


A Study of Job Satisfaction, Job Stress and Quality of Life in Auxiliary Health Care Workers of a Public Tertiary General Hospital

Rucha Sule¹ · Harshal Thadasare¹ · Sushma Sonavane¹ · Nilesh Shah¹ · Avinash De Sousa^{1,2} 

Received: 12 August 2016 / Accepted: 19 January 2017 / Published online: 25 January 2017
© Springer India Pvt. Ltd. 2017

Abstract Stress is a contributing factor to job stress, lack of satisfaction at work and poor quality of life. Job stress and job satisfaction are interlinked in most organizational settings. The present study aimed to assess the quality of life, level of job stress and level of job satisfaction amongst hospital staff in a public tertiary general hospital. The sample consisted of 110 workers from the hospital across various departments and classes of work. The sample was administered the WHO Quality of Life questionnaire brief version, the Workplace Stress Scale and the Generic Job Satisfaction Scale. The sample was divided as per the department in which they worked and the type of work involved. The scores on various scales were statistically analyzed. It was observed that quality of life was highest amongst those working in psychiatry and the ICU settings. Job stress ($p < 0.0001$) and job satisfaction ($p = 0.0469$) was significantly greater amongst psychiatry and medicine department staff. Amongst various groups student nurses had higher QOL scores ($p = 0.013$) as well as lower job stress ($p = 0.04$) scores. Job stress ($r = -0.4457$) and job satisfaction (0.3797) were correlated negatively and positively to the scores on the QOL scales. It is essential that job stress be addressed in hospital staff as well as measures adopted to enhance job satisfaction which may in turn improve quality of life in this group.

Keywords Job stress · Job satisfaction · Quality of life · Hospital staff · Hospital · Stress · ICU · Psychiatry · Surgery · Medicine · Nurses

Introduction

Stress is an important factor in determining work output and satisfaction at work [1]. It is well known from various studies that healthcare workers across disciplines and irrespective of the type work may face job stress on a day to day basis [2]. Studies have demonstrated an inverse correlation between stress on the job and job satisfaction as well life satisfaction and quality of life [3, 4]. Hospital staff has shift duties and long hours of work that may increase their job stress and reduce satisfaction at work [5]. Dissatisfied hospital staff are more likely to provide inferior services and the physical, mental and social functioning of these workers may be affected substantially by the level of their job satisfaction [6]. Organizational psychological medicine in the recent years has focused on interventions that aim to reduce illness and improve wellness in hospital staff with an overall aim to enhance their quality of life in general [7]. Many studies have discussed stress, burnout and psychopathology in physicians and nurses as well as nursing students in India [8–10]. This stress has been related poor doctor's attitude, posting in busy departments (emergency/ICU), inadequate pay, too much work and hospital policy. 40–45% of nursing staff in these studies were stressed across these studies. There is a dearth of Indian research on hospital staff such as ward assistants (ward boys), hospital cleaning staff (hospital sweepers) and rotational staff who work together as a team in hospitals. There is little or no data available on their job stress, job satisfaction or quality of life [11]. The present study was

✉ Avinash De Sousa
avinashdes888@gmail.com

¹ Department of Psychiatry, Lokmanya Tilak Municipal Medical College and General Hospital, Mumbai, India

² Carmel, 18, St. Francis Road, Off S.V. Road, Santacruz (West), Mumbai 400054, India

aimed at identifying job stress, job satisfaction and quality of life of various types of hospital staff based on the department they work in and the type of work they engage in a public hospital setting. For the purpose of the current study hospital staff meant Staff nurses, Student nurses, Ward boys and Sweepers from various departments of the hospital. The study also aimed at correlating the scores between various scales in this regard with respect to the whole sample.

Methodology

The study was a cross sectional study carried out in a public tertiary general hospital attached to a medical college within the city of Mumbai. After approval by the institutional ethics committee, the hospital staff was informed about the aims and objectives of the study. We approached 110 staff members and followed a systematic sampling method from various departments willing to participate in the study. A list of the staff in various departments was sought and every third staff member was interviewed. A total of 146 workers were contacted and 110 staff workers including Staff nurses, Student nurses, Ward boys and Sweepers from various departments of the hospital formed the final sample. They were interviewed in a single sitting using the following scales viz.

