

Executive Women and Health: Perceptions and Practices

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Abstract: The purpose of this study was to obtain a socioeconomic/health profile of a select group of executive women, to understand more about their personal and professional lives, and to examine how these factors relate to their overall health. The data were obtained from a self-administered 73-item questionnaire that was mailed during spring 1987 to the 1,000 members of a professional executive women's organization with 15 chapters across the United States. Findings suggest that the women in executive positions do not necessarily compromise their health. In comparison with a group of

age/gender/education matched working women, the overall wellness and risk assessment scores were remarkably similar. The study group, however, reported greater life satisfaction, stronger social support, and excellent health status; the overwhelming majority was satisfied with their personal and professional lives and believed that they were in control of both. This perception, coupled with the relatively high wellness scores, suggests that on average this group of executives may be in better health than had been predicted as women rose to executive positions within organizations. (*Am J Public Health* 1990; 80:1450-1454.)

Introduction

The role of women has changed—both inside and outside the home. Since the beginning of the twentieth century, many women have moved from the traditional rural culture of child-rearing and farm work to the modern urban culture of nannies and executive boardrooms.

Although the move from farm to city and from home to office has been evolving since the early 1900s, it was during World War II that the major and more permanent change occurred. In 1890, women constituted 18 percent of labor force participation, by 1945 that number had risen to 36 percent, and in 1989, women represented 54 percent of the labor force participation.^{1,2}

During World War II, as throughout history, women took on the work responsibilities vacated by men who left home and jobs to fight wars. Unlike the aftermath of previous wars, however, American women did not follow historical precedent and return home to their traditional responsibilities. They continued to work outside the home and over time began to take on occupations previously held by men—medicine, the law, engineering, politics, and others. Gradually they began to take on the power and responsibilities associated with these occupations. In many cases, women added these outside responsibilities to the ones they already had at home—managing the children and the household.

Yet, little attention has been focused on the impact of these changes. Studies are only just now emerging that begin to examine the complex nature of the home/work/health relationships on working women. Some investigators have suggested that functioning in different roles poses health problems for working women,³⁻⁵ while others have suggested that it is beneficial.⁶⁻⁸ Some have suggested that a critical factor in these relationships is the perception that the woman holds about her life situation.

Prior health studies focused primarily on women in blue-collar occupations, or on women in white-collar occupations who worked at relatively low to mid-level positions.³⁻²⁴ Existing studies of executive women usually do not include health data.^{25,26} Indeed, only three studies were identified that focused on the health of women in executive positions—either in very

large companies or in the federal government.²⁷⁻²⁹ The purpose of this study, therefore, was to obtain a socioeconomic/health profile of a select group of executive women, to understand more about their personal and professional lives, and to examine how these factors relate to their overall health.

Methods

The data were obtained from a self-administered questionnaire that was mailed during spring 1987 to the 1,000 members of a professional executive women's organization with 15 chapters across the United States. Entry into the organization is by invitation only and is based on criteria that insists on each member having "substantial influence in her field . . . regardless of title." The organization criteria also states that "there are many influential and powerful women outside large organizations, thus the size of the organization should not be considered as an important criterion." Occupations include chief executive officers, lawyers and judges, physicians and scientists, administrators, politicians, the clergy, artists, and writers. The majority, 54.8 percent, listed their title as executive. The mean income of the respondents was \$133,000 per annum; median income was \$96,000. The income distribution was positively skewed. The income levels ranged from no income for a Roman catholic nun who was a hospital administrator to several chief executive officers who reported over \$3 million in salary per annum. Because of the wide range of incomes, further analyses of income against other key variables are underway.

The questionnaire consisted of 73 items in four major categories—sociodemographic, general health, job satisfaction, and home/work/health relationships. Sociodemographic items were based on those used in the National Health and Nutrition Examination Surveys and National Health Interview Surveys.^{30,31} Participants were also asked job-related questions and queried about who bears the major responsibility for making major financial decisions and arranging child care.

