ORIGINAL ARTICLE

Do doctors have hidden distress; a study conducted at tertiary care hospital at Lahore

Khaula Atif,[1] Habib Ullah Khan,[2] Adeela Farid Malik[3]

Abstract

Objectives: Toanalyse the prevalence of distress in doctors serving in a tertiary care hospital and studying the factors having significant impact on the subject.

Methods: The cross-sectional study was conducted at the Combined Military Hospital, Lahore, from February to December 2014, and comprised doctors serving for at least six months who volunteered to fill out the standardised General Health Questionnaire-12Demographic features and level of job satisfaction were taken as independent variables. Outcome variable was the questionnaire score. SPSS 20 was used for data analysis.

Results: The mean questionnaire score of the 97 respondents in the study was 12.27±6.397. Of them, 19(19.6%) and 11(11.3%) had distress and severe distress respectively. Marital status (p=0.006), age (p=0.029), income per month (p=0.010) and levels of job satisfaction (p=0.001) had significant impact on the scores. Variables having insignificant impact were gender (p=0.529), number of children (p=0.220), education (p=0.816), service years (p=0.155), current employment (p=0.504), nature of job (p=0.531), working hours (p=0.632), additional duties (p=0.663), and socioeconomic class (p=0.935).

Conclusion: Almost one-third of the doctors had distress under the significant impact of multiple factors.

Keywords: Delivery of healthcare, Hospital inventory, Job satisfaction, Developing countries, Psychological stress.
(JPMA 66: 63; 2016)

Introduction

Doctors are always considered to be the saviours of the sick and the distressed. Although the nature of a doctor's job makes him quite prone to distress, yet they are somehow believed to be immune to it. The subject of distress in doctors is inadequately studied throughout the world, especially in developing countries like Pakistan. Some studies have revealed high levels of distress amongst doctors.[1] Literature reveals that 28% of doctors and paramedical staff have enhanced levels of psychological stress, which is quite high compared to 18% in the general working population.[2] Distress may make people mentally or physically unwell. It plays a pivotal role in a person's private and professional life. Yet, its significance has mostly been overlooked.

Doctors are the lynchpin to mental and physical health of any society. Healthy doctors lead a healthy nation. Emotional distress in doctors can adversely affect the delivery of healthcare.[3] Fatigued and distressed doctors may err more at job.[4] Therefore, every society must keep an eye on mental health issues and psychological stress of its physicians. Psychological and psychiatric assessment tools may be utilised to evaluate distress in workers, its sources and predisposing factors.[5] Few studies have been conducted to evaluate distress in doctors in Pakistan, but there is no report of any such analysis in a tertiary care hospital in Lahore applying the General Health Questionnaire instrument-12(GHQ-12). GHQ is a well-renowned and widely used instrument in occupational research.[5]

The current study was planned to utilise this hospital inventory. It was hypothesised that doctors must be having significant levels of distress. The research may help to unmask hidden, unrevealed or un-documented distress in doctors, may help in initiating reforms to attenuate it and may prove as a guideline to lead to more studies in this regard.

Subjects and Methods

The cross-sectional study with non-probability purposive sampling was conducted at the Combined Military Hospital (CMH), Lahore, a tertiary care facility, from February to December 2014. The standardised GHQ-12 questionnaire was used. The sample comprised doctors of either gender serving in the hospital for at least six months regardless of their departments and age. With prior estimation of 50% non-response rate, 20% doctors

[1]Department of General Administration, [3]Department of Dermatology, Combined Military Hospital, Peshawar Cantonment, Khyber Pakhtunkhwah, [2]Department of Neurosurgery, Combined Military Hospital, Abbottabad Cantonment, Pakistan.

Correspondence: Khaula Atif. Email: khaulaatifkhan@gmail.com

were expected to have distress, with a margin of error of 10%. The required sample size was calculated to be 96 individuals representing a population of 20,000. Thus, 220 forms were distributed to the doctors.

External validity was variable as local or regional studies were not available for comparison, while international studies revealed a wide spectrum of distress among doctors ranging from 6-68%.

