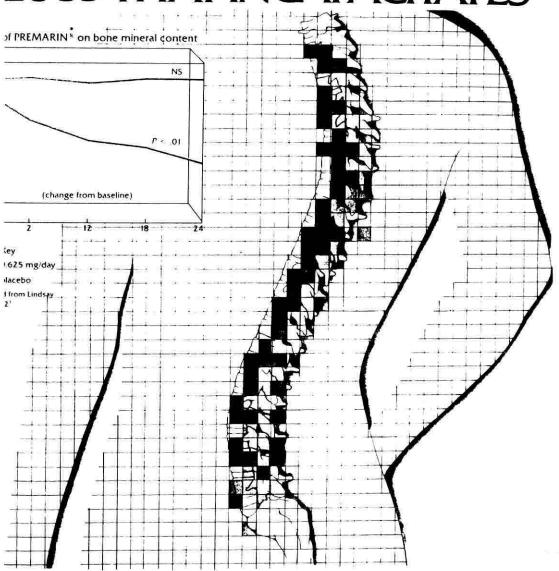
APPENDIX A

Selected Advertisements for Illustrative purposes



Medical Aspects of Human Sexuality. (Nov., 1967). $\underline{1}$, 3.

POSTMENOPAUSAL BONE LOSS THAT INCAPACITATES



Medical Times. (May, 1985). 113, 9.

APPENDIX B

Randomly Selected and Coded Advertisements
Representing the Sample Population

Journal: Medical World News. (Aug., 1965). 6, p. 80.

was accounted account account	NAME OF STREET				Variables &
Advertisement		Winds Security			Categories:
1 2 3 4	5 6	7 8	9	10	<u>Setting</u>
					In the household
	9-1-1				Out of household
x		::			Undetermined
					Physical Activity
					Work
					Leisure
					Health Care
x					Inactive/Decorate
					Physical Appearance
x					Neat
	SE SE 1				Sloppy
					Psych. Appearance
x					Нарру
			- -v		Unhappy
					Race
x			:		Caucasian
					Hispanic
					Black
					Oriental
					Other
					Drug Type
					Psychoactive
x					Nonpsychoactive
					Age Range
x					Adult (19-44)
					Middle Aged
					(45-64)
					Aged (65 and over)



I may have a cold, Doctor...

but I've still got my senses.

Journal: Medical Times. (Mar., 1965). 93, p. 165a.

7.4.	.ort			Numb						Variables &
l	2	.15en 3	4	5	6	7	•		10	Categories:
		3	4	Э	О	1	8	9	10	Setting
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										Out of household
				==						Undetermined
										Physical Activity
x-	-									Work
										Leisure
			1-1-3							Health Care
										Inactive/Decorate
										Physical Appearance
x-										Neat
										Sloppy
										Psych. Appearance
x -										Нарру
										Unhappy
										Race
X-										Caucasian
		==								Hispanic
										Black
				2						Oriental
										Other
										Drug Type
x-										Psychoactive
										Nonpsychoactive
										Age Range
x-		(s 2		·	Adult (19-44)
				-						Middle Aged
										(45-64)
										Aged (65 and over)

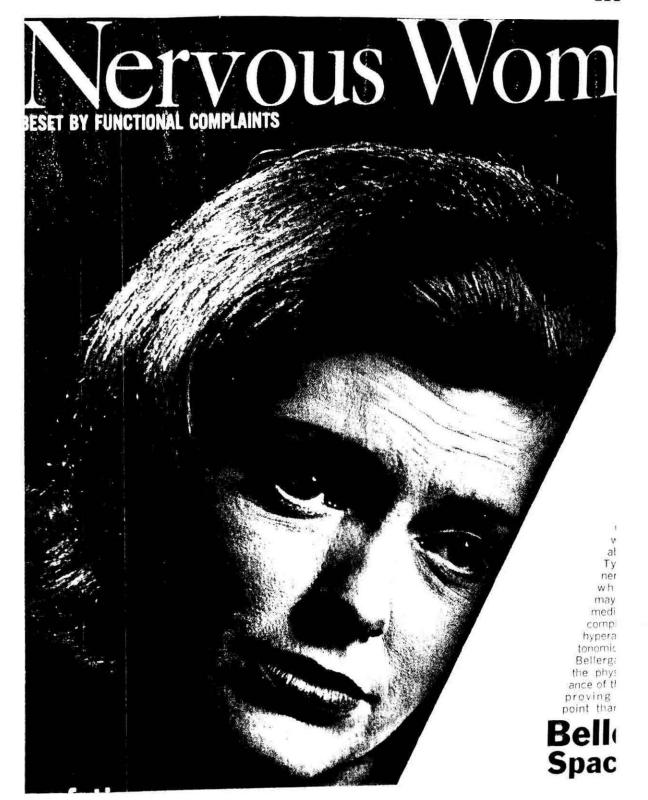


Ritalin°

Journal: Med. Aspects Human Sexuality. (Oct., 1967). 1, p. 9. Variables & Advertisement Number: Categories: 3 6 7 8 9 10 Setting --In the household Out of household Undetermined Physical Activity Work __ Leisure Health Care Inactive/Decorate Physical Appearance Neat Sloppy Psych. Appearance Нарру Unhappy Race Caucasian