The general health section consisted of the 1984 32-item* Centers for Disease Control Health Risk Appraisal (CDC HRA) with the exception of one item reflecting exposure to

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*One question was dropped from the original questionnaire at the request of the organization's board. The question was considered offensive and board members felt that such a question would seriously impair the willingness of members to respond. The excluded question was "How many of the following do you usually do? Hitch-hike or pick up hitch-hikers? Carry a gun or knife for protection? Keep a gun at home for protection? Criticize or argue with strangers? Live or work in a high crime area? Seek entertainment at night in high-crime areas or bars?"

violence.³² This instrument was used for two reasons. In addition to providing an assessment of the individual's perception of her health status, the CDC HRA also provided a limited assessment of the respondent's level of personal satisfaction—an important psychosocial variable previously shown to be related to the development of disease.⁹⁻¹¹

The job satisfaction section consisted of two scales developed by Karasek and colleagues—a five-item job satisfaction scale and a nine-item decision latitude scale.³³⁻³⁷ These variables were added because professional satisfaction and perception of job mastery are believed to be related to health.^{4,9-11,33-37}

Perceptions about control over their lives and the impact of their personal and professional lives on physical health and mental well-being were examined using five questions developed by the investigator. Finally, two open-ended questions were included at the end of the questionnaire for the respondents to add comments on their personal and professional lives and their health, and to reflect on the study. Analyses of the responses to these questions are not included in this paper; they will be the subject of a future analysis.

After a three-phase mailing, designed to maximize the response rate, 66 percent (660/1,000) of the members had responded. Of those 660, 590 cases (59 percent of the total) were complete and usable; 545 of the cases represented executives who were employed full-time. They are the focus of this paper.

Complete data for comparing respondents and nonrespondents were available on only two factors: education and marital status. No differences were found between the two groups on these factors. While differences may have existed, other demographic factors such as age, number of years married, spouse education and income, level of personal and professional satisfaction, and the entry criteria for membership in the organization suggest that this particular population of executive women is fairly homogeneous. The assumption that the respondents and nonrespondents are similar seems reasonable.

Results

The 545 respondents were predominantly White, middle-aged, well-educated, well-paid executives. The majority were married and had an average of two children. Almost 19 percent of the children were 18 years of age or younger. The majority of the spouses, like their wives, were well-educated executives. Table 1 summarizes the selected demographic findings and job characteristics.

Although the majority of the couples had equally well-paying, executive positions, the distribution of jobs at home was not as equitable. While the responsibility for making major financial decisions was a shared responsibility between the partners, the responsibility for arranging child care usually fell to the woman. Seventy-three percent of the respondents reported arranging child care 75 percent or more of the time.

Over half the respondents have had at least two job changes in the past 10 years, usually representing an advancement. While the majority of the respondents worked for a firm other than their own, 28 percent owned their own company. The majority reported high levels of job satisfaction (median equaled 90 on a scale of 0 to 100) and decision latitude (median equaled 86 on a scale of 0 to 100)—indicating an ability to make autonomous decisions regarding their work direction and pace.

TABLE 1—Profile of 545 Full-Time Women Executives

Factors		
Age (years) (Mean/Median)	49.7/48.0 years	
Race (% White)	90.1	
Education (% ≥ Masters)	57.0	
Spouses' Education (% ≥ Masters)	66.1	
Married (%)	59.5	
Married (years)	20.0	
Children (% with)	73.0	
Children (Average Number)	2.0	
Children (% with ≤ 18 years of age)	19.0	
Annual Personal Income (Mean/Median)	\$133,785/\$96,000	
Spouse's Annual Personal Income (Mean/Median)	\$143,102/\$90,000	
Annual Total Family Income (Mean/Median)	\$271,401.00/\$175,000.00	
Hours worked per week (Mean/Median)	54.0/54.0	
Self-employed (% who owned firm)	27.5	
Occupation	Respondent	Spouse
Business Executive	54.8	45.7
Lawyer	11.2	17.2
Physician	0.0	6.2
Government Official	9.0	0.0
College Administrator/Professor	6.2	4.2
Other	18.8	26.0

NOTE: Other includes editor, publisher, author/correspondent, physician, CPA, architect, psychologist, performer/artist

Over 56 percent of the respondents believed that they had a great deal of control over their personal and professional life. An additional 31 and 34 percent in each category (personal and professional, respectively) believed they had a moderate amount of control. In addition, the majority of respondents (77 percent) reported being at least mostly satisfied with their lives.

Respondents furthermore reported that their personal and professional lives had a strongly positive effect on both physical health and mental well-being. In both personal and professional categories, however, the positive effect on mental well-being was stronger than the positive effect on physical health (data available from author upon request).

In general, respondents believed that they were in good health and reported maintaining positive health practices. The mean CDC HRA wellness score, based on a 100-point scale, was 86, with a median score of 87.

This score requires a reference point to indicate where this group falls on the 100-point continuum in comparison with other groups. Although no entirely appropriate comparison group who had completed the CDC HRA could be found for these senior-level executive women, their responses were compared with those from a matched group of working women in the Fitness Research Center data base at the University of Michigan.** Each of the participants in the study group (N = 533)*** was matched on age and education with 20 working women from the Fitness Research Center data base for a total of 10,660. Because neither of the two groups is necessarily representative of all working women nor all executive women, the findings should be interpreted with caution.