1. *The Workplace Stress Scale (WSS)* [12]—this is an 8 item Likert type scale with scores that range from 1 to 5 and a range of total scores from 8 to 40. The higher the score the greater is the level of stress. It has been used widely in a number of occupational health studies and has good reliability and validity.
2. *The Generic Job Satisfaction Scale (GJSS)* [13]—this is a 10 item Likert type scale made up of statements where the answers are scored in the range 1–5 from strongly disagree to strongly agree and total scores that range from 10 to 50. The scale has been used as a measure of job satisfaction and has good reliability and validity with a Cronbach alpha of 0.77.
3. *WHO Quality of Life Brief Questionnaire (WHOQOL-BREF)* [14]—it is a 26-item version of the WHOQOL-100 assessment. It is a standardized tool used across cultures to assess quality life with good reliability and validity across the world. It measures the QOL in four domains viz. physical, social, psychological and environmental along with a total score. It is one of the most commonly used and standardized measures of QOL across most studies.

The subjects comprised of staff only from departments that consented for the study. Hence staff from only a few departments formed part of the sample. All participants in

the study were in the age range 18–60 years. No other specific inclusion or exclusion criteria were employed. The Hindi translations of the above scales were used for subjects that did not follow English.

Statistical Analysis

The comparison within groups based on the department the staff worked in (5 groups) and the type of work involved (4 groups) was done using a one way ANOVA and Tukey's honest significance of difference (HSD) was used to ascertain intergroup differences. The correlation between total scales in the entire sample was done using a Spearman correlation considering the ordinal nature of the scales. All the statistics were computed using the VassarStats computerized statistical online software.

Results

The study sample consisted of 110 auxiliary health care workers. The age range of the sample 19–59 years with a mean age of 33.37 ± 12.36 years. The sample was divided into 5 groups based on the department they worked in and included 22 members each from the medicine, surgery, Intensive care unit (ICU), Rotational staff (that moved within departments) and psychiatry. The sample was also divided into 4 groups based on the work involved and they included staff nurses ($n = 34$, 30.9%), student nurses ($n = 37$, 36.6%), ward assistants or ward boys ($n = 24$, 21.8%) and sweepers ($n = 15$, 13.6%). All the staff in the study did shift works and rotated shifts regularly.

On comparing the scores on various scales in staff based on department of work it was noted that psychiatry and ICU staff scored higher on QOL scores compared to surgery and rotational staff which was clinically significant though the one way ANOVA did not reveal a statistical significance. Workplace stress was however lowest in rotational and psychiatry staff while highest scores were seen in medicine and ICU staff ($F = 11.03$, $p < 0.0001$). Job satisfaction was highest amongst psychiatry and medicine staff and though ANOVA revealed a statistical significance ($F = 2.5$, $p = 0.0469$), there were no major differences in scores observed across departments with lowest scores being reported from surgery staff (Table 1).

On comparing the staff based on the type of work performed QOL scores was highest for staff and student nurses versus ward assistants and sweepers ($F = 3.76$, $p = 0.0138$). Workplace stress was lowest amongst student nurses and ward assistants while staff nurses showed high scores in this regard ($F = 4.53$, $p = 0.0049$). There were no differences across groups on job satisfaction scores

Table 1 Scores on various scales based on department of work

Scales used	Surgery (n = 22) Mean ± SD	Rotational staff (n = 22)	Psychiatry (n = 22)	Medicine (n = 22)	ICU staff (n = 22)	Statistical analysis
WHO QOL BREF Scale	57.36 (16.55)	58.55 (16.66)	70.22 (8.06)	63.09 (15.44)	69.06 (12.15)	df = 4 F = 3.92 p = 0.052 NS
Work Place Stress Scale	21.22 (6.23)	16.95 (5.51)	18.01 (5.04)	25.59 (4.87)	24.27 (3.98)	df = 4 F = 11.03 p < 0.0001*
Generic Job Satisfaction Scale	30.09 (4.39)	32.04 (6.09)	35.56 (8.42)	35.63 (8.76)	33.18 (6.67)	df = 4 F = 2.5 p = 0.0469*

* Significant ($p < 0.05$), NS not significant, one way ANOVA used in the analysis