Hispanic Black Oriental Other

CODING SHEET



Journal: Medical World News. (Jan., 1972). 13, p. 54.

	1941	100	61	1440 D						Variables &
				Numb						Categories:
1	2	3	4	5	6	7	8	9	10	Setting
					-					In the household
										Out of household
x-				==				/		Undetermined
										Physical Activity
							(-	3-3-3		Work
x-									X C	Leisure
				-			-			Health Care
										Inactive/Decorate
										Physical Appearance
x-										Neat
										Sloppy
										Psych. Appearance
									-	Нарру
x-										Unhappy
		•								Race
x-										Caucasian
										Hispanic
							-			Black
									-	Oriental
										Other
										Drug Type
x-								==		Psychoactive
										Nonpsychoactive
										Age Range
x-										Adult (19-44)
										Middle Aged
										(45-64)
										Aged (65 and over)

She's on a diet. She's discouraged. She needs your help.

You can encourage her with DEXAMYL®

brand of dextroamphetamine sulfate and amobarbital

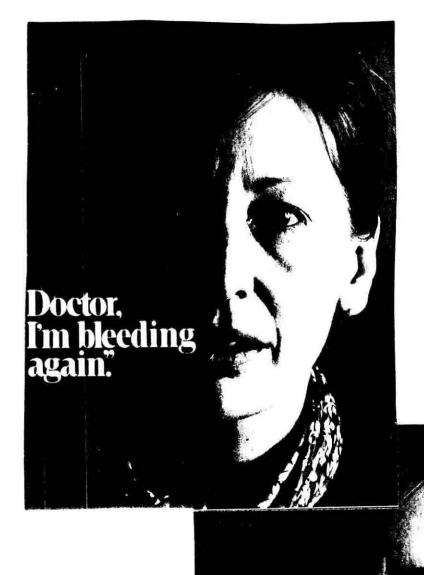
'Dexamyl' is the mood-lifting anorectic; it not only assures unexcelled control of appetite but also improves outlook.

Formula: Each 'Dexamyl' Spansule® (brand of sustained release capsule) No. 1 contains 10 mg. of Dexedrine® (brand of dextroamphetamine sulfate) and 1 gr. of amobarbital, derivative of barbituric acid [Warning, may be habit forming]. Each 'Dexamyl' Spansule capsule No. 2 contains 15 mg. of Dexedrine (brand of dextroamphetamine sulfate) and 1½ gr. of amobarbital [Warning, may be habit forming]. Principal cautions and side effects: Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Insomnia, excitability and increased motor activity are infrequent and ordinarily mild. Before prescribing, see SK&F product Prescribing Information. Smith Kline & French Laboratories, Philadelphia



Aged (65 and over)

CODING SHEET Journal: Medical Times. (May, 1972). 100, p. 120. Variables & Advertisement Number: Categories: 2 3 6 7 8 9 10 Setting In the household --Out of household Undetermined Physical Activity Work Leisure Health Care Inactive/Decorate Physical Appearance Neat Sloppy Psych. Appearance Happy Unhappy Race Caucasian Hispanic __ Black Oriental Other Drug Type Psychoactive Nonpsychoactive Age Range Adult (19-44) Middle Aged (45-64)



.and frightening."

Journal: Med. Aspects of Human Sexuality. (Jul., 1972). 6, p. 114.

E 50: 11	Wes	625	8						Variables &
Advert	iseme	ent							Categories:
1 2	3	4	5	6	7	8	9	10	Setting
									In the household
									Out of household
x									Undetermined
									Physical Activity
				3					Work
									Leisure
									Health Care
x									Inactive/Decorate
									Physical Appearance
									Neat
x									Sloppy
									Psych. Appearance
									Нарру
x					-				Unhappy
550									Race
x									Caucasian
									Hispanic
									Black
									Oriental
									Other
									Drug Type
									Psychoactive
x									Nonpsychoactive
									Age Range
x									Adult (19-44)
									Middle Aged
	(Feb.)								(45-64)
									Aged (65 and over)

Sterile at nineteer



"Tests for gonorrhea...have shown that about one in ten girls between the ages of 15 and 25 has gonorrhea and doesn't know it. By the time they do become aware of it, the eye opener is a serious complication that could render them sterile or subject to ectopic pregnancy; that requires immediate surgical intervention; or that could simply leave them gynecologic cripples."