**The Fitness Research Center at the University of Michigan maintains a current data base of over 100,000 health risk appraisals collected from the University of Michigan Business School and from diverse data bases provided by investigators from across the United States.

***Twelve cases of the original 545 were not used either because of insufficient data or because respondents were over 70 years of age. Thus, the 533 used represented complete cases.

Table 2 summarizes the CDC HRA health findings from the study reported here and compares them with the CDC HRA health findings from the matched reference group.

The average wellness scores and the risk assessment scores between the two groups were remarkably similar. Yet, further examination reveals several important differences. Fewer of the study group were married than were the matched group with the major difference occurring among those who were divorced. Fewer of the study group smoked than did the matched group, yet far more of the study group reported drinking than did the matched group. Although the number who reported heavy drinking (≥ 25 drinks of alcohol per week) was small, the study group had over three times as many heavy drinkers as the matched group.

Blood pressure and total blood cholesterol levels were reported as slightly lower among the study group than the matched group.[†] However, this should be interpreted carefully as the study group of executives was far less knowledgeable about their blood pressure and blood cholesterol values than the matched group. The majority of the executives in the study group did not know either value.

Differences existed between the two groups concerning regular exercise as well as miles driven and seat belt use. The study group exercised more regularly (49 percent) than did the matched group (44 percent). The executives drove, on average, considerably more miles per year than did the matched group and were far more likely to use seat belts (80 percent) than did the matched group (36 percent).

Discussion

This study provides some preliminary data that suggest that the women in executive positions do not necessarily compromise their health. Indeed, this particular group of executive women perceived themselves to be quite healthy, which was supported by their overall wellness and risk assessment scores. In comparisons with a group of age/gender/education-matched working women, the overall wellness and risk assessment scores were remarkably similar. The study group reported greater life satisfaction, stronger social support, and excellent health status. The overwhelming majority of the study group were satisfied with their personal and professional lives and believed that they were in control of both. This perception, coupled with the relatively high wellness scores, suggests that this group of executives may be in better health than had been anticipated as women rose to executive positions within organizations.

The greater numbers of those who drank and who drank heavily, as well as the greater number of divorcees among the study group, requires further examination. Perhaps among a sub-set of these women, there are those for whom the executive lifestyle had a negative effect.

That the executives drink more is not entirely unexpected. Although fewer business lunches and dinners today are conducted with alcohol as an important social ingredient, alcohol is still consumed at such meetings. It may be that alcohol consumption is perceived as a necessary social part of doing business. Or, it may be that these executives really do consume alcohol more often than do other types of working women, possibly as a way of reducing stress. Yet, other behaviors that have been linked to stress reduction,

[†]Where blood pressure and blood cholesterol data are missing, the CDC HRA program automatically assigns an age/gender/race mean to that case.

TABLE 2—Demographics, Disease Risk Factors, and Health Practices and Perceptions among the Study Group and the Matched Group

Factors	Study Group (N = 533*)	Matched Group (N = 10,660)
<i>Sociodemographics</i>		
Age (Mean)	49	49
Marital Status (%)		
Married	58.5	65.3
Single	12.2	10.5
Divorced	20.1	14.1
Separated	2.6	2.2
Widowed	5.3	7.4
Race/Ethnic Group (%)		
White	89.9	89.9
Black	7.1	5.2
Hispanic	1.9	1.2
Asian	0.6	2.5
Native American	0.0	0.9
Other	0.6	0.2
Education (%)		
≤ High School	7.1	7.1
Some College	2.1	2.1
College or Professional	90.6	90.6
<i>Risk Factors</i>		
Height/Weight (Mean)		
Height (Inches)	65.5	65.5
Weight (Pounds)	136.7	137.4
Smoking (%)		
Smoker	12.0	17.7
Ex-smoker	38.3	23.3
Never Smoker	49.7	58.9
Among Smokers		
Average/day	11.4	19.0
Among Ex-smokers		
Years Stopped	5.4	10.3
Blood Pressure (%)		
High SBP** ≥ 140 mm Hg	5.5	21.9
High DBP** ≥ 90 mm Hg	0.4	17.2
Mean SBP (mm Hg)	117.8	120.1
Mean DBP (mm Hg)	75.0	77.1
Know Blood Pressure	44.5	68.5
Blood Cholesterol (%)		
BC ≥ 5.7 mmol/L	25.6	36.1
Mean Total BC (mmol/L)	5.0	5.6
Know Blood Cholesterol	16.1	25.0
Alcohol Use (%)		
Drinker	72.2	45.3
Ex-drinker	2.1	2.3
Never Drinker	25.7	52.5
Among Drinkers Only (%)		
Light (≤ 7 /week)	57.4	72.5
Medium (8–24/week)	39.2	26.9
Heavy (≥ 25 /week)	3.1	0.6
Average/week	8.1	7.8
Drug Use		
Non (Rarely) Use	92.3	93.5
Light (Occasional)	5.6	4.8
Heavy (Almost daily)	2.1	1.6
<i>Health Practices</i>		
Physical Activity		
Regular (≥ 3 times/week)	49.3	44.1
Occasional	37.1	43.6
Little	13.5	12.3
Sleep		
≤ 6 hours/night	24.6	27.1
7–8 hours/night	72.6	72.0
≥ 9 hours/night	2.8	1.7
Pap Smear		
Annually	68.3	63.5
Every 3 Years	22.0	22.9
< Every 3 Years	7.1	9.7
Almost Never	0.2	0.7
Breast Self-examination		
Monthly	21.2	36.7
Every Few Months	40.3	35.5
Rarely/Never	38.5	27.8
Annual Rectal Examination	47.1	37.1

