

ORIGINAL ARTICLE

Why Stress? A Comparative Descriptive Study of Perceived Stress Levels Among Working and Non-Working Female Medical Doctors

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ABSTRACT

Objective: To identify different levels of stress and determine significant risk factors among working and non-working female medical doctors in Islamabad/Rawalpindi city

Study Design: A Comparative cross-sectional study.

Place and Duration of Study: Rawalpindi/Islamabad from September to December 2019

Materials and Methods: 240 respondents were selected by simple random and snowball sampling. Study subjects included working and nonworking female doctors. Scoring was done on the basis PhoenX Tool Kit for Chronic Stress.

Results: Among the total respondents 17.1% were found to be highly stressed however remaining 75.8% were moderately stressed. Significant difference in stress scores was observed between working (9.2% highly stressed) and nonworking (25% highly stressed) female doctors ($p=0.003$). Mean optimal score was 28.15 for doctors working in public hospitals as compared to 22.1 for those working in private hospitals ($p<0.001$). Medical officers were found to be stressed to a greater extent (54.5%) as compared to registrars (45.5%) and consultants. Number of dependent family members, years since graduation, stressful financial situation and cooperation of husband/in-laws were found to be significant stressors among both groups. However, among non-working female doctors, their financial situation, non-cooperation of husband/family, more dependent family members, low self-esteem and self-confidence were significant stressors.

Conclusion: It is concluded that medicine is inherently a stressful profession for both working and non-working females. Working female doctors have high rates of anxiety, depression, and marital problems, while non-working females have social environment, less appreciation by the society and monotonous lifestyle.

Key Words: Female Medical Doctors, Stress, Stressors, Stress Management, Working and Non-Working Women.

Introduction

Stress is defined as any action that results in special psychological and physical demands on a person that unbalances an individual's equilibrium. Job-related stress is the leading source of stress among both working and non-working adult population. Workplace has become a source of extreme stress because of technological changes, mass retrenchments, mergers and acquisitions, information overload, demand for more

productivity, fierce competition, and uncertain future. On the other hand, well-educated young professionals who fail to pursue their profession also suffer from stress due to internal guilt, low self-esteem, and dissatisfaction.¹

Medicine is inherently a stressful profession and job stress is a well-recognized problem among health care professionals. Medical doctors are a high-risk group for mental health problems due to job-stress. The specific factors which make doctor's profession so stressful include their responsibility for "people" rather than "objects", and the fact that their actions or omissions can cost life or death and that they have a profound impact on a human's life. Moreover, doctors' competence is under continual evaluation by both patients and colleagues.² Their mistakes are highly visible with potentially devastating results for patients as well as the doctors themselves. Two potential additional sources of stress for health professionals include their face-to-face relationships with patients, relatives, other staff and hospital's

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management and exposure to increased risk of disease or injury.³

Around one third population of medical doctors suffer from severe stress and mental health illnesses as compared to general population one fifth of which suffer from such conditions.⁴ High stress levels lead to anxiety and depression, and it is reported that one third of the medical doctors had anxiety disorders while 20% had depression.⁵ Unfortunately, these symptoms are more commonly encountered by female medical doctors. Female doctors working in hospitals experience higher levels of professional burnout than males, and around 40% of the female doctors abandon their careers right after graduating.⁶ Long working hours usually disturbs the early-marriage and family life, leading to conflicts with partners, which is one of the main reasons for high burnout rate.⁷

Potential sources of stress among female medical professionals generally include five factors which were qualitatively labeled as career development, job demands, organizational climate, working hours and other external factors.⁸⁻¹⁰ A survey conducted by the Department of Community Health Sciences, Agha Khan University, concluded that Majority (68%) of the doctors were not satisfied with their jobs, and females more commonly than males (72% vs 65%, $p < 0.001$).¹¹

As doctors are generally more stressed out due to nature and demand of their work, at the same it is not less stressful for well-educated doctors to quit their profession and get confined at homes. It is important to identify the level of stress among both working and non-working female doctors so that appropriate measures could be taken to normalize the stressors. Therefore, this comparative study was designed with an aim to identify and compare stress levels among working and non-working female medical doctors in Islamabad/Rawalpindi city and also to determine significant risk factors causing stress among the study population.

