



## Original Article

# Stress and psychological well being status among health care professionals

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## Abstract:

Stress is a condition or feeling experienced when a person perceives that “demands exceed the personal and social resources the individual is able to mobilize” (Lazarus)<sup>1</sup>. It could be debatable whether stress is inevitable, but most professionals report stress at work place and in general. A common perception prevails regarding high stress level amongst professionals in particular industries like the information technology, professionals with fieldwork (medical representatives, insurance agents) that is also backed by study findings. However, stress among health care professionals is less explored.

The present study aims to explore and assess psychological well being and stress levels among health care professionals.

50 health professionals, including doctors, paramedical and nursing staffs from different multi-specialty hospitals in Kolkata were assessed on the General Health Questionnaire (GHQ 12) and the Professional Life Stress scale, and Medico Psychological Questionnaire.

Majority of the subjects had evidence of psychological distress. Stress level was present in varying degree among all professionals, while nurses and technicians had stress level at severe level.

**Key Words:** Stress; Psychological well-being; Health care professionals.

## Introduction

Stress has been defined as a condition or feeling experienced when an individual perceives that demands exceed his personal and social resources he can mobilize. Stress at any workplace appears to be inevitable, irrespective of the work nature. While a little stress could be performance-boosting (eustress), stress beyond control (distress) can bring adverse effect on work performance and to the individual itself. Conventionally stress is looked upon as excessive workload, but not all people with excess workload may have stress. Study findings support a common perception regarding high stress in certain work professionals, like those in the Armed forces, Police,

high vigilance duties in railways and power-grids to name a few [1 - 4]. Information Technology professionals, Medical representatives and Insurance agents too, who always have difficult business targets to meet are considered to be another stressed group of work professionals. Health care professionals too are not immune from stress. While doctors are perceived an elite group of professionals with relatively better pay packages and job securities, the same could not be true for other health care professionals. Increasing job responsibilities, multitasking, need to adept self with emerging technologies, stricter consumer rights along with job insecurities and a competitive workplace make health care a challenging sphere to work in. Thus it is important to check stress levels and well being status of health care professionals, as first and foremost they are directly involved with health care of the people. Any error arising out of stress could be hazardous to the patient if not life threatening.

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With this back ground the current study aims to explore and assess psychological well being and stress levels among health care professionals.

## Methods

This is a cross- sectional, exploratory study conducted to find out the stress level and psychological well being status among health care professionals.

**Sample:** Based on purposive sampling technique, a sample consisting of 50 health professionals of both sex (Doctors - 20, Nursing staff - 15, Paramedical staff - 15) were included. Sample was drawn from different private multi - specialty hospitals of Kolkata.

**Socio Demographic Data Sheet:** This semi structured Performa includes details about age, sex, marital status, specialty and years of work experience.

**General Health Questionnaire (GHQ-12):** Developed by D Goldberg (1992)<sup>5</sup>, the GHQ is a self- administered screening questionnaire, which provides a measure of overall psychological health and wellness. It focuses on two major classes of phenomena: i) inability to continue to carry out normal healthy function and ii) symptoms of a distressing nature. GHQ-12 is a short version of the original GHQ and has a sensitivity 89% and specificity of 80%.

**The Professional Life Stress Scale (PLSS):** Developed by David Fontana (1989)<sup>6</sup>, the Professional Life Stress Scale is a 24-item self- administered scale to measure stress levels among working professionals. The scores categorize stress levels into ranges of: Non-problematic (up to 15), Moderate range (16-30), Problematic (31-45) and Major problem (45-60).

**Medico Psychological Questionnaire (MPQ):** Developed by J. Bharat Raj<sup>7</sup>, the Medico Psychological Questionnaire is a 50 item questionnaire. The tool is a reliable and valid measure of general neuroticism and gives insight into five domains, namely: Obsession compulsion, Reactive depression, Anxiety Neurosis, Neurasthenia, and Hysteria.

After taking informed consent, subjects were assessed on the General Health Questionnaire (GHQ-12), the Professional Life Stress Scale (PLSS) and the Medico Psychological Questionnaire (MPQ). Further, data were analyzed using descriptive statistics.

## Results

**Characteristics of the sample:** Mean age of doctors was 43.62 years, while that of nurses, technicians, and paramedical staffs it was 35.75 years, 34.39 years, and 32.54 years respectively. Findings reveal that majority of the doctors, technicians and paramedical staffs were male, while nurses were mostly females. Majority of the sample was married.