Formal approval was taken from the institutional ethics committee, and all the participating doctors signed an informed consent form.

The main outcome variable was distress as per GHQ scores. Independent variables were demographic features and level of job satisfaction.

Statistical analysis was done using SPSS 20, and data was expressed as frequencies, percentages and mean ± standard deviation. Cross-tabulation was done via chi-square test and $p<0.05$ was taken as significant.

Results

Out of 263 doctors on the hospital roll, 203(77%) initially volunteered, but 97(47.78%) of them filled the GHQ-12 and represented the study sample. Mean age of participants was 33.47±9.454 years (Table-1).

Table-2: Level of Job Satisfaction & Distress in Study Participants.

Job Satisfaction	GHQ Grade			Total
	No Distress	Distress	Severe Distress	
Below Average	3	2	5	10
Average	19	8	5	32
Above Average	15	6	0	21
Well Above Average	17	3	1	21
Outstanding	13	0	0	13
Total	67	19	11	97

GHQ: General Health Questionnaire.

The mean GHQ score was 12.27±6.397 (range: 0-30). Overall, 67(69.1%) doctors had no distress, 19(19.6%) had distress and 11(11.3%) had severe distress (Figure-1).

Amongst the single doctors, 3(9%) had distress, while 8(24%) had severe distress. Among the married doctors, 16(25%) had distress, and 3(4.69%) had severe distress (p=0.006).

There was significant impact of age on distress (p=0.029);

Table-1: Frequencies and Percentages of Demographic Variables of Study Participants (n-97).

Gender	Age Group in Years	Education
Male=52(53.6)	22-29= 44(45.4)	MBBS=61(62.9)
Female=45(46.4)	30-39=26(26.8)	MCPS And/Or MPH=4(4.1)
	40-49=16(16.5)	M.Sc And/Or MPH=5(5.2)
	50-59=10(10.3)	Single FCPS Or Equivalent=21(21.6)
	≥60=1(1.0)	≥1 FCPS Or Equivalent=6(6.2)
Marital Status	**Number Of Children**	**Service Years**
Single=33(34.0)	No Child=48(48.5)	Less Than 4=46(47.4)
Once Married=64(66.0)	1=9(9.3)	5-9=17(17.5)
Divorced=Nil(0)	2=11(11.3)	10-14=7(7.2)
Widowed=Nil(0)	3=21(21.6)	15-19=7(7.2)
≥ 1 Marriage=Nil(0)	≥4=8(9.3)	≥20 =19(19.6)
Current Employment	**Working Hours/week**	**Additional Duties**
Army Doctor=51(52.6)	Up to 35hrs=6(6.2)	Nil=7(7.2)
Re-employed after retirement from army=5(5.2)	36-95hrs=23(23.7)	MO[1]/SMO[2]=20(20.6)
Civilian Doctor=41(42.2)	96-125hrs=13(13.4)	Resident=45(46.4)
	126-175hrs=37(37.1)	On Call From Home=16(16.5)
	≥176hrs=19(19.6)	MO[1] & On Call From Home=9(9.3)
Nature Of Job	**Income[3]**	**SEC[4]**
House Officer=29(29.9)	Honorary=15(15.5)	Low=2(2.1)
MO[1] Administration=3(3.1)	15-49=31(32.0)	Low-Middle=4(4.1)
MO[1] Clinical=17(17.5)	50-74=21(21.6)	Middle-Middle=48(49.5)
Trainee=23(23.7)	75-99=6(6.2)	Upper-Middle =33(34.0)
Consultant=25(25.8)	≥100 =24(24.7)	Upper Class=8(8.2)

[1]MO stands for Medical Officer
[2]SMO stands for Senior Medical Officer
[3]Income per month in thousands PKR
[4]SEC stands for Socioeconomic Class

