The Influence of Women on the Health Care-Seeking Behavior of Men

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BACKGROUND. Gender and social relationships are believed to have a strong influence on health care attitudes and behavior. This study was designed to determine the effect of the gender of closely associated persons on the health care-seeking behavior of persons of the opposite sex.

METHODS. We developed a 14-item questionnaire that requested information on social and demographic characteristics, health status, and influences on the decision to seek health care, and administered it to 314 consecutive patients seen at two family medicine clinics in San Diego, California. Data were analyzed by means of one-way analysis of variance for continuous variables and the chi-square test for categorical variables. Additionally, data were analyzed by means of a multivariant logistic regression model that calculated odds ratios and 95% confidence intervals.

RESULTS. Men were 2.7 times more likely than women to be influenced to seek health care by a member of the opposite sex (95% CI, 1.6 to 4.6). Married patients were 2.4 times more likely than unmarried patients to be influenced to seek health care by a member of the opposite sex (95% CI, 1.4 to 4.3).

CONCLUSIONS. Women exert an important influence on the decisions of men to seek health care.

KEY WORDS. Gender identity; health services research; health services accessibility; health behavior. *(J Fam Pract 1996; 43:475-480)*

There is strong empirical evidence that marriage and other social relationships are associated with lower morbidity and mortality.[1-6] The health benefits of such relationships in general and marriage in particular, however, appear to be greater for men than for women.[7-10] This gender difference is particularly noticeable when marital relations are disrupted by the death of a spouse or divorce. Numerous studies have found that such disruptions are more detrimental to the health of men than of women.[10-13]

Although the reasons for this gender difference remain unclear, a potential explanation is that women are more likely than men to be the principal brokers or arrangers of health care for their spouses as well as for their children.[14] This explanation is consistent with studies demonstrating that women are more likely than men to seek and utilize health care,[15-17] possess greater knowledge about health,[18] be compliant with a therapeutic regimen,[19] and monitor the health and safety of others as well as their own health.[20] However, evidence for the role of a married man or woman in the spouse's health services utilization remains inconclusive. In a nationwide survey, women were found to attempt to control the health behaviors of their spouses significantly more frequently than the converse.[10] Other studies, however, have reported either a negative association[21] or no association[22] between marital status and health services utilization, either because of increased utilization of home health care by married adults[21] or because marital status is associated with improved health care for both men and women.[22,23]

Women may be more likely to act as health services brokers than men for a number of reasons. The reason for assumption of this responsibility may be that women are more knowledgeable about health than men. Data from 1433 men and women with hypertension in the First Connecticut Blood Pressure Survey showed that women were more

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likely to be aware of their diagnosis and to have their blood pressure under control.[19] In a random sample of 732 men and women in the Boston area, Avis and colleagues[18] found that women manifested a significantly greater knowledge of cardiac risk factors than men. The role of health services broker may also be an extension of the health care-seeking behavior of women, who are more likely to seek treatment than men. Data from the National Ambulatory Medical Care Survey (NAMCS), a population-based survey of visits to office-based physicians, indicate that 60% of all office visits in 1991 were made by women, and women accounted for a higher proportion of visits than men in all age categories except those under age 15 years.[24]

To test the hypothesis that men in general and married men in particular are more likely to be influenced by a woman to utilize health services than the converse, we conducted a study of patients' decisions to seek health care from their primary care provider.

METHODS

Subjects for this study were 314 consecutive patients 18 years of age and older, at two family medicine clinics located in San Diego, California. Both clinics were staffed by faculty family physicians and family nurse practitioners. All the patients contacted (100%) agreed to participate in the study. Informed consent was obtained by a 4th-year medical student after explaining the purpose of the study and data collection procedures. Patients were asked to complete a 14-item questionnaire that requested information on social and demographic characteristics (age, gender, marital status, ethnicity, education, income, employment, health insurance, religion), and health status (tobacco use, chronic conditions). Patients were also asked to describe their reasons for the clinic visit and identify from a list of potential influences on their decision to seek health care all those that applied to that particular visit. This list included the following: doctor's recommendation; not feeling well; checkup or physical examination; encouragement by husband; encouragement by father, brother, or other male relative or friend; encouragement by wife; encouragement by mother, sister, or other female relative or friend; something seen in the media; and other reasons such as follow-up visits and prescription refills. The questionnaire was pretested on 20 patients and found to be reliable and easy to use. It was also translated into Spanish, pretested, and found to be reliable. The Spanish language version was used by three patients.

