

Original Article

STRESS IN WOMEN PHYSICIANS IN PAKISTAN

Unaiza Niaz¹, Sehar Hassan² & Sobia Ali³

ABSTRACT:

Objective: To understand and evaluate practicing women physicians' perception of physical and mental health, job stress, satisfaction, and level of professional knowledge.

Methods: Specifically designed questionnaires for socio-demographic characteristics, physical and mental health, Self perception of medical knowledge and ability were distributed among 150 female doctors. The sample consisted of family physicians (n=41), specialists (n=57) and house officers (n=52). Only quantitative methods were used in the study to analyze the data.

Findings: 71% of the women physicians perceived their physical health as good. 34% of the women physicians reported "high" level of stress. The level of stress was high among house officers (32%) and specialists (21%) than family physicians (12%).

Conclusions: Most of the female doctors perceived their physical health as good and level of stress as "high" or "moderate". Stress in female physicians leads to more time-off work, intake of antidepressant and smoking. Stressed doctors are also less likely to enjoy their practice.

KEY WORDS: Stress, Women Physicians, Perceptions, Mental Health.

Pak J Med Sci April - June 2003 Vol. 19 No. 2 89-94

INTRODUCTION

Women practicing medicine are known to have a high-stress lifestyles. Medicine is an inherently stressful profession with long hours,

pressing clinical problems, ethical dilemmas, difficult patients and conflicting demands. Several studies have reported elevated rates of depression, anxiety, marital problems and higher suicide and addiction rates among physicians compared to other professionals.¹ Branthwaite and Ross 1988 studied the causes of stress in general practice i.e. work insecurity, isolation, poor relationships with other doctors, disillusionment with the role of GP'S and changing demands were all sources of perceived stress.

The general practitioners' ability to deal with stress may also influence their ability to help others. The physical and psychological demands of the profession often make women more vulnerable to high levels of stress. Considering the growing numbers of women in medicine, the importance of helping women physicians deal with stress is especially significant. One of the first studies to look at the causes of stress in general practice in the

1. Unaiza Niaz, M.D. DPM F.R.C., Psych (Eng)
Consultant Psychiatrist and Psychotherapist,
2. Sehar Hassan, M.Sc. Beh. Sc.
Behavioral Scientist,
Intern at The Psychiatric Clinic and
Stress Research Center,
3. Sobia Ali, M.A. Psychology

Correspondence:

Dr. Unaiza Niaz
Director,
The Psychiatric Clinic & Stress Research Center,
6C, 7th, Commercial Lane, Zamzama Boulevard,
Phase V, D.H.A. Karachi, Pakistan
E-mail: drunaiza@cyber.net.pk

* Received for publication: March 27, 2003

Revision received: April 23, 2003

Revision accepted: April 25, 2003

mid-1980s¹ found that insecurity in work, isolation, poor relationships with other doctors, disillusionment with the role of GPs and changing demands were all sources of perceived stress.² In the late 1980s, Cooper and others found that the four most important predictors of job stress were: work-home interface, demands of the job, patients' expectations and practice administration. For women doctors, the interference of the job with family life was the most significant predictor of stress.³

There is little published work quantifying either the effects of stress on doctors or the results of interventions designed to reduce stress. Grol demonstrated poor clinical performance in those doctors with negative feelings of tension, lack of time and frustration as evidenced by having a high prescription rate and give little explanation to the patients.⁴ The effects of stress on practice are evidenced as increased errors in prescribing, increased staff turnover, limited team working, more patient's complaints, poor time-keeping and sickness absence. Stressed GPs may develop problems in their relationships with their partners and family at home, these include becoming uncommunicative at home or work and more withdrawn and isolated.

A recent study conducted by the University Health Network at the University of Toronto confirms that female doctors are dealing with high levels of stress and burnout. Stress in women physicians was conducted by Donna Stewart in Toronto. More than 140 women physicians from various specialties across Canada participated in survey. The primary sources of stress cited by respondents included juggling multiple roles, having young children, time issues (too much work, too little time) changing practice patterns.