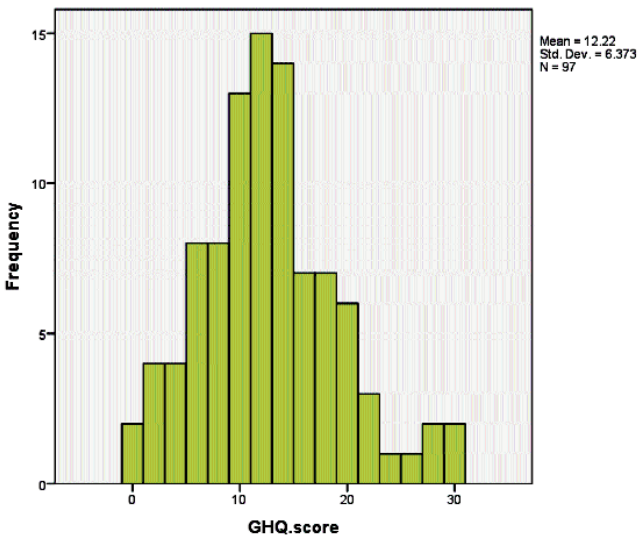

Figure-1: Frequency of GHQ-12 Scores in Study Participants.

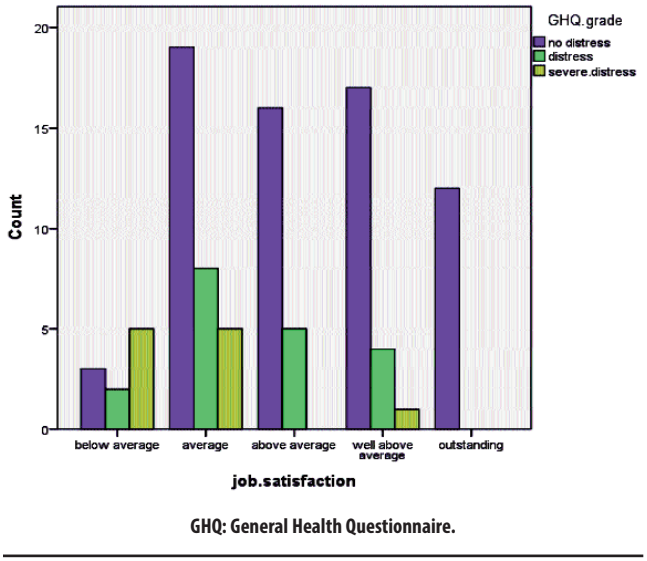

Figure-2: Negative Correlation between Level of Job Satisfaction and GHQ Scores of Study Participants.

in 22-29 years age group, 6(13.64%) showed distress and 8(18.8%) showed severe distress; in 30-39 years, 11(42.31%) had distress and 1(3.85%) had severe distress; in 40-49 years, 2(12.5%) showed distress and 2(12.5%) showed severe distress; while in 50-59 years age group, and among those over 60 years of age, none showed distress or severe distress.

Relation of distress with income was significant (p=0.010). Among honorary workers, distress was in 4(26.67%) and severe distress in 4(26.67%):15-49,000 rupees per month (PKR/pm), distress was in 1(3.23%) and severe distress in 4(12.90%);50-74,000 PKR/pm, distress 9(42.86%) and severe distress 1(4.76%);75-99,000 PKR/pm, there was no distress or severe distress;100,000 or more PKR/pm, distress 5(20.83%) and severe distress 2(8.33%).

Level of job satisfaction also significantly affected the GHQ scores (p=0.001) (Table-2), and lower job satisfaction showed higher distress scores and vice versa (Figure-2).

There was no significant impact of gender (p=0.529), number of children (p=0.220), education (p=0.816), service years (p=0.155), current employment (p=0.504), nature of job (p=0.531), additional working hours (p=0.632), additional duties (p=0.663), and socioeconomic class (SEC) (p=0.935).