TABLE 2—Continued

Factors	Study Group (N = 533*)	Matched Group (N = 10,660)
Seatbelt Use		
Regular ($\geq 75\%$)	80.5	36.4
Semi-regular ($<75\%$)	6.0	37.4
Non-user	13.5	26.1
Average Use (%)	82.9	47.4
Average driving miles/years	26,538	11,191
Perceptions		
Life Satisfaction		
Completely	77.3	60.4
Quite	21.0	28.5
Somewhat	1.3	9.9
Not Very	0.4	1.2
Perceived Social Support		
Strong	69.6	52.7
Average	21.2	40.5
Below Average	4.1	5.9
Unsure	2.1	1.1
Perceived Health Status		
Excellent	61.4	36.0
Good	34.0	55.8
Fair	3.9	7.6
Poor	0.8	0.8
Risk Assessment		
Average Risk Age (years)		
Actual	49.6	48.6
Appraised	48.1	47.4
Achievable	46.0	44.9
Projected Death Rate		
All Cause Death/1,000		
Persons during Next 10		
Years		
Actual	77.4	75.1
Appraised	68.3	71.6
Achievable	57.7	55.4
Wellness Score (Mean)	85.5	78.3

*533 represents cases which are complete.

**SBP = Systolic Blood Pressure; DBP = Diastolic Blood Pressure

such as smoking and overeating, appear to be less common with this group of executives compared to the matched group. In fact, more positive stress-reducing activities, such as regular exercise, appear to be practiced by almost half of the executive group.

It is not surprising that at the time of the study (1987) many of the participants and matched group were unaware of their blood cholesterol levels. The National Cholesterol Education Program had just been initiated and related public education was in its infancy. What is surprising is the number of executives who did not know their blood pressure values. The National High Blood Pressure Education Program and its public education efforts have been strong in the United States for the past 17 years. Knowledge about one's "number" and awareness about the disease has been increasing since the inception of this national educational effort. Indeed, knowledge about blood pressure and action to control it has been highly correlated with education and income, especially among females. The reason for this lack of knowledge about blood cholesterol and blood pressure levels is puzzling and is worthy of further investigation.

The greater effort expended on exercise is certainly within keeping among men with higher education. Now Matthews, *et al.*, have reported similar findings among women with college and advanced degrees, e.g., the higher the education, the greater the energy expenditure.³⁸

While this study may begin to dispel some of those notions of compromised health among women executives, it

raises far more questions than it answers. Clearly the study has limitations. It captures only one moment in time and it does not represent all executive women. However, it provides suggestions that might direct further study. The study and the review of the literature argue vigorously for more investigation in this particular area of executive working women, and in the larger concern of the interrelationships of home, work, and health for all working women.

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Innovations in State and Local Government Awards Program Invites 1991 Applications

The Innovations in State and Local Government Program has issued a call for applications for its 1991 Innovations Awards Program to recognize creative government efforts at the state, county, municipal, special authority, and tribal levels. Ten winners, selected by a national committee of leaders from government, education, business, and the media, will receive grants of up to \$100,000 each by the Ford Foundation.

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For more information and a 1991 application, contact: Doug Carpenter, Operations Manager, Innovations in State and Local Government, A. Alfred Taubman Center, 79 John F. Kennedy Street, Cambridge, MA 02138; (617) 495-0557.

To be considered, all applications must be received no later than 5:00 p.m., Wednesday, January 9, 1991.