Table 2 Scores on various scales based on the type of job

Scales used	Cleaning staff (n = 15)	Ward assistants (n = 24)	Student nurses (n = 37)	Staff nurses (n = 34)	Statistical analysis
WHO QOL BREF Scale	56.68 (14.79)	58.83 (16.87)	68.83 (11.89)	64.76 (14.79)	df = 3 F = 3.76 p = 0.0138*
Workplace Stress Scale	23.53 (5.16)	21.12 (4.84)	18.51 (6.03)	23.17 (6.81)	df = 3 F = 4.53 p = 0.0049*
Generic Job Satisfaction Scale	31.62 (4.93)	32.58 (6.11)	35.16 (7.38)	32.55 (8.44)	df = 3 F = 1.3 p = 0.2783 NS

* Significant ($p < 0.05$), NS not significant, one way ANOVA used in the analysis

though all scores demonstrated moderate to high scores on the scale (Table 2).

The total scores of the entire sample across all scales was correlated using the Spearman correlation and it was perceived that workplace stress correlated negative with QOL ($r = -0.4629$). There was a strong positive correlation between job satisfaction and QOL ($r = 0.4493$) while a very strong negative correlation between job stress and satisfaction was noted ($r = -0.06749$) (Table 3).

Discussion

Job Satisfaction

The study looked at hospital staff all from the same hospital. Staff working in a tertiary general public hospital would usually have a stable job and fixed work hours with a good salary. Working in a public hospital like a

municipal hospital involved in the study also involves regular leave and provident fund benefits and health insurance unlike many jobs in the private healthcare sector. Jobs with a secure future and steady growth are usually satisfying [15]. The employees across various departments showed similar scores on the job satisfaction scale. This was seen in all departments with lowest scores in the surgery staff but these low scores were actually in the moderate range of job satisfaction. This also held true irrespective of the type of work involved in keeping with the factors described above.

Job Stress

Job stress was lowest among the psychiatry and rotational staff. It has been shown that staff working in mental health facilities may be more resilient and may adapt over the years more to job stress keeping in mind the training they undergo in handling patients with psychiatric disorders

Table 3 Correlation table between various scales (R values—Spearman Rho)

	WHOQOL-BREF Scale	Workplace Stress Scale	Generic Job Satisfaction Scale
WHOQOL-BREF Scale	–	–0.4629	0.4493
Workplace Stress Scale	–	–	–0.6749
Generic Job Satisfaction Scale	–	–	–

[16]. Job stress was also low in rotational staff. We hypothesize that the fact that they moved from department to department gave them no permanent responsibility for work in any sector and may have helped in alleviating their job stress. Medicine, ICU and surgery staffs treat more high risk cases and serious patients and this may probably contribute to their job stress. Deaths in medical and surgical wards as well as ICUs are higher and may add to job stress [17]. Job stress was also lowest in student nurses probably due to the fact that they may not be held responsible for errors that may inadvertently occur in the learning period. It is well documented that student nurses undergo far less stress than staff nurses in a hospital as the learning period is usually enriching and fulfilling compared to the working phase [18]. In our study the rotational staff has lowest scores on job stress but had poor scores on job satisfaction and quality of life (Table 1). This may be due to the unstable nature of the duties and irregular timings as well as non-stability of work in a single department like non-rotational staff.

Quality of Life (QOL)

Quality of life (QOL) was reported to be highest in ICU and psychiatry staff in keeping with their training and their ability to deal with stress unlike staff in other departments [19]. QOL was far greater in staff like nursing staff and student nurses compared to labour staff like ward assistants and sweepers. This may be due to education levels, differences in salaries and socio-cultural factors that may play a role.

The staff nurses in the study had greater QOL scores than ward assistants though they scored higher on job stress and lower on job satisfaction. This may be due to the stressful nature of their job and probably certain personal characteristics which were not explored and beyond the scope of the current study.

Job stress correlated negative with QOL and job satisfaction while job satisfaction correlated positively with QOL. This is in keeping with studies done in healthcare and other populations worldwide [20–22].

The current study was limited by a small sample size and many departments like gynaecology and paediatrics not being considered. There were many confounding factors like socio-demographic factors, financial status and

psychopathological factors that were not considered during the evaluation which could have affected outcomes.

Conclusions

The study stresses that it is important that job stress be addressed on a regular basis in health care auxiliary workers in hospitals with aim to improve their quality of life and promote job satisfaction. Further studies that compare larger samples across different hospitals are warranted.