Discussion

Distress in doctors is an under-studied and under-estimated issue. Most of us are unable to clearly understand and elucidate this term. There is no single definition of distress.[6] In Medicine, a maladaptive and aversive behaviour is called distress which a person may develop under stressful events.[7] Psychology defines it as the process of interaction of a person with his environment.[6] Medical researchers have more recently started putting more stress on acknowledgement of distress in health issues. It has been recommended to add distress as the sixth vital sign.[3] Doctors can be expected to evaluate the distress of their patients. But now it is time to formally gauge the levels of distress in doctors serving in various healthcare facilities. Various internationally acknowledged inventories are available for the said purpose, and GHQ is one of them. It has been used many a time in postgraduate students to analyse occupational health and well-being.[5] It is a user-friendly questionnaire, which yields fruitful results to assess distress or psychological problems in subjects.[5] Its reliability coefficient ranges from 0.78 to 0.95[8-10] while sensitivity is 0.68, specificity 0.59 and overall misclassification rate 0.40.[10]

A doctor's job is multi-faceted and multi-dimensional. Far less attention has been directed to reducing specific elements of distress among Resident physicians.[4] Doctors face unique challenges which may lead to distress, for example financial problems, long working hours during day and night, crushing responsibilities, dealing with dying patients, overwhelming patients' demands and poor working environment.[11] Doctors are not really good at seeking medical help for themselves; the phenomenon is even more profound when it comes to assistance for mental health. The reasons may be lack of time, neglect towards one's own health and, most ironically, the fear of

stigmatisation. At every stage of management, distress should be screened, diagnosed, treated and followed-up aptly.[3]

Literature reveals that even the doctors with insight of distress fail to opt for appropriate help.[11] Instead of seeking professional help, they mostly take refuge in relations.[12] Doctors also tend to ignore the obvious symptoms of distress in their colleagues.[13] Thus distress remains a masked, under-diagnosed and under-treated phenomenon in healthcare professionals.

In this study, only 47.78% volunteers responded to the study. In other studies of distress, the response rate by doctors was 67.5%[4] and 67.5%.[9] In this study, 30.9% doctors showed substantial levels of distress. No similar local or regional studies are available for comparison from our part of the world. In the United States, substantial levels of distress has been recorded in doctors compared to the general public.[14] In London, 68%[9] and in Japan 6.0% doctors had moderate to severe psychological distress[15] while in New Zealand 10% doctors showed severe distress.[16]

This study revealed predominance of distress in youngsters, similar to few other researches,[11] especially in junior most physicians.[12] This study did not show gender difference in distress, but some researchers have revealed its predominance among women.[12] The marital status showed significant yet varying results in this study. Out of the distressed, married were more prone to having mild to moderate distress, while single individuals had more prevalence of 'severe distress'. The doctors with maximum monthly income were least distressed in this study. In Japan, the levels of psychological distress were considerably affected by social status.[17] Adverse working conditions profoundly increase distress in doctors and negatively affect their work qualitatively and quantitatively.[12] In this study, job satisfaction had a profound effect on level of distress, both being negatively related. Other researchers have also documented that job satisfaction is inversely proportional to GHQ scores.[18] Job satisfaction has been studied by scholars to assess distress at work and desire to serve.[18-20] It depicts the mental health and well-being of workers, and are both directly proportional to each other.[20]

This study is unique and, to the best of the knowledge of the authors, first of its type in the region as no such study has yet been carried out to assess distress in doctors, specially where GHQ-12 has been used as an inventory. It has brought to limelight considerable levels of distress in the subjects, with probing in many allied issues and pre-dispositions. It can give a fair idea of psychological health issues in doctors serving in similar environments and circumstances. Being first of its type, it may lead to other similar research in local and regional medical set-ups. There is a dire need to initiate explicit programmes to evaluate, manage and prevent distress in doctors.[12] ReMed is one of the programmes in Europe[11] while the United Kingdom, Spain and Norway have also established similar programmes under consultation with the European Association for Physician Health. But Pakistan, like many other countries, does not have any such programmes. Such programmes may serve as a model for similar initiatives.

The study has its limitations. Firstly, only 97 among 263 doctors in our study volunteered to fill the GHQ questionnaire, and the selection bias was thus inevitable. These doctors were more likely to be health-conscious or research oriented than the others. Secondly, the study has been done in a single medical setup, thus generalisation of the findings is not recommended. Nevertheless, the participation and survey response rates were high compared to surveys on other medical doctors. Thirdly, no similar local or regional studies were available to validate its findings. Finally, the GHQ, or any other standardised questionnaire, cannot be used alone to diagnose distress. Although the positive likelihood ratio for these inventories is similar to that of other accepted screening tools, but additional clinical evaluation would be necessary to diagnose distress in participants with positive screening scores.