Comparisons between men and women of demographic characteristics, health status, and patient influence by someone of the opposite sex to seek medical care were based on one-way analysis of variance for continuous variables and the chi-square test for categorical variables. The chi-square test was used to compare reasons for visiting the clinic by sex and the influence of someone of the opposite sex versus other reasons for seeking medical care by patient social and demographic characteristics. Comparisons of patient influence by someone of the opposite sex were also stratified by each of the primary patient social and demographic characteristics. No adjustment was made for multiple comparisons, however, and caution should be exercised in interpreting results. In addition to patient sex, other potential demographic predictors of being influenced by someone from the opposite sex to seek medical care were analyzed by means of a multivariate logistic regression model that calculated odds ratios (ORs) and 95% confidence intervals (CIs) and estimated adjusted odds of each factor, controlling for all other factors.

RESULTS

A description of the demographic characteristics of study subjects by gender is provided in Table 1. The median age of the population was 40 years and the median household income was $31,250. A little over one half (51.6%) of the subjects were women, and about one half (50.3%) were currently married or living with a significant other. Most were white (68.5%), employed (74.5%), had at least a high school diploma (82.5%), did not smoke (87.3%), and had health insurance (82.8%). Slightly less than one third (31.5%) of the participants identified themselves as belonging to one of a number of different Protestant religious denominations; about 30% identified themselves as Catholic; and one in five stated that they belonged to no organized religious group. A significantly larger percentage of men than women had household incomes above the median ($\chi^2 = 5.0$, $df=1$, $P<.05$).

The reasons for visiting a primary care physician,

by gender, are presented in Table 2. Two of every three men and three of every four women listed only one reason for the clinic visit; the remainder listed two or more reasons. Of those listing only one reason, men were three times as likely as women to list encouragement by someone of the opposite sex (χ^2= 12.3, *df*=1, *P*=.0004). Apart from this reason, men and women did not differ significantly with respect to any single reason for visiting the physician. Of those listing more than one reason, men were 1.4 times as likely as women to list encouragement by someone of the opposite sex (χ^2 = 2.3, *df*=1, *P*=.13). Altogether, men were 2.1 times as likely to list encouragement by someone of the opposite sex as a reason for the clinic visit (χ^2 = 15.8, *df*=1, *P* <.0001).

Patients who listed encouragement by someone of the opposite sex and those who did not list this reason were further compared on the basis of demographic characteristics and health status (Table 3). Patients encouraged by someone of the opposite sex were significantly more likely to be men (χ^2 = 16.3, *df* = 1, *P* <.0001) and married (χ^2 = 12.8, *df* = 1, *P*<.001) than patients who listed other reasons for the clinic visit. Patients who were encouraged to visit the physician by someone of the opposite sex also differed from other patients with respect to ethnicity (χ^2 = 16.3, *df* = 5, *P*<.01); these patients were more likely to be Latino, Asian, or Native American and less likely to be African American or white.

Comparisons between men and women with respect to the influence of someone of the opposite sex to visit a physician were further stratified by demographic characteristics to identify potential confounders in the observed association between gender and influence. The association between gender and influence of someone of the opposite sex was independent of age, employment status, and income. Men who were white (χ^2 = 9.0, *df*=1, *P*<.01) had at least a high school diploma (χ^2 = 18.2, *df*=1, *P*<.001), were insured (χ^2 = 14.1, *df*=1, *P*<.001), and did not use tobacco (χ^2 = 13.7, *df*=1, *P*<.001) were more likely to be influenced by someone of the opposite sex than their respective female counterparts.

The independent effects of gender, marital status, ethnicity, education, income, health insurance, employment, tobacco use, and age on the influence of someone of the opposite sex to visit a physician were examined by means of a multiple logistic regression analysis. Men were 2.7 times more likely than women to be influenced by a member of the opposite sex to visit a physician (95% CI, 1.6 to 4.6), and married patients were 2.4 times more likely than unmarried patients to be influenced by a member of the opposite sex to visit a physician (95% CI, 1.4 to 4.3), independent of other patient social and demographic characteristics.