—Emergency Medicine. March, 1971

Order a supply now or see your SK&F Representative SMITH KLINE DIAGNOSTICS 1500 Spring Garden Street, Philadelphia, Pa. 19101, Dept.

Send _____dozen 'Clinicult' office tests for gonorn

Send_____dozen 'Clinicult' office (ests for gonom (\$28.20 per dozen).

| Send the table-top 'Clinicult' Incubator (\$25.00 each).

☐ I do not need the incubator.
☐ Send _____dozen 'Clinicult' office tests for moniliasis (\$23.40 per dozen).

(323.40 per oozen).

Send information on the gonorrhea test and 'Clinicult'

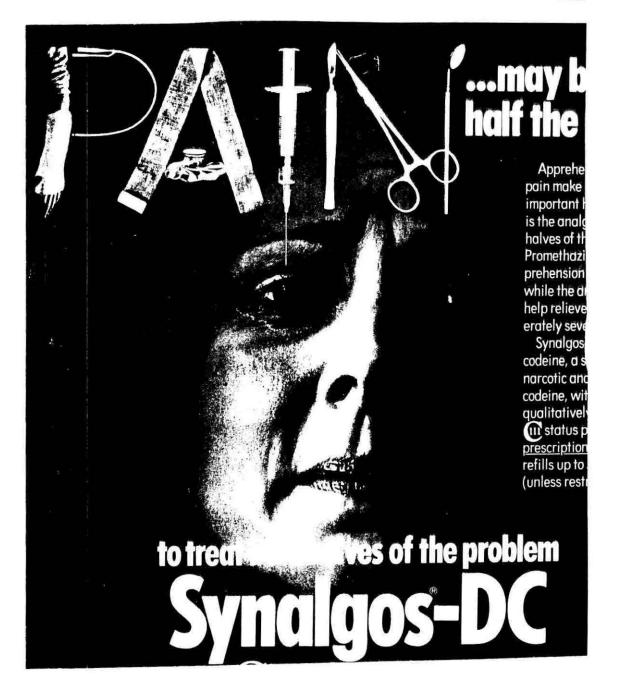
Journal: Med. Aspects Human Sexuality. (Jun., 1979). 13, p. 72.

3 J		1711						Variables &
	isement						421 (21)	Categories:
1 2	3 4	5	6	7	8	9	10	<u>Setting</u>
								In the household
				-				Out of household
x								Undetermined
								Physical Activity
								Work
								Leisure
								Health Care
x								Inactive/Decorate
								Physical Appearance
x								Neat
								Sloppy
								Psych. Appearance
				-				Нарру
x								Unhappy
								Race
x								Caucasian
								Hispanic
								Black
								Oriental
		==						Other
						==	-	
								Drug Type
x				••				Psychoactive
								Nonpsychoactive
								Age Range
x							X	Adult (19-44)
								(45-64)
							-	Middle Aged
				••				Aged (65 and over)



Journal: Medical World News. (Feb., 1979). 20, p.103.

	371				Variables &
Advertisement		<u> </u>	3		Categories:
1 2 3 4	5 6	7 8	9	10	<u>Setting</u>
		S=3=2	N = C		In the household
x					Out of household
					Undetermined
					Physical Activity
x					Work
					Leisure
			: -: -::		Health Care
					Inactive/Decorate
					Physical Appearance
x					Neat
					Sloppy
					Psych. Appearance
x					Нарру
					Unhappy
					Race
x					Caucasian
					Hispanic
					Black
					Oriental
					Other
					Drug Type
					Psychoactive
x					Nonpsychoactive
					Age Range
					Adult (19-44)
					Middle Aged
x					(45-64)
Anthri Protes added water					Aged (65 and over)
					Agea (05 and 5761)



CODING SHEET Journal: Medical Times. (May, 1979). 107, p. 52.									
Jour	naı: <u>I</u>	nealc	al 1	imes	<u>·</u> (May,	197	9).	107, p. 52.
									Variables &
Adve:	rtiser	nent	Numb	er:					Categories:
1 :	2 3	4	5	6	7	8	9	10	Setting
									In the household
									Out of household
x									Undetermined
									Physical Activity
									Work
									Leisure
									Health Care
x									Inactive/Decorate
									Physical Appearance
x									Neat
									Sloppy
									Psych. Appearance
									Нарру
x									Unhappy
									Race
x									Caucasian
									Hispanic
									Black
									Oriental
									Other
									Drug Type
x									Psychoactive
									Nonpsychoactive
									Age Range
x									Adult (19-44)
									Middle Aged
									(45-64)
									Aged (65 and over)

t* PRN is appropriate for f your migraine sufferers...

should they take blocker days a year?