Conclusion

The number of doctors diagnosed to have distress and severe distress is critical. Moreover, marital status, age group, income and level of job satisfaction had significant effects on the levels of distress. Doctors circumvent revealing their distress and even at times lack adequate insight to their own mental health issues. Nationally representative psychiatric morbidity surveys and controlled treatment trials of doctors are required to prevent, reveal and control morbidity from distress amongst physicians.

Acknowledgements

We are grateful to all the doctors of Combined Military Hospital, Lahore, who participated in the study.

References

1. Dillner L. Doctors are more miserable than ever, says report. BMJ 1994; 309: 1529.
2. Wall TD, Bolden RI, Borrill CS, Carter AJ, Golya DA, Hardy GE, et al. Minor psychiatric disorders in NHS trust staff: occupational and gender differences. Br J Psychiatr 1997; 171: 519-23.
3. Bultz BD, Holland JC. Emotional distress in patients with cancer: the sixth vital sign. Comm Oncol 2006; 3: 311-4.

4. West CP, Tan AD, Habermann TM, Sloan JA, Shanafelt TD. Association of Resident Fatigue and Distress with Perceived Medical Errors. JAMA 2009; 302: 1294-300.
5. Jackson CA. The general health questionnaire. Occup Med (Lond) 2007; 57: 79.
6. Schwarzer R, Schulz U, Berli FU. THE ROLE OF STRESSFUL LIFE EVENTS. Stressful Life Events 2001. [online] [cited 2014 Jan 14]. Available from: URL: http://userpage.fu-berlin.de/health/materials/lifeevents.pdf
7. Recognition and Alleviation of Pain and Distress in Laboratory Animals. Institute for Laboratory Animal Research, National Research Council; 1992
8. Jackson C. The General Health Questionnaire. Occup Med (Lond) 2007; 57: 79.
9. Winefield HR, Goldney RD, Winefield AH, Tiggemann M. The General Health Questionnaire: reliability and validity for Australian youth. Aust N Z J Psychiatr 1989; 23: 53-8.
10. Politi PL, Piccinelli M, Wilkinson G. Reliability, validity and factor structure of the 12-item General Health Questionnaire among young males in Italy. Acta Psychiatr Scand 1994; 90: 432-7.
11. Hegenbarth C. Rescuing doctors in distress. CMAJ 2011; 183: E153-4.
12. King MB, Cockcroft A, Gooch C. Emotional distress in doctors: sources, effects and help sought. J R Soc Med 1992; 85: 605-8.
13. Rawnsley K. Helping the sick doctor: a new service. BMJ 1985; 291: 923.
14. Devi S. Doctors in distress. Lancet 2011; 377: 454-5
15. Suzue T, Sakano N, Miyamae Y, Yoda T, Yoshioka A, Nagatomi T, et al., editors. Factors associated with psychological distress of medical doctor in Kagawa prefecture, Japan: a pilot study. Health 2011; 3: 748-51.
16. Dowell AC Dowell AC, Hamilton s, MsLeod DK. Job satisfaction, psychological morbidity and job stress among New Zealand General Practitioners. N Z Med J 2000; 113: 269-72.
17. Sakurai K, Kawakami N, Yamaoka K, Ishikawa H, Hashimoto H. The impact of subjective and objective social status on psychological distress among men and women in Japan. Sol Sci Med 2010; 70: 1832-39.
18. Janyam K. The Influence of Job Satisfaction on Mental Health of Factory Workers. Internet J Ment Health 2009; 7: 1-6
19. Pincus JD, Knipp JE, Rayfield RE. Internal communication and job satisfaction revisited: The impact of organizational trust and influence on commercial bank supervisors. Pub Relations Res Ann 1990; 2: 173-91
20. Pugliesi K. The consequences of emotional labor: Effects on work stress, job satisfaction, and well-being. Motivation and Emotion 1999; 23: 125-54.