TABLE 1

Demographic Characteristics of Primary Care Patients, by Gender

Characteristic	Men (n=152)	Women (n=162)
Age, mean (SD)	41.4 (14.6)	40.0 (13.9)
Marital status (%)		
Married	57.9	46.3
Not married	42.1	53.7
Ethnicity (%)		
African American	3.3	5.6
Latino	13.2	9.9
Native American	2.0	0.0
Asian	7.8	8.0
White	69.1	67.9
Other	4.6	8.6
Education (%)		
<12 y	15.8	19.1
≥12 y	84.2	80.9
Income (%)		
<$31,250	54.3	66.7
≥$31,250	45.7	33.3*
Employment (%)		
Employed	67.8	59.3
Not employed	32.2	40.7
Medical insurance (%)		
Insured	84.2	81.5
Uninsured	15.8	18.5
Religion (%)		
Catholic	31.6	28.4
Protestant	30.3	32.7
Jewish	7.2	4.9
Other	10.5	13.6
None	20.4	20.4
Tobacco use (%)		
Yes	11.8	13.6
No	88.2	86.4

*Statistically significant at *P*<.05 level.

TABLE 2

Reasons for Visiting a Primary Care Physician, by Gender

Variable	Men (n=152) No.(%)	Women (n=162) No. (%)
Patients listing only one reason	103 (67.8)	120 (74.1)
Doctor's recommendation	9 (5.9)	19 (11.7)
Not feeling well	23 (15.1)	29 (17.9)
Checkup	22 (14.5)	29 (17.9)
Encouragement by someone of opposite sex	29 (19.1)	11 (6.8)*
Encouragement by someone of same sex	6 (4.0)	2 (1.2)
Something seen in media	1 (0.7)	4 (2.5)
Other reasons†	13 (8.6)	26 (16.0)
Patients listing multiple reasons	49 (32.2)	42 (25.9)
Including encouragement by someone of opposite sex	31 (20.4)	19 (11.7)
Not including encouragement by someone of opposite sex	18 (11.8)	23 (14.2)
All patients listing encouragement by someone of opposite sex as a reason for clinic visit	70 (39.5)	30 (18.5)

*Statistically significant at $P<.001$ level.
†Includes follow-up visits, prescription refills, periodic screening.

DISCUSSION

Although nearly one in five women reported being influenced by a man to seek health care, the results of this study confirmed our hypothesis that women are more likely than men to encourage their spouses, as well as friends and relatives of the opposite sex, to seek health care, a finding that suggests that women are the principal brokers of health services in the American family. The fact that women are more likely than men to assume this role may account, at least in part, for the gender difference in the health benefits of marital status. Women are more likely than men to monitor the health and health services utilization of their respective spouses, thus providing men with greater health benefits associated with marital status.

It is unclear why the attitudes and behavior of women toward health care are so different from those of men, but the differences appear early in life. In a study of 350 fourth and eighth grade children and their mothers, Mechanic found an association between the mother's interest and willingness to express symptoms and that of her child, although the effect was small.[25] In a study of 398 children ages 8 to 18 years attending a summer camp, girls used the infirmary more often than boys ($P<.01$), especially for minor trauma, yet no gender difference was found in the incidence of "obvious morbidity" or hospital admission.[26] Stephenson, however, found no gender differences among 551 elementary school children who visited the school nurse's office.[27] Yet another study of elementary school children, reported by Van Arsdell and co-workers, found that a higher percentage of girls than boys visited the school nurse at all ages, but statistical significance was obtained only for nontraumatic illness in grades one through three.[28] Lewis and colleagues observed over 300 elementary school children ages 5 to 12 years, who were allowed to visit the school nurse practitioner without prior approval from the teacher or other adult.[29] Fifteen percent of the study population accounted for 50% of all visits. Significant predictors of nurse practitioner utilization included: female gender, affluence, and ordinal position (only child or youngest). A significant association was also found between child-initiated visits and the frequency of being taken to the pediatrician by the mother.

Does this remarkable role of American women improve health outcomes for our society, or is a significant portion of this behavior inappropriate, placing an additional burden on a health care system already laboring to control its consumption? A recent study of 4723 men and 4963 women from four general practices in the Netherlands did reveal significant excess morbidity in women.[30] However, only 18.2% of the excess morbidity was attributable to "vague or psychosomatic complaints." The majority of excess morbidity was due to obstetrical and gynecological diagnoses (43%) and preventive services (26.9%). Similarly, McFarland et al examined utilization patterns among a random sample of long-term enrollees in a health maintenance organization.[22] They found that a subset of 13% of the study population were consistently high utilizers, accounting

for 30% of outpatient surgical services, 31% of physician office visits, and 35% of hospital admissions. In contrast to the Dutch study, however, 56% were male, whereas only 46% of the study population was male (P=.001).