Materials and Methods

This comparative cross-sectional study was conducted from September to December 2019, in four tertiary care hospitals of Islamabad/Rawalpindi city, selected randomly from a list of all tertiary care hospitals functioning in twin cities. The minimum required sample size was calculated to be 240 (120

each for working and non-working female doctors group), using WHO online sample size calculator where prevalence of stress among female healthcare professionals was considered to be 88%,¹² with a 95% level of confidence, 80% study power and 10% adjustment for attrition. The inclusion criteria for working female doctors included at least MBBS qualification, PMDC registered doctors from public and private hospitals practicing medicine for past 5 years while for non-working female doctors all those who were not practicing medicine from the beginning of their career were included in the study. Female doctors who had recently left the job or at least within last 5 years or practicing privately as General Practitioners at private clinics were excluded from the study because the reason for their stress level might confuse because of recently quitting the job. The study was approved from Institutional Review Board (IRB)

A two-staged cluster-random sampling technique was employed in this study. At the first stage, sampling frame was developed by listing public and private tertiary care hospitals in Rawalpindi/ Islamabad, one public and one private hospital was selected randomly for each city. In the second stage, lists of all the employed doctors were obtained from randomly selected hospitals. A sampling frame was created by including and excluding the individuals as per the set criteria mentioned above. A list of 200 random numbers was generated using computer software Microsoft Excel 2003, with the help of which 120 working female doctors were randomly selected, thirty from each hospital list. Each participant was approached, and a formal written consent was obtained after having adequately explained the objectives and the rationale for the study. Upon refusal to participate in the study, next participant from the list, according to random number sequence, was approached till completion of required sample size. The non-working doctors were contacted on telephone and through their e-mail Ids. Keeping in view the limited access “snowball sampling” technique was employed for accessing non-practicing doctors and information was gathered via interviews.

A validated questionnaire was used to collect data for this study that is the “PhenX Tool Kit for Chronic Stress”,¹³ consisting of two sections. First section

comprised of the socio-demographic details while the second section consisted of variables / stressors based on protocol used for assessment of chronic stress. This section included a list of 31 items about common life conditions and situations (e.g., financial issues, work, marital relationship, family and children, social life). The 32-item scale was broken down into 11 subscales (General, money and finance, work, non-working, marital relations, parental, family, isolation/depression, social life, residence and recommendations). For each item the scoring was done as: a response of not true = 0, somewhat true = 1, and very true = 2. The total score from each individual subscale was then calculated. A low score indicated good mental health while higher score showed increased degree of stress.

Data analysis was done using statistical package for social sciences software (IBM SPSS version 23.0). Descriptive statistics of categorical variables was presented as frequency/percentages, while mean and standard deviation was reported for continuous variables. The outcome variable, stress level score, was calculated for each responder. 31-items were scored as 0, 1 or 2 depending on participant's response, while the last item related to recommendations was not scored. Total maximum score was 62. A score 18 points or less was labelled as "not stressed", score of 19 to 43 was labelled as "stressed to some extent", while score between 44 to maximum of 62 was labelled as "stressed to great extent". Pearson's chi square test was applied to compare the stress levels among working and non-working female doctor groups. Multivariate analysis was done to find any significant associations between working status of doctors and financial issues, work, marital relationship, family and children and social life. The p-value of ≤ 0.05 was considered to be significant.

Results

There were 240 female doctors participated in the study, where 120 were working doctors while 120 were non-working doctors. Overall, 177 (73.8%) respondents were of age less than 40 years, whereas 63 (26.3%) were of more than 40 years. Around 15% (36) of the doctors had graduated for more than 20 years ago, 43.3% (104) had graduated between 10 to 20 years ago, and 41.7% (100) had graduated less than 10 years ago. Among working doctors, majority

45 (37.5%) were working as medical officers, and majority 44.2% (53) reported to be working for 10 hours daily. Post-graduation was completed by 89 (37.1%) working doctors, whereas among non-working doctors only 11 (9.1%) pursued post-graduation as shown in table 1.