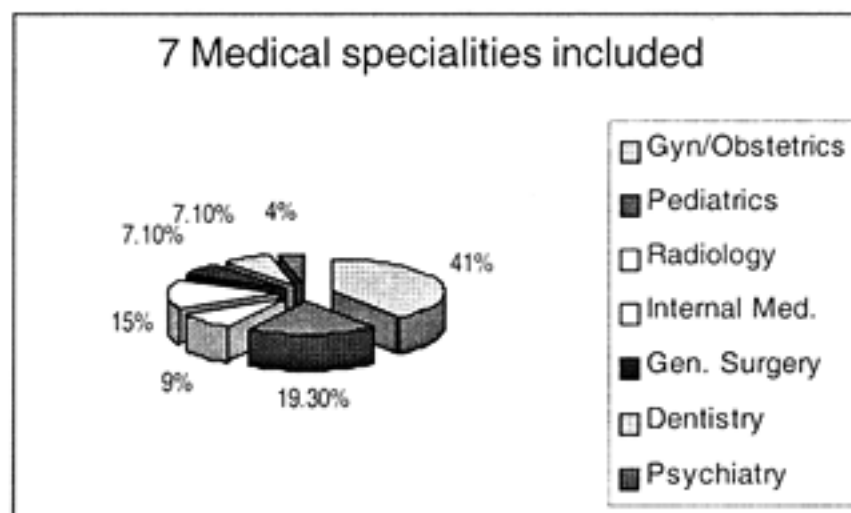
A similar study was conducted by us in Pakistan by employing similar methodology and research design. The principal purpose of conducting the study was to understand and quantify the perceptions of physical and mental health, stress, job satisfaction about professional knowledge in practice in Pakistan.

METHOD

Subjects:

Women physicians practicing in different hospitals of Karachi i.e. Civil Hospital, Jinnah Hospital, Liaquat National Hospital and Mid-East Medical Center were approached to participate in the survey. Initially 200 mail survey questionnaires were distributed among women physicians. On receiving a very poor response, it was decided that the remaining 200 survey questionnaires will be given in the hospitals and recollected by the researchers. Finally only 150 women physicians participated in the study. The sample included family physicians (n= 41), specialists (n= 57) and house officers (n= 52). Figure 1.

FIGURE 1



Material:

Physicians Health Survey instrument was used for this study. The questionnaire included information about socio-demographic characteristics, physical and mental health status of the subjects. The socio-demographic information included age, marital status, number of children, number of years in practice and specialty. The physical health section included questions on self-perceived physical health compared with the people of same sex and age. The mental health section asked for levels of stress, mental tiredness, smoking, use of antidepressant medication and time off work in the last month. The 5 point Likert Scale Mental Health Inventory (MHI) were included, with questions on feelings of calmness and peace, downhearted and blue, nervousness,

happiness and down in dumps in the previous month. Physicians' self perception about their medical knowledge and ability were also inquired.

Data Analysis

The data was analyzed using Statistical Package for Social Sciences (SPSS) version 10.0. The descriptive statistics included prevalence of selected characteristics for study population. Specialists and family physicians and house officers were compared for selected characteristics like, socio-demographic, perception of professional knowledge and ability.

- **DESCRIPTIVE STATISTICS**

- Prevalence of selected characteristics for study population

- **TESTS OF SIGNIFICANCE**

- T- Test for continuous variables.