References

1. Karasek RA, Theorell T. *Healthy work: stress, productivity, and the reconstruction of working life*. New York: Basic Books; 1992.
2. Bono JE, Glomb TM, Shen W, Kim E, Koch AJ. Building positive resources: effects of positive events and positive reflection on work stress and health. *Acad Manag J*. 2013;56(6):1601–27.
3. Trivellas P, Reklitis P, Platis C. The effect of job related stress on employees' satisfaction: a survey in health care. *Proc Soc Behav Sci*. 2013;73:718–26.
4. Khamisa N, Oldenburg B, Peltzer K, Ilic D. Work related stress, burnout, job satisfaction and general health of nurses. *Int J Environ Res Public Health*. 2015;12(1):652–66.
5. Chou LP, Li CY, Hu SC. Job stress and burnout in hospital employees: comparisons of different medical professions in a regional hospital in Taiwan. *BMJ Open*. 2014;4(2):e004185.
6. Stimpfel AW, Sloane DM, Aiken LH. The longer the shifts for hospital nurses, the higher the levels of burnout and patient dissatisfaction. *Health Aff*. 2012;31(11):2501–9.
7. Lavoie-Tremblay M, Sounan C, Martin K, Trudel JG, Lavigne GL, Grover SA, Lowensteyn I. Determinants and benefits of physical activity maintenance in hospital employees. *Health Care Manag*. 2014;33(1):82–90.
8. Kim JK, Kim MJ, Kim SY, Yu M, Lee KA. Effects of general hospital nurses' work environment on job embeddedness and burnout. *J Korean Acad Nurs Adm*. 2014;20(1):69–81.
9. Adriaenssens J, De Gucht V, Maes S. Determinants and prevalence of burnout in emergency nurses: a systematic review of 25 years of research. *Int J Nurs Stud*. 2015;52(2):649–61.
10. Shanafelt TD, Hasan O, Dyrbye LN, Sinsky C, Satele D, Sloan J, West CP. Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *Mayo Clin Proc*. 2015;90(12):1600–13.
11. Chandramouleeswaran S, Edwin NC, Braganza D. Job stress, satisfaction, and coping strategies among medical interns in a South Indian tertiary hospital. *Indian J Psychol Med*. 2014;36(3):308–11.

12. McCalister KT, Dolbier CL, Webster JA, Mallon MW, Steinhardt MA. Hardiness and support at work as predictors of work stress and job satisfaction. *Am J Health Promot.* 2006;20(3):183–91.
13. Macdonald S, MacIntyre P. The generic job satisfaction scale: scale development and its correlates. *Empl Assist Q.* 1997;13(2):1–6.
14. Skevington SM, Lotfy M, O'Connell KA. The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. *Qual Life Res.* 2004;13(2):299–310.
15. Lu H, Barriball KL, Zhang X, While AE. Job satisfaction among hospital nurses revisited: a systematic review. *Int J Nurs Stud.* 2012;49(8):1017–38.
16. Morse G, Salyers MP, Rollins AL, Monroe-DeVita M, Pfahler C. Burnout in mental health services: a review of the problem and its remediation. *Adm Policy Ment Health Ment Health Serv Res.* 2012;39(5):341–52.
17. Hall LH, Johnson J, Watt I, Tsipa A, O'Connor DB. Healthcare staff wellbeing, burnout, and patient safety: a systematic review. *PLoS ONE.* 2016;11(7):e0159015.
18. Milton-Wildey K, Kenny P, Parmenter G, Hall J. Educational preparation for clinical nursing: the satisfaction of students and new graduates from two Australian universities. *Nurs Educ Today.* 2014;34(4):648–54.
19. Videbeck S. *Psychiatric and mental health nursing.* Philadelphia: Lippincott Williams and Wilkins; 2013.
20. Fortney L, Luchterhand C, Zakletskaia L, Zgierska A, Rakel D. Abbreviated mindfulness intervention for job satisfaction, quality of life, and compassion in primary care clinicians: a pilot study. *Ann Fam Med.* 2013;11(5):412–20.
21. Hart PL, Brannan JD, De Chesnay M. Resilience in nurses: an integrative review. *J Nurs Manag.* 2014;22(6):720–34.
22. Orrung Wallin A, Jakobsson U, Edberg AK. Job strain and stress of conscience among nurse assistants working in residential care. *J Nurs Manag.* 2015;23(3):368–79.