Table I: Demographic Characteristics of Study Participants (n=240)

Demographics	Working Status n(%)	
	Working (n=120)	Non-working (n=120)
Age (n=240)		
• Less than 40 years	84 (70.0%)	93 (77.5%)
• 40 years and above	36 (30.0%)	27 (22.5%)
Graduation year (n=240)		
• 1-10 years ago	17 (14.2%)	19 (15.8%)
• 11-20 years ago	56 (46.6%)	48 (40.0%)
• 21 years and above	47 (39.1%)	53 (44.1%)
Post-graduation (n=240)		
• Yes	11 (9.1%)	89 (74.1%)
• No	109 (90.8%)	31 (25.8%)
Designation (n=120)		
• Medical officer	-	45 (37.5%)
• Registrar	-	36 (30.0%)
• Consultant	-	39 (32.5%)
Gross income (PRK) (n=240)		
• <75k	34 (28.3%)	30 (25.0%)
• 76-150k	68 (56.6%)	61 (50.8%)
• 151-250k	13 (10.8%)	17 (14.2)
• >250k	5 (4.2%)	12 (10.0%)
Dependent family members (n=240)		
• Less than 4	88 (73.3%)	81 (67.5%)
• 4 or more	32 (26.6%)	39 (32.5%)

Among the working group, 94 (78.3%) agreed that they had no time to fully take care of own needs as compared to 16 (13.3%) of non-working group ($p < 0.001$). Stressor of less appreciation from family/employer was reported by 16 (13.3%) working while 56 (46.6%) non-working doctors ($p < 0.001$), 61 (50.8%) of working females reported to unwillingly say yes to commitments as compared to 15 (12.5%) non-working doctors ($p < 0.001$), stressful financial situation was faced by 19 (15.8%) working while 63 (52.5%) non-working doctors ($p < 0.001$). Regarding marital relationship, 14 (11.6%) working and 22 (18.33%) non-working doctors reported to encounter frequent arguments with the husband ($p = 0.082$), 20 (16.6%) working and 16 (13.3%) non-working doctors reported less involvement of

husband in domestic duties ($p < 0.001$), 19 (15.8%) working and 20 (16.6%) non-working doctors admitted that they could have worked or excelled in carrier if husband had supported them ($p < 0.001$), 13 (10.8%) working as compare to 43 (35.8%)

nonworking women admitted that their family relations (husband/ in-laws) are not supportive and this factor causes significant stress ($p < 0.001$). Summary of other stressors is given in table 2.

Table II: Summary of Various Stressors among Working and Non-working Female Doctor Groups

Stressors	Study Groups		P-value
	Working (n=120)	Non-working (n=120)	
A. General			
1.You don't have time to fully take care of your own needs because you are doing so much to take care of others. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	94 (78.3%) 19 (15.8%) 7 (5.8%)	16 (13.3%) 96 (80.0%) 8 (6.6%)	< 0.001
2.You feel as though you are always working and yet getting nothing done <ul style="list-style-type: none"> • True • Somewhat true • Not true 	6 (5.0%) 58 (48.3%) 56 (46.6%)	55 (45.8%) 64 (53.3%) 1 (0.8%)	< 0.001
3.Too much is expected from you by others. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	32 (26.6%) 64 (53.3%) 24 (20.0%)	21 (17.5%) 69 (57.5%) 30 (25.0%)	0.208
4.You seldom get any feedback /word of appreciation from your employer /family /spouse. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	16 (13.3%) 27 (22.5%) 77 (64.1%)	56 (46.6%) 63 (52.5%) 1 (0.8%)	< 0.001
5.You sometimes find yourself saying "yes" to commitment, you wouldn't normally volunteer to do, because it is easier than saying "no". <ul style="list-style-type: none"> • True • Somewhat true • Not true 	61 (50.8%) 53 (44.1%) 6 (5.0%)	15 (12.5%) 89 (74.1%) 16 (13.3%)	< 0.001
B. Money and Finance			
6>Your financial situation is pretty uncomfortable and you stress about it regularly <ul style="list-style-type: none"> • True • Somewhat true • Not true 	19 (15.8%) 44 (36.6%) 57 (47.5%)	63 (52.5%) 46 (38.3%) 11 (9.2%)	< 0.001
7.You feel it is good to be intellectually stimulated and financially independent. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	96 (80.0%) 19 (15.8%) 5 (4.2%)	111 (92.5%) 9 (7.5%) -	0.008
C. Work			
8. You don't feel motivated /excited about your job. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	3 (2.5%) 36 (30.0%) 81 (67.5%)	-	-
9. Your work schedule (hours /days /weekends /nights) do not fit in your personal life. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	42 (35.0%) 61 (50.8%) 17 (14.1%)	-	-