**Table 1 Socio-demographic details of subjects.**

		Doctors (n= 15 )	Nurses (n= 15 )	Technicians (n= 15 )	Para - medical Staffs (n= 5 )
Age	Range (years)	32-54	29-45	26- 43	28-37
	Mean ±9.71	43.62 ±9.71	35.75 ±6.83	34.39 ±7.39	32.54 ±4.58
Sex	Male	9	3	11	3
	Female	6	12	4	2
Marital Status	Married	14	11	13	5
	Single	1	4	2	0
Experience (in years)	Average	9 years	7 years	6 years	5 years

GHQ profile of the sample reveals evidence of distress in majority of the sample. The percentage was highest among paramedical staffs (80%) followed by doctors (60%), nurses (60%) and technicians (53.3%). While neither doctors, nor paramedical staffs had psychological distress levels at severe problem level, it was at problem level among nurses (20%) and technicians (6.6%). It is to be mentioned that GHQ scores should not taken as a measure of stress level, rather indication of psychological distress only

**Table 2 Profile of GHQ-12 scores of subjects .**

GHQ	Doctors (n= 15 )		Nurses (n= 15 )		Technicians (n= 15 )		Paramedical Staffs (n= 5 )	
	No.	%	No.	%	No.	%	No.	%
0- 15	6	40	3	20	6	40	1	20
> 15 (Evidence of distress)	9	60	9	60	8	53.3	4	80
> 20 (Severe problem & Psychological distress)	0	0	3	20	1	6.6	0	0

Nature of stress: It was evident that stress level was highest among nurses followed by technicians, paramedical staffs and finally doctors. Stress was clearly a problem for 33.3 percent of nurses, 20 percent of technicians and paramedical staffs and 13.3 percent of doctors. While neither doctors, nor paramedical staffs in the sample had stress level at major problem level; 13.3 percent of nurses and 6.6 percent of technicians fell under stress at major problem category.

**Table 3 Stress levels (Professional Life Event Scale) scores of the subject .**

PLES	Doctors (n= 15)		Nurses (n= 15)		Technicians (n= 15)		Paramedical Staffs (n= 5)	
	No.	%	No.	%	No.	%	No.	%
No Problem	6	40	3	20	5	33.3	1	20
Moderate Range	7	46.6	5	33.3	6	40	3	60
Clearly a Problem	2	13.3	5	33.3	3	20	1	20
Major problem	0	0	2	13.3	1	6.6	0	0

The MPQ scores, which provide a valid measure of neuroticism, are divided into domains of obsessive tendency, reactive depression, anxiety neurosis, neurasthenia and hysteria.

The above table shows above cut-off score profile of subjects on the measure. Findings reveals reactive depression traits among all health professionals (33.3% - 66.6%). They also had anxiety traits in majority of the sample (40% - 60%). A small percentage of technicians (13.3%) and nurses (6.6%) had neurasthenic traits; while only nurses (6.6 %) among the entire sample had traits of hysteria.

**Table 4 Profile of subjects scoring above cut-off on MPQ.**

MPQ Domains	Doctors (n= 15)		Nurses (n= 15)		Technicians (n= 15)		Paramedical Staffs (n= 5)	
	No.	%	No.	%	No.	%	No.	%
Obsession	2	13.3	3	20	2	13.3	0	0
Reactive depression	5	33.3	10	66.6	6	40	2	40
Anxiety	6	40	8	53.3	9	60	3	60
Neurasthenia	0	0	1	6.6	2	13.3	0	0
Hysteria	0	0	1	6.6	0	0	0	0

## Discussion

Findings of the study are in unison with previous studies reporting stress among health professionals [8]. While psychological distress, as measured by GHQ was at evidence

level in varying degree for all subjects, it was at severe level only for nurses and technicians. The same pattern followed while analyzing the stress level among these health professionals. Stress was clearly a problem for all the health professionals, yet again nurses and technicians had stress at major problem level. High stress levels among nurses have been previously reported too and support present study findings [9]. This comparative difference of stress level among different health professionals, with nurses on the higher band could be because of work nature of nurses and technicians that require high vigilance and monitoring through out their working hours. Nurses in comparison to doctors, technicians or paramedical staffs are often put into multiple responsibilities which also include dealing with the public. Study findings have suggested that, these role ambiguity conditions lead to stress [10] in nurses.

While these work hazards are for all in varying degree; personal factors too play a role in stress. This is a fact that irrespective of individual position at workplace, income or security, every professional is subject to socially adverse conditions, which could have hazardous effects on the individual. It is evident that doctors are on top of hierarchy in health care and best paid amongst all, even they are subject to stress. On the other hand not all nurses, technicians, and paramedical staffs who are relatively less if not inadequately paid had stress.

The study did not attempt to correlate personality traits or individual coping strategies with stress level of subjects. However, one of the measures used in the study (MPQ), which assessed neuroticism traits in the subjects, revealed anxiety and reactive depression in majority of the subjects which indicated emotional maladjustment tendencies in these subjects. Emotional adjustment comes into question also because of the subjective verses objective perception aspects of stress.

Finding of this study does not imply that workload or occupational hazard of these professionals was the sole reason behind psychological distress and stress perceived by them. The findings only indicate towards inherent stress among health care professionals, and relatively in bigger proportion among nurses like any working professional. The findings indicate need of taking precautionary measures in this regard, which could be psychological screening during recruitment, as well as regular checks of stress levels among not only nurses but all health professionals. A dedicated cell in each organization offering regular counseling and psychological intervention can prevent stress related hazards at preliminary stages [11].

The study could have given better insights, if it included a larger and diversified sample, with controlling of confounding variables.

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