The results of this study have two important implications for health policy. First, anyone wishing to change the health behaviors of the American public in general and American men in particular, especially with respect to utilization of primary care services, would do well to target American women, first and foremost, as the most likely group to respond to such interventions with enthusiasm and interest, and to effect such changes in their families. This recommendation is consistent with those of previous studies seeking to identify members of social networks who are potentially instrumental in health promotion and disease prevention interventions that seek to change health-related behavior.[31] In this context, it is our belief that women play a potentially critical role in encouraging men to seek primary care and other health services. Primary care utilization is seen as a cost-effective approach to health care. Similarly, enlisting the support of women is seen as a potentially cost-effective means of encouraging men to utilize primary care services.

Second, the results of this study also point to the need to educate men to assume greater responsibility for seeking health care services in an appropriate and timely manner. Although women exhibit greater morbidity and health care services utilization, men exhibit greater age-adjusted mortality.[13,32] A number of explanations have been proposed to account for this paradox, including the propositions that women are biologically "more fit" than men[33] and that men behave in ways more damaging to health.[34] However, it is plausible that culturally mediated barriers to seeking health care may also be involved in explaining this paradox.[10,20] The gender difference in the influence of family members to seek health care found in this study suggests that we also direct our efforts to breaking down these cultural and other barriers that prevent men from both seeking appropriate health care themselves and encouraging women to utilize primary care services.

It is possible that our results were affected by self-reporting bias and that men are less likely than women to admit to initiating a health care visit, preferring instead to attribute the care-seeking behavior to their spouse. The participants were informed that the data were held in the strictest confidence, however, and no identifying data were obtained. Under these circumstances it is difficult to see what men would have to gain by providing misinformation. Moreover, even if it were true that men are as likely as women to suggest that the spouse seek health

TABLE 3

Influence of Opposite Sex in Seeking Medical Care, by Demographic Characteristics

Characteristic	Opposite Sex (n=90)	Other Reason (n=224)
Age, mean (SD)	39.2(12.4)	41.3(14.8)
Gender (%)		
Men	66.7	41.1
Women	33.3	58.9*
Marital status (%)		
Married	67.8	45.5
Not married	32.2	54.5*
Ethnicity (%)		
African American	0.0	6.3
Latino	18.9	8.5
Native American	2.2	0.4
Asian	11.1	6.7
White	62.2	71.0
Other	5.6	7.1†
Education (%)		
<12 y	20.0	16.5
≥12 y	80.0	83.5
Income (%)		
<$31,250	55.6	62.7
≥$31,250	44.4	37.3
Employment (%)		
Employed	65.6	62.5
Not employed	34.4	37.5
Medical insurance (%)		
Insured	80.0	83.9
Uninsured	20.0	16.1
Religion (%)		
Catholic	41.1	25.4
Protestant	22.2	35.3
Jewish	5.6	6.3
Other	12.2	12.1
None	18.9	21.0
Tobacco use (%)		
Yes	13.3	12.5
No	86.7	87.5

*Statistically significant at P< .001 level.
†Statistically significant at P< .01 level.

care, a woman's role in encouraging a man plays a major role in his decision to seek health care, if only by providing a convenient excuse to do so.

The results of our study strongly suggest that women are the principal health care brokers of the American family. Whether this role holds true for minority families or other subsets of the general population could not be determined from our sample which was relatively affluent as evidenced by mean income and level of education, unusually "healthy" as evidenced by the low prevalence of tobacco use (12.7%), and largely white. Further research is required to determine whether factors such as socioeconomic status, health status, reason for the visit (eg, presentation of symptoms requiring treatment versus health maintenance examination) and ethnicity influence the observed effect of gender on the decision of a spouse or family member of the opposite gender to seek health care.

Nevertheless, the results of our study strongly support the contention of Lewis and Lewis, who wrote in 1977: "At a time when society's expectations of women and men are changing—although slowly—it will be fascinating to observe the future health-related behavior of the female of the species. Currently, women are the principal brokers or arrangers of health services for their children and spouses. Once deprived of mother or wife (or both), the male of the species demonstrates behavior that places him at risk in terms of morbidity and mortality. Females, more so than physicians, might be viewed as the principal determiners of the health status of all members of society."[14]

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