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Research article

The association of work pressure with depression and sexual desire a cross-sectional study among health care professional

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ABSTRACT

We aim to explore the relationship between work pressure and depression, and sexual desire in a healthcare professional. A cross-sectional study was conducted with healthcare professionals between the age of 18-45 years in a multispecialty healthcare institute using the Hamilton Depression Rating scale (HAMD), and Telford and Wrekin sexual health questionnaire. In total, 150 people participated in our study, with a mean age of 28.83 ± 5.56 years. Among them22.0% of respondents had low work pressure, 42.7% had moderate work pressure, and 35.3% had heavy work pressure. In terms of sexual desire, 20.7% (31) of the participants desired to have sexual relations every day, 22% (33) twice a week, 22% (33) once a week, 15.3% (23) once a month, and 20% (30) of the participants did not have sexual desire. As per the HAM-D scale assessment, 40.7% of the participants were normal, while 12.7 % had mild depression. People who were moderately, severely, or highly depressed made-up 16%, 10.7%, and 20% of the participants, respectively. A chi-square test was used to examine the relationship between the two variables. There was no statistically significant difference in the presence of depression among work pressure ($p>0.05$). There was a statistically significant difference in sexual desire among work pressure ($p<0.001$). The study concluded that there was no difference in the presence of depression among various levels of work pressure, and there was a difference in sexual desire.

Keywords: Work Pressure, Depression, Sexual Desire, Health Care Professional.

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INTRODUCTION

Outside of usual work hours, healthcare professionals (HCPs) are frequently called upon to monitor health systems. Because health emergencies can strike at any time, HCPs spend a lot of time in hospitals monitoring patients, dispensing medications, and overseeing therapy [1]. HCPs are usually in charge of crisis management and disaster recovery, which can be extremely stressful. Recurrent stress can contribute to a variety of physical symptoms in addition to mood swings and anxiety [2-4]. Because of the constant physical and emotional stress of their jobs, employees in the health industry are more likely to develop health problems [5]. Stress is a factor in the disease's development, sustainment, and progression [6]. Regarding depression, working hours and job pressure are two factors that should not be ignored. Adegite A *et al.,* in their study, highlighted the relationship between the extended period (over time) of computer use and depression [4]. High work pressure and stressful working hour can lead to frustration in pursuing their partner aggressively. As a result of differences in sexual communication between married couples, sexual health might become unsatisfactory. A repeated unsatisfactory or unpleasant sexual experience can result in sexual dysfunction [5]. Although there is thought to be a connection between work pressure, depression, and sexual desire, there are no studies that address this issue among HCPs in India. In this study, we sought to explore the association of work pressure with depression and sexual desire among healthcare professionals.

METHODOLOGY

Study design

A healthcare-based, non-interventional, multi-structured cross-sectional study was conducted in multispecialty healthcare institutes in Kathmandu, Nepal. The study commenced between August 2021 and January 2022 after getting approval from the Institutional Ethical Committee (NIH/IEC/1640/2021-22). All the study participants were voluntarily included after obtaining the informed consent form.

Study subjects

HCPs between the ages of 18 and 45 years who were not suffering from any type of sexual dysfunction and were not taking medicines to treat it without regard to gender were recruited for the study. We excluded participants over the age of 45 since advanced age can lead to sexual inefficiency. Because the study was focused on work pressure, immediate recruits were excluded. Before the data was collected, all study participants were informed about the study's objective and outcome. Informed consent was obtained from all study participants. Participants who did not want to participate were allowed to opt out of the study.

Sample size

With a 95% confidence interval and a 5% margin of error, the sample size was calculated to be 150 based on the total population of healthcare employees in Kathmandu using the Raosoft® sample size calculator.

Study procedure and data collection

The human resources (HR) departments at twelve multispecialty hospitals in Kathmandu were contacted, explained the study, and requested permission to conduct the study. Three of them agreed and were permitted to do so. Following the approval, a confidentiality agreement was signed, which prevented the names of the hospitals and study subjects from being revealed.