- **COMPARISONS**

- Specialists, Family physicians and House officers were compared for selected characteristics

RESULTS

Family physicians and specialists were close to each other in their socio-demographic characteristics like age, number of years in practice, marital status and practice settings where as house officers varied a little bit from the other two groups in this regard. The mean age of specialists and family physicians was i.e. 34 and 37 years respectively and 8 -11 years of practicing experience. House officer's mean age was 25 years with a mean two years of practicing experience. Most of the participants of

the study were married i.e. family physicians 51%, specialists 68% and 17% house officers. The rates of separation or divorce were high among specialists (8%) as compared to family physicians (2%) and house officers (0%). Mean number of children for specialists were three and for family physicians it were two. The practice setting reported by most of the participants of study was "Other Institutions". (Table I)

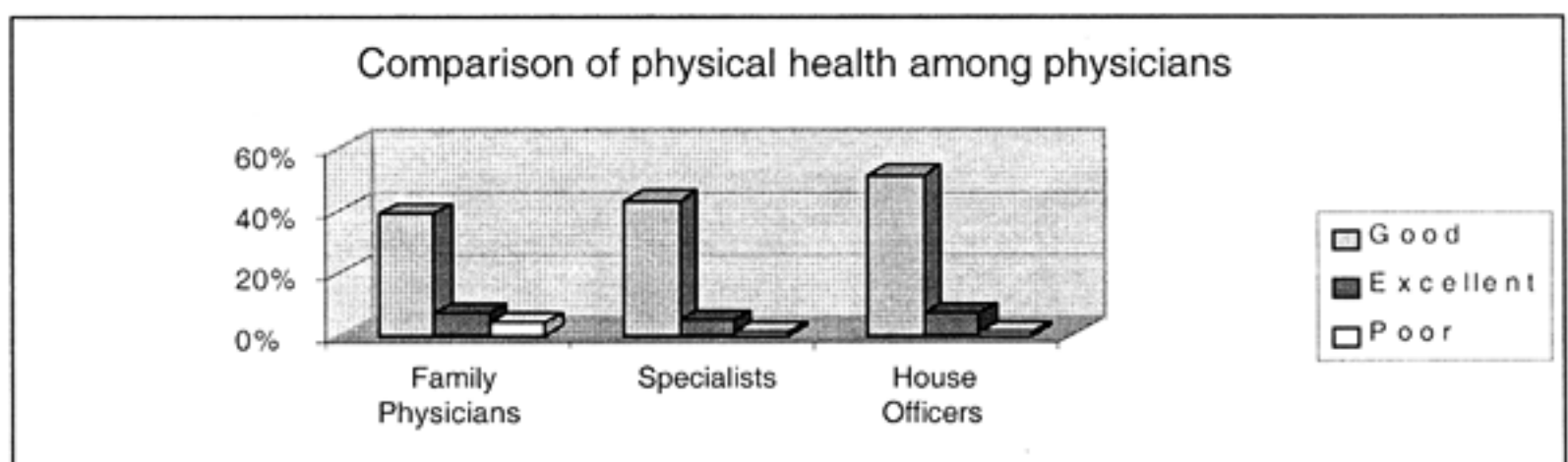
Table-I: Demographic characteristics of the participants

	Family Physicians (n=41)	Specialists (n=57)	House-Officers (n=52)
Mean Age	34	37	25
Mean No. of years in practice	8	11	1.5
Marital status (married)	51%	68%	17%
Separated/ Divorced	2%	8%	0%
Mean No. of children	2	3	0

The health section included physical and mental health status of practicing physicians in the last month. Overall 71% rated their physical health as "good", 6% considered it "excellent" and 5% rated it as "poor".

These findings indicated that majority of the female physicians who participated in the study enjoyed good physical health. The mental health status was measured by 5-item Mental Health Inventory (MHI) (Figure-2). 38% of the female physicians were usually

FIGURE 2



mentally tired. 29% felt downhearted and blue. 18% felt themselves usually nervous in the last month. 68% were usually calm and peaceful and 71% usually enjoyed themselves.

Most of the female doctors usually enjoyed their professional lives however; some were also mentally tired, downhearted and blue (Figure 3). The level of stress of the female doctors was assessed by asking them to estimate their "level of stress in the last month" as low, moderate, high or none. 12% reported having "high" levels of stress, 34% reported having "moderate" level of stress and 35% considered it "low", whereas 18% reported having "no stress at all".