10. You don't get paid enough for what you do. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	33 (27.5%) 52 (43.3%) 35 (29.0%)	-	-
D. Non-working			
11. You are looking for a job and cannot find the one you want. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	-	57 (47.5%) 60 (50.0%) 3 (2.5%)	-
12. You feel like being a housewife is not appreciated. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	-	110 (91.6%) 9 (7.5%) 1 (0.8%)	-
13. Your decision to stay at home is enforced because the current situation doesn't give choice for employment. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	-	110 (91.6%) 5 (4.2%) 5 (4.2%)	-
E. Marital relations			
14. You have frequent arguments/disagreements with your husband. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	29 (24.1%) 77 (64.1%) 14 (11.7%)	17 (14.6%) 81 (67.5%) 22 (18.3%)	0.082
15. Your husband's share in domestic duties is very less. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	56 (46.6%) 44 (36.6%) 20 (16.6%)	9 (7.5%) 95 (79.1%) 16 (13.3%)	< 0.001
16. You feel that you could excel in your job /carry on your profession if your husband had cooperated. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	51 (42.5%) 50 (41.6%) 19 (15.8%)	16 (13.3%) 84 (70.0%) 20 (16.6%)	<0.001
17. Your relationship restricts your freedom. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	67 (55.8%) 37 (30.8%) 16 (13.3%)	39 (32.5%) 61 (50.8%) 20 (16.7%)	0.001
18. You do not get much time to spend /communicate with your husband <ul style="list-style-type: none"> • True • Somewhat true • Not true 	22 (18.3%) 80 (66.6%) 18 (15.0%)	28 (23.3%) 92 (81.6%) -	<0.001
19. Your family relations (husband/ in-laws) are not supportive and cause significant stress. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	73 (60.8%) 34 (28.3%) 13 (10.8%)	3 (2.5%) 74 (61.6%) 43 (35.8%)	< 0.001
F. Parental Aspects			
20. Your family size makes thing difficult for you to manage. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	75 (62.5%) 42 (35.0%) 3 (2.5%)	46 (38.3%) 41 (34.1%) 33 (27.5%)	<0.001
21. You feel guilty about the childcare arrangements when your child is sick. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	59 (49.2%) 44 (36.6%) 17 (14.1%)	0 (0%) 41 (34.1%) 79 (65.8%)	< 0.001

22. You feel there is no workplace facility/flexible working hours for working mothers. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	100 (83.3%) 20 (16.7%) 0 (0%)	84 (70.0%) 35 (29.1%) 1 (0.8%)	0.039
G. Family			
23. You have a parent, child or a spouse who is in a very bad health. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	0 (0%) 31 (25.8%) 89 (74.0%)	16 (13.3%) 40 (33.3%) 64 (53.0%)	<0.001
H. Isolation and Depression			
24. You find your mind is still consumed with worry even when you are relaxing or spending quiet times with your family. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	4 (3.3%) 35 (29.1%) 81 (67.5%)	7 (5.8%) 78 (65.0%) 35 (29.1%)	<0.001
25. You have emotional out bursts where you cry/ become angered easily <ul style="list-style-type: none"> • True • Somewhat true • Not true 	23 (19.1%) 76 (63.3%) 21 (17.5%)	54 (45.0%) 61 (50.8%) 5 (4.1%)	< 0.001
26. You often have trouble in sleeping. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	8 (6.6%) 27 (22.5%) 85 (70.8%)	18 (15.0%) 67 (55.8%) 35 (29.1%)	< 0.001
27. On the whole you are not satisfied with yourself and you often feel less self confident. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	19 (15.8%) 26 (21.6%) 75 (62.5%)	78 (65.0%) 40 (33.3%) 2 (1.6%)	< 0.001
I. Social Life			
28. You often have to go to social events alone & you don't want to. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	16 (13.3%) 84 (70.0%) 20 (16.6%)	17 (14.1%) 80 (66.6%) 23 (19.1%)	0.845
29. You are unable to count on friends /family to help you through problems. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	0 (0%) 38 (31.6%) 82 (68.3%)	3 (2.5%) 104 (86.6%) 13 (10.8%)	<0.001
J. Residence			
30. You live farther away from the rest of your family/love ones. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	26 (21.6%) 66 (55.0%) 28 (13.3%)	0 (0%) 52 (43.3%) 68 (56.6%)	<0.001
31. You would like to move away from a joint family system but you cannot. <ul style="list-style-type: none"> • True • Somewhat true • Not true 	7 (8.5%) 69 (57.5%) 44 (33.0%)	57 (47.5%) 54 (45.0%) 9 (7.5%)	<0.001
K. Recommendations			
32. What is the best parameter which may be adopted to reduce stress among working/ nonworking female doctors? <ul style="list-style-type: none"> • Flexible working hours/ day care centers • Better support from family/spouse • Salaries equitable to male colleagues • Adequate autonomy and respect at home/workplace 	27 (22.5%) 37 (30.8%) 12 (10.0%) 44 (36.6%)	65 (54.1%) 49 (40.8%) 0 (0%) 6 (5.0%)	<0.001