CODING SHEET										
Journal: <u>Medical Times</u> . (May, 1985). <u>113</u> , p. 27.										
Variables & Categories:										
(40/52/002/A)/1/52/5-52			Categories:							
1 2	3	4	5	6	7	8	9	10	<u>Setting</u>	
									In the household	
x									Out of household	
									Undetermined	
									Physical Activity	
	0-0-0	-				-		1	Work	
x									Leisure	
									Health Care	
									Inactive/Decorate	
									Physical Appearance	
x									Neat	
	==								Sloppy	
									Psych. Appearance	
x		100		-				9-0-0	Нарру	
									Unhappy	
									Race	
x									Caucasian	
	_=								Hispanic	
									Black	
									Oriental	
									Other	
									Drug Type	
		_200							Psychoactive	
x (art	 h=:+	 -							Nonpsychoactive	
x (art	III I C	12)	=-=		35,55				Age Range	
									Adult (19-44)	
						-	-	o -saa h	Middle Aged	
x								· - · · ·	(45-64)	
									Aged (65 and over)	



CAPOTEN is almost never associated with loss of libido

Journal: Medical World News. (Jun., 1985). 26, p. 40.

					Variables &
Advertise	ment Numl	per:			Categories:
1 2 3	4 5	6 7	8	9 10	Setting
x			:		In the household
			:		Out of household
					Undetermined
					Physical Activity
					Work
x					Leisure
					Health Care
			== :		Inactive/Decorate
					Physical Appearance
x			:		Neat
					Sloppy
					Psych. Appearance
x					Happy
					Unhappy
					Race
x	=-				Caucasian
					Hispanic
			7		Black
			-		Oriental
					Other
					Drug Type
					Psychoactive
x (hyperto	ension) -	=			Nonpsychoactive
2. 150.54					Age Range
					Adult (19-44)
x			-		Middle Aged
					(45-64)
					Aged (65 and over)



CODING SHEET

Journal: Med. Aspects of Human Sexuality. (May, 1985). 19, p. 164.

Advertisement Number: 1 2 3 4 5 6 7 8 9 10 Setting	
In the household Out of household Undetermined Physical Activity Work Leisure Health Care	
Out of household x Undetermined Work x Health Care	
x Undetermined Physical Activity Work x Health Care	
Physical Activity Work Leisure Health Care	
Work x Leisure Health Care	
x Leisure Health Care	
Health Care	
Inactive/Decorate	<u>:e</u>
Physical Appearance	
x Neat	
Sloppy	
Psych. Appearance	
х Нарру	
Unhappy	
Race	
x Caucasian	
Hispanic	
Black	
Oriental	
Other	
Drug Type	
x Psychoactive	
Nonpsychoactive	
Age Range	
Adult (19-44)	
x Middle Aged	
(45-64)	20
Aged (65 and over)



APPENDIX C

Advertisements Representing Pharmaceutical Trends

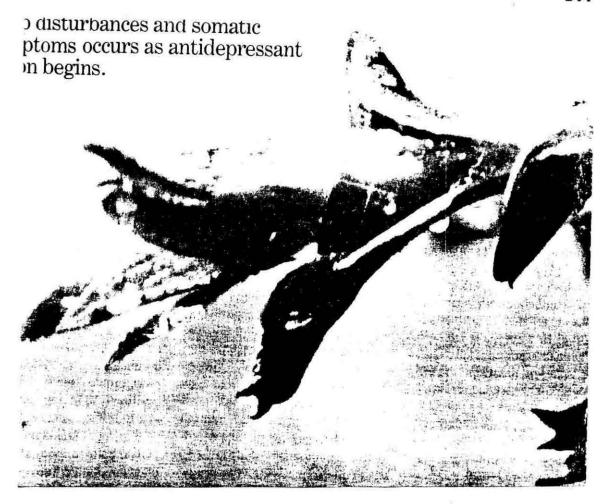


Sinequanism 1 Symptoms that go hand in hand...

Medical Times. (May, 1972). 100, 18.