After getting written consent for the study and considering the inclusion and exclusion criteria, subjects were enrolled. All relevant data was acquired during face-to-face interviews using a well-designed data collection form. The patient's choice of medication for sexual dysfunction was assessed using a validated questionnaire. The individual's depression levels were assessed using the Hamilton Depression Scale (HAM-D) questionnaire, and sexual dysfunction was assessed using the Telford and Wrekin sexual health questionnaire. Four faculty members validated the content of the questionnaire. Each faculty member's suggestions were addressed, and revisions were made to the final questionnaire. The study questionnaire was evaluated on 35 people as a reliability assessment before the actual study began. However, they were not included in the final analysis.

Statistical analysis

The data were entered into an Excel spreadsheet and processed. The SPSS statistics version 26 program was used to compute descriptive statistics on sample characteristics, such as means, standard deviations, and frequency distributions. The studies analyzed demographic details, harassment, depression levels, work pressure, working hours, sexual inadequacy, sexual desire, and drug usage. Chi-square test was used to find out the association between different variables. A significant association was defined as one with a "p" value <0.05.

RESULTS

In total, 150 people participated in our study. Each gender had the same number of participants (50%). Most participants (n = 72; 48.0%) were between the ages of 26 to 35 years, with a mean age of 28.83 ± 5.56 years. Among them, 22.0% of respondents had low work pressure, 42.7% had moderate work pressure, and 35.3% had heavy work pressure (Table 1).

Table 1: Distribution of the participants according to their demographic details

Demographics	Particulars	Number of respondents (N=150)	Percentage (%)
Age (in years)	18-25	53	35.3
	26-35	72	48.0
	36-45	25	16.7
Gender	Male	75	50
	Female	75	50
Experience	Fresher	51	34
	Non fresher	99	66
Working pressure	Low	33	22
	Medium	64	42.67
	High	53	35.33
No. of sexual partners	0	30	20.0
	1	53	35.3
	2-4	55	36.7
	5-9	8	5.3
	10+	4	2.7
Sexual Inefficiency	No	54	36.0
	Yes	11	7.3
	Suspected	35	23.3
	Don't know	40	26.7
	Need counselling	10	6.7
Depression levels	Normal	61	40.7
	Mild	19	12.7
	Moderate	24	16.0
	Severe	16	10.7
	Very severe	30	20.0
Sexual desire	Every day	31	20.7
	Weekly twice	33	22
	Weekly once	33	22
	Monthly once	23	15.3
	Never	30	20.0
Sexual orientation	Heterosexual	119	79.3
	Bisexuals	17	11.4
	Gays or lesbians	5	3.3
	Others	4	2.7
Harassment	Physically	21	14
	Sexually	11	7.3
	Mental	41	27.3

In the study, 79.3% (119) of the participants were heterosexual, followed by bisexuals with 11.4% (17), gays and lesbians each with 3.3% (5), and others with 2.7% (4). In response to the number of

sexual partners, 20% (30) of the participants never had any sexual partners, 35.3% (53) of the participants had one sexual partner, 36.7% (55) had 2-4 sexual partners, 5.3% (8) had 5-9 sexual partners, and 2.7% (4) had ten or more sexual partners. 20.7% (31) of the

participants desired to have sexual relations every day, 22% (33) twice a week, 22% (33) once a week, 15.3% (23) once a month, and 20% (30) of the participants did not have sexual desire. In total, 36.0% (54) of participants were satisfied with their sexual needs, 7.3% (11) had sexual inefficiency, 23.3% (35) were suspected of having sexual inefficiency, and 26.7% (40) were unknown, 6.7% (10) required counseling. Mental harassment affected 27.3% (41) of participants, 14 % (21) of those who were physically harassed, and 7.3 % (11) of those who were sexually harassed (Table1). As per the HAM-D scale assessment, 59.3% (89) of the participants had at least mild depression. While people who were mildly, moderately, severely, or extremely depressed made-up 12.7 %,16%, 10.7%, and 20% of the participants, respectively. In terms of work pressure, 60.6% (20) of low work pressure, 33.81% (21) of medium work pressure, and 18.87% (10) of high work pressure were fresher. There was a statistically significant difference in the experience among work pressure (p<0.001). 60.6% (20) of low work pressure, 53.13% (34) of medium work pressure, and 66.04% (35) of high work pressure were depressed. There was no statistically significant difference in the presence of depression among work pressure (p>0.05). 57.57% (19) of low work pressure, 87.5% (56) of medium work pressure, and 90.57% (35) of high work pressure were having sexual desire at least once in a month. There was statistically significant difference in the sexual desire among work pressure (p<0.001) (Table 2).