Stress score was calculated for both study groups, the mean score among working group was 23.6±7.4 while 32.6±10.5 for non-working group (p<0.001). It was revealed that 17.1% of the respondents reported to be stressed to great extent, 75.8% were stressed to some extent and 7.1% were not stressed. Among the working group 9.2% were stressed to great extent as compare to 25% of non-working females, 81.6% were stressed to some extent as compare to 70% of non-working respondents while 9.2% were not stressed as compare to 5% of non-working females (P<0.003) as shown in figure 1. Female doctors working in public sector hospitals had significantly higher stress score as compared to those working in private hospitals (28.15 vs 22.1, p=0.003). Comparison of time since graduation with stress score revealed significant difference in the stress score for participants who had graduated within last 10 years (P value<0.005) and those with graduation time between 10-20 years (P value<0.001) with group with graduation time more than 21 years respectively while there was no significant difference between group less than 10 year and 10-20 years. This showed that there was significant difference in optimal stress scores of those who graduated 1-10 years and 10-20 years back with those of more than 21 years. With reference to increasing income levels, it was found that it had significant negative correlation with stress scores i.e. with growing income levels the stress scores were decreasing. (P<0.01). This means that financial situation was a significantly important factor in producing stress among people.

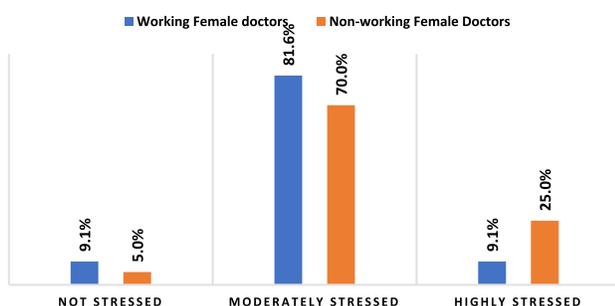


Fig 1: Comparison of Stress Levels Among Working and Non-Working Female Doctors.

Stress scores were calculated based on responses to the stressor questionnaire. It was found that 41 (17.1%) participants were experiencing high stress, 182 (75.8%) were moderately stressed while 17

(7.1%) were found to be under no stress. Significantly a greater number of non-working doctors were found to be experiencing high level of stress as compared to working female doctors (73.1% vs 26.8%, p<0.001). Around 26.8% doctors working in public sector hospitals were experiencing high stress while no employee of private sector hospital was under high stress (p=0.002). Similarly, high stress levels were positively associated with years of graduation, designation, gross income, and number of dependent family members. Significantly a greater number of participants who graduated within past 10 years experienced high stress (p=0.002), medical officers of junior designation were at higher level of stress (0.04), participants with gross income less than 150,000 (p<0.001) and participants with more than 4 dependent family members were also found to be at higher stress level (p<0.001) as shown in table 3.

Table III: Comparison of Stress Score and Demographic Variables between Study Groups

Characteristics	Stress level			P-value
	Not stressed (n=17)	Moderately stressed (n=182)	Highly stressed (n=41)	
Age				
• Less than 40 years	11 (64.7%)	139 (76.3%)	27 (65.8%)	0.261
• 40 years and above	6 (35.3%)	43 (23.6%)	14 (34.1%)	
Type of institution				
• Public sector	6 (35.3%)	43 (23.6%)	11 (26.8%)	0.002
• Private sector	5 (29.4%)	55 (30.2%)	-	
Graduation year				
• 1-10 years ago	9 (52.9%)	70 (38.4%)	21 (51.2%)	0.002
• 11-20 years ago	2 (11.7%)	82 (45.0%)	20 (48.7%)	
• 21 years and above	6 (35.3%)	30 (16.4%)	-	
Designation				
• Medical officer	5 (29.4%)	34 (18.6%)	6 (14.6%)	0.040
• Registrar	5 (29.4%)	26 (4.2%)	5 (12.1%)	
• Consultant	1 (5.8%)	38 (20.8%)	-	
Gross income (PRK)				
• <75k	-	44 (24.1%)	20 (48.7%)	<0.001
• 76-150k	10 (58.8%)	98 (53.8%)	21 (51.2%)	
• 151-250k	7 (41.1%)	23 (12.6%)	-	
• >250k	-	17 (9.3%)	-	
Work profile				
• Non-working	6 (35.3%)	84 (46.1%)	30 (73.1%)	0.003
• Working	11 (64.7%)	98 (53.8%)	11 (26.8%)	
Dependent family members				
• Less than 4	12 (70.5%)	141 (77.4%)	16 (39.0%)	<0.001
• 4 or more	5 (29.4%)	41 (22.5%)	25 (60.9%)	