The study indicated that many female doctors had high to moderate levels of stress which could have an adverse effect on their performance (Figure 4). Time off work due to illness was reported by 26% of the female doctors with a mean value of 5-7 days. The commonly cited reasons for leave by them were fever (8%), fatigue (9%) and gastric problems (4%). As regards smoking habits 6% of the participants in the study were smokers. It included 9% of family physicians, 7% of house officers' and only 1% of the specialist who were smokers.

Intake of Anti depressant

Thirteen percent of the participants in the study were currently taking antidepressant medication amongst them 5% were family physicians, 17% specialists and 15% house officers.

Professional knowledge and ability

Sixty percent of the participants rated their perception of professional knowledge and ability as "good" or "excellent" and 3% rated it as poor. Amongst which 46% Family physicians rated their perception of professional knowledge and ability as "good", none as "excellent" and 4% as poor. 52% Specialists rated their perception of professional knowledge and ability as "good", 5% as "excellent" and 0% as poor. 48% of House officers reported that their perception of professional knowledge and ability as "good" 1% as "excellent" and 6% as poor.

The important findings of the study were the incidence of mental stress among practicing women physicians, causes of stress and effects of this stress on their health and profession. The study revealed that house officers and specialists as compared to the family physicians had higher levels of stress.

FIGURE 3

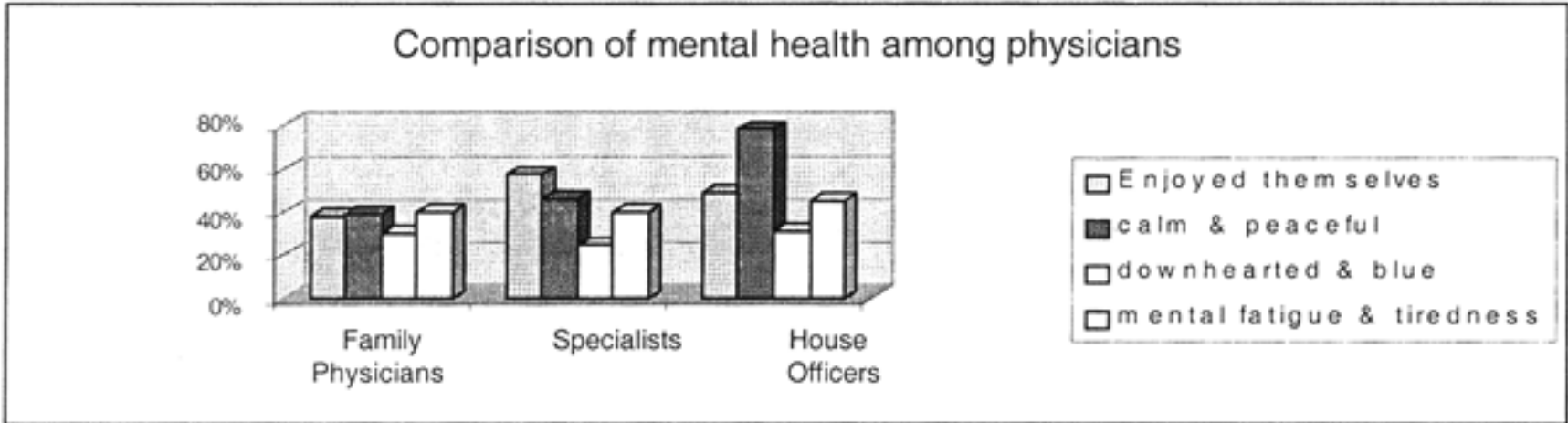
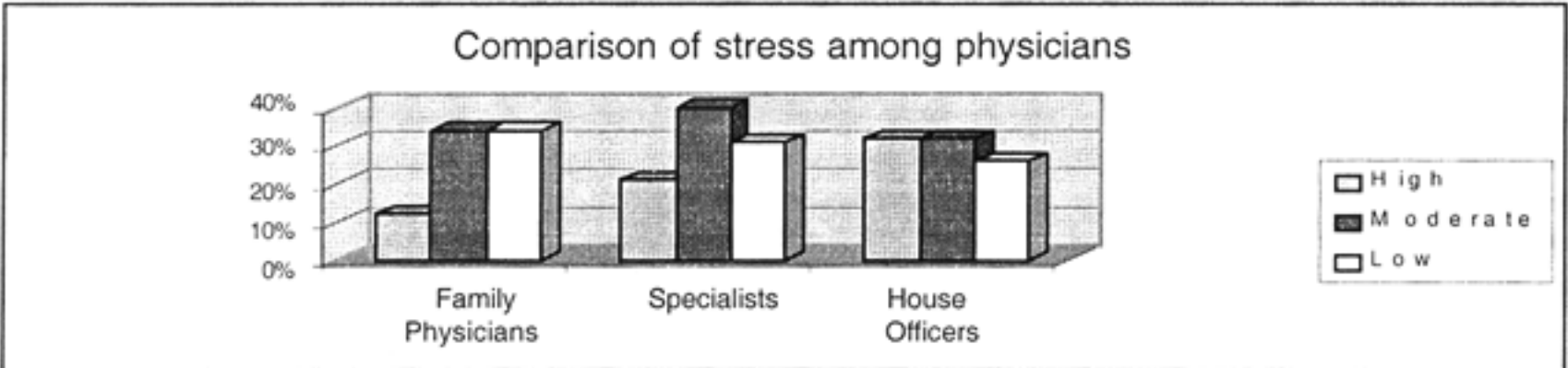