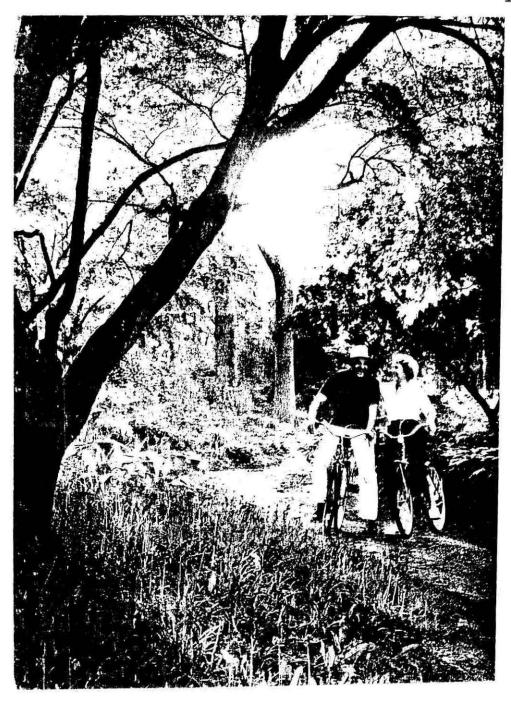


Medical World News. (Feb., 1979). 20, 66.



SNEQUAN

Medical Times. (May, 1985). 113, 26.



Medical World News. (June, 1985). 26, 56.

APPENDIX D

Pilot Study Coding Sheets And Instructions

CODING SHEET					
Journal: Name		YearVolu	me Page		
			Variables		
Advertisement Nu			Categories:		
1 2 3 4	5 6 7	8 9 10	Setting		
			In the household		
			Out of household		
			Cannot determine		
			Physical Activity		
			Work		
			Leisure		
			Health Care		
			Inactive/Decorate		
			Physical Appearance		
			Neat		
			Sloppy		
			Psych. Appearance		
			Нарру		
			Unhappy		
			Race		
			Caucasian		
			Hispanic		
			Black		
			Oriental		
			Other		
			Drug Type		
			Psychoactive		
			Nonpsychoactive		
			Age Range		
			Adult (19-44)		
			Middle Aged		
			(45-64)		
			Aged (65 +)		

CODING

Read definitions below to make decisions INSTRUCTIONS: regarding the most appropriate line to check. each adult female patient in each of the advertisements according to the variables and categories above. caption clues to assist in making decisions.

VARIABLE DEFINITION

Setting

In the household:

Choose if advertisement shows outside or inside of a home, or if it shows a family or home-centered activity such as woman feeding or playing with child, woman mowing lawn, cleaning house, cooking, sleeping, or

eating.

Out of household:

Any setting not defined as In the household. Could include out of household work setting, eating in a restaurant, walking in the street, or sitting in a park. Choose if it is impossible to

determine the setting.

Cannot Determine:

Physical Activity Work:

Choose if woman is working either

in or out of the household.

any clothing or other paraphrenalia which suggests an occupation or work activity.

Choose if woman is engaged in social activities, sports, play, or rest. Use accompanying

paraphrenalia such as sports equipment, picnic tables, or bed. Do not choose if woman appears to

have stopped working to rest. Choose if woman is in a doctor's

office, wearing a examination gown, taking medicine, dispensing

medicine, experiencing the application of medical equipment,

or is in a hospital.

Inactive/Decorative: Choose if the woman is posed in order to illustrate a product, but is not engaged in an activity.

Leisure:

Health Care:

Physical Appearance Neat:

Choose with properly fitted clothing, correctly worn clothing, combed hair, properly applied makeup, evidence of good dental hygiene, clothing appropriate to the activity.

Note: a woman involved in work activity such as yard work or house painting may appear messy but can still be judged as neat because her appearance is

appropriate to the work she is

doing.

Choose if the woman does not appear neat based on above

criteria.

Sloppy:

Psych. Appearance Happy:

Unhappy:

Choose if posture is erect with smiling, whistling, singing, or dancing. With clear bright eyes. Choose with frowning, grimacing, crying, looks of frustration or dissapointment, slumped back or shoulders, bowed head, the appearance shouting, pounding fists, kicking, or throwing objects. Neutral looks of not smiling fit this category.

Race

Caucasian:
Hispanic:
Black:
Oriental:
Other:

Age Range

Adult (19-44 years): Middle Aged (45-64): Aged (65 and over): Make determinations using skin color hair color and texture, facial features, and costumes.

Make determinations based on hair color, (the amount of gray) wrinkles on face, neck and hands, evidence of dowagers hump, type of clothing worn, or product advertised.