Discussion

Stress is a well-recognized problem within the medical profession. Work related stress can affect doctor's health and result in low morale and motivation while female physicians who are unable to pursue their profession also experience low self-esteem and self-confidence leading to greater degree of stress. This study was an effort to find out difference in stress levels in working and non-working female doctors, their comparison with each other and various stress factors associated with high levels of stress in female doctors.

Among the working group 9.2% were stressed to great extent as compared to 25% of non-working females. Performing several roles may increase individual's privileges and resources in their social environment, assist in establishing social and economic status and security, act as a buffer for problems or families in any single life domain, and enhance feelings of self-worth. Recent studies of the risk and benefits of having multiple roles indicate that people who had more social roles experience less psychological distress and mental illness.¹⁴

The results show that the respondents who graduated 1-10 years back were far more stressed than those who graduated more than 21 years ago. Initial few years after graduation are more critical, as that is the time for career development and maintaining a balance between career, family and raising children is necessary. Thus this could be the reason for high stress levels which eventually decreases with time as family life and financial situations gets stable.¹⁵

Majority of non-working doctors were dissatisfied, low self-esteemed and less confident as compared to working female doctors ($p < 0.001$). These results are highly supported by another study carried out in Iran regarding self-efficacy and self-esteem in employed and unemployed women. The reason of higher self-esteem level among professional working women could be that these women are considered to have somewhat higher status and economic independence related to employment, which lacks in non-working women.¹⁶ A feeling of contributing to the welfare of their families as well as society might also contribute in enhancing their self-esteem. Work provides a woman with more self-esteem and to some extent satisfies her need for recognition

freedom, power, independence, and the need for social contacts.¹⁷

It was found that working women have bigger social circle and enjoy better social life as compared to the non-working group, thus they count on friends or family to help them through problems and difficult times. Similar results were concluded in a study that at sometimes job might operate as a safety valve through which frustrations which could potentially be expressed in the family are often diverted.¹⁸

Significantly higher number of working women reported to have supportive and cooperative families specially husbands and in-law's relatives. On the contrary most of non-working doctors admitted that their marital relationship restricts their freedom and family does not support their professional career growth. These findings were found to be in agreement with results of studies conducted by Dhote S et al, Ahmed A et al, and SS Nathawat, et al.¹⁹

²¹ Results indicated significantly better marital adjustment and subjective well-being for the working women than for the house-wives. Specifically, working women reported higher scores on general health, life satisfaction, and self-esteem measures and lower scores on hopelessness, insecurity, and anxiety, compared with the housewives.²¹

Stressful financial situation was another factor found to be more common in the non-working female doctors group, who despite of being professionally competent were unable to pursue their career and earn due to unavoidable family circumstances. Stress was found to be negatively associated with financial independence.²⁰

Non-working females were found to be emotionally unstable as compared to working females ($p < 0.001$), and these results were supported by studies conducted by Arif S et al²² and Akram MA et al.²³ Arif S et al stated that non-practicing doctors showed lack of the ability in stress management related to occupational stress and also find it difficult to manage personal stress and managing new relationships in their lives, such as with husband and/or in-laws.²²

A significant difference in stress levels was observed among doctors working in public and private hospitals. The main factor observed was the difference in pay scale. Doctors working at private

hospitals were found to be well paid with less workload as compared to the ones working in public sector hospitals. These findings were consistent with study conducted by Malik AA et al²⁴ where it is stated that in public setups long duty hours, less personal safety and heavy workload to be significant demotivators.

Conclusion

It is concluded that both working and non-working female doctors have high rates of anxiety, depression and marital problems, but non-working females are significantly more stressed. This study highlights significance of stress management so the individuals can develop skills to cope stress and associated problems.

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