FIGURE 4



DISCUSSION

The principal purpose of the study was to explore the perception of female physicians about their physical health, stress and professional knowledge in Pakistan. Most of the specialists and family physicians in both studies had been in medical practice for a decade or more. Many family physicians and specialists in the study reported that they usually enjoyed their work, felt calm and peaceful but the figures showed that many other women physicians in these two groups also reported of mental fatigue, tiredness, felt downhearted and blue. Most of the female doctors perceived their level of stress as "moderate" or "high" and overall only 19% of the women physicians reported that they had "no stress at all".

In the medical literature there is a whole series of unconnected research studies over the last ten years done in UK. It shows that stress in general practice had become a regular feature of everyday life.^{6,7,8,9,10,11,12} The other studies done on related issues also revealed that high levels of personal accomplishment increased stress levels in doctors.¹³ Women doctors, who were often intelligent, high achievers and perfectionists, might have a personality profile that made them more vulnerable.¹⁴ These studies are suggestive of finding ways to combat stress and mental health problems among doctors, of whom more than a third are women.

House officers were also included in the study done in Pakistan. The results of the study showed that the house officers' perceptions of health vary from the family physicians and specialists. House officers perceived their physical health very good as compared to the specialists and family physicians. The factors that might have contributed towards good perception of their physical health might be their age, marital status and number of children. Most of the house officers were quite young, they were less likely to be married and mean number of children for this group was "no children" indicated that they were able to get enough time to take care of their physical self as well and had no stress of demands of in-laws, and

they had less household responsibilities. The house officers though scored well on MHI scale and majority of them usually enjoyed their work, felt calm and peaceful, still the figures showed that quite high percentage of house officers perceived their level of stress as "high" and also reported of "mental fatigue and tiredness". The incidence of mental stress among house officers was found higher to family physicians and specialists. The stresses reported might be specific to medical profession, gender or age.¹⁵ Approximately 10% of them reported symptoms associated with more severe psychological disturbance.¹⁶ The stressed women physicians took more time off work in last year as well as increased antidepressants intake was reported in them.

CONCLUSIONS

A vast majority of female doctors who participated in this survey perceived that their physical health was good but level of stress was "high" or "moderate". Stress in female physicians lead to more time-off work and they started taking antidepressants while some also started smoking. These doctors who are working under stress are less likely to enjoy their practice.

ACKNOWLEDGMENTS

The authors are grateful to the doctors for their cooperation who participated in the study.

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