Table 2: The association of work pressure with experience, sexual desire and depression.

Parameters assessed		Work pressure			p value
		Low	Medium	High	
Experience	Fresher	20 (39.2%)	21 (41.2%)	10 (19.6%)	<0.001
	Non-fresher	13 (13.1%)	43 (43.4%)	43 (43.4%)	
Sexual desire	Every day	12 (38.71%)	11 (35.48%)	8 (25.81%)	<0.001
	Weekly twice	2 (6.1%)	20 (60.6%)	11 (33.33%)	
	Weekly once	4 (12.12%)	14 (42.42%)	15 (45.45%)	
	Monthly	1 (4.36%)	11 (47.83%)	11 (47.82%)	
	Never	14 (46.67%)	8 (26.67%)	8 (26.67%)	
Depression	Normal	13 (21.3%)	30 (49.2%)	18 (29.5%)	0.695
	Mild	6 (31.6%)	7 (36.8%)	6 (31.6%)	
	Moderate	5 (20.8%)	10 (41.7%)	9 (37.5%)	
	Severe	5 (31.3%)	5 (31.3%)	6 (37.5%)	
	Very severe	4 (13.3%)	12 (40%)	14 (46.7%)	

DISCUSSION

In this study, we sought to determine the association of work pressure with depression and sexual desire among HCPs. The majority of the healthcare professionals who participated in the study were between the ages of 26 to 35 years, similar is reported by Nagarkar et al.,[7]. We observed no statistically significant difference in depression among various levels of work pressure (p>0.05). However, high work pressure has a greater number of severe and very severely depressed HCPs. In contrast to our result, Birhanu M et al. reported a higher risk of developing depression with high work pressure [8]. In the study, we observed that most low-work-pressure participants have depressive symptoms. It indicates that some other hidden factors could influence causing depression. In the study, 27.3% are mentally, 14% are physically, and 7.3% are sexually harassed. Other might be the terrifying working environment due to the spread of the COVID-19 pandemic. Sahebi A et al. reported a higher prevalence of depression among HCPs [9].

The study observed a statistically significant difference in sexual desire among various work pressure (p <0.001). The study shows the low work pressure group has more sexual desire every day and never than medium and high work pressure (38.71%, 46.67% vs 35.48%, 26.67% vs 25.81%, 26.67%). It might be due to the smaller number of experienced HCP belonging to a low work pressure group (13.1%), and 20% of the study participants do not have sexual partners. It may also be affected by harassment (Table 1 & 2). However, 2.7 % have 10 or more partners, which reveals that sexual desire is a wholly personal experience that is unrelated to one's career or other factors. Many aspects, including psychological, physio-anatomical, cultural, and relational variables, have a role in sexuality. It varies from person to person, period to time, and from situation to scenario throughout life [10]. Sexual desire is directly related to sexual activity [11]. Furthermore, it differs in people who are psychologically In the study, 20% of HCPs reported having ever had any sexual desire, which could be attributed to disorder factors such as hormone changes, sexual aversion disorders, and erectile dysfunction. HCPs suffering from depression were either unaware of or suspicious of their sexual inefficiency, and due to their busy schedules, they rarely sought medical confirmation [12].

Our study was limited to physicians and nurses with a smaller sample size, so the study can further extrapolate to other HCPs such as pharmacists, physiotherapists, etc.. The small sample size was a paradigm for our research, and the conclusion drawn from

this will be inadequate and unconcise. Further high-quality research with many populations is necessary for a clear picture and proper understanding.

CONCLUSION

In the study, we observed no difference in the presence of depression among various levels of work pressure and the difference in sexual desire among multiple groups of work pressure. Further high-quality researches with many populations are necessary to corroborate the result.

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Ethics statement:

The study was approved by the Institutional Ethical Committee, Norvic International Hospital, Thapathali, Kathmandu, Nepal (NIH/IEC/1640/2021-22).

Conflicts of interest:

The authors have no conflicts of interest to declare for this study.

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