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Effect of Job Demand, Social Support and Decision Latitude on Burnout in Doctors Working in Private and Government Hospitals

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Abstract

Burnout in doctors is a critical issue that has been recognized in recent years. Burnout is characterized as a state marked with mental, physical as well as emotional exhaustion that is a result of prolonged and excessive stress. Doctors, particularly those in high-stress environments such as emergency rooms, intensive care units, and other specialties, are at increased risk of burnout which is due to the demanding jobs. This study investigated the effect of job demand, decision latitude (job control & skill discretion) and social support on burnout after controlling for demographic variables in Indian medical doctors. Burnout was assessed using Maslach Burnout Inventory-Human Services Survey (MBI-HSS) by Maslach, & Jackson (1981). Job demand and decision latitude were studied using measures developed by Karasek (1979). Finally, Social Network Scale by Lubben (1988) was used to measure social network. The sample consisted of 109 doctors from the city of Allahabad in Uttar Pradesh, India. The data from private practitioners was collected based on convenience whereas for government doctors the questionnaires were distributed through the Chief Medical Officer's office in Allahabad. Results indicated that job demand, decision latitude and social support were all significantly correlated with job burnout. Type of practice was the only demographic variable significantly predicting burnout. Job demand and decision latitude were significant predictors of burnout. The major limitations of the study were in regards to its sample size and sampling method. The findings from this study hold important implications for researchers as well as practitioners. Suggestions for future research are also given.

Keywords: Burnout, Job Demand, Decision Latitude, Job Control, Social Support

Introduction

Mental health at the workplace has been an issue for concern for organizations all over the globe, especially in the health sector as it may lead to unprofessional behavior, substance abuse, personal/family issues, suicide etc. One of the pertinent mental health problem at workplace is burnout, which is a kind of prolonged psychological stress. Burnout is quite common in the health sector because of the nature of the jobs as they require dealing with the distress of clients/patients directly (Maslach, 1981). Due to the stigma attached to mental health disorder, people are reluctant to approach psychologists/counsellors for help resulting in untreated burnout that adversely affects individual's career and well-being.

Burnout can be understood through symptoms of depersonalization, emotional exhaustion, and reduced personal accomplishment due to activities at work (Maslach, 1982). Emotional exhaustion is understood as depletion of emotional resources. Depersonalization is the detached/ cynical attitude towards others in one's service. It is the dehumanized view of other recipients in one's service. Reduced personal accomplishment is the lack in feeling of competence and productivity in one's job. Stress among doctors has been a burning topic for research in the past two decades because one of the negative consequences of workplace stress is burnout which ultimately affects the quality of health care. Doctors are consistently involved with 'helping' patients/clients which may lead to high emotional and interpersonal demands which can lead to burnout (Winefield & Anstey, 1991; Kirwan & Armstrong, 1995; Deary et al., 1996).

Job Demand and Decision Latitude

Job demand can be explained as the psychological stressors at the workplace. It is "the degree to which the environment contains stimuli peremptorily require attention and response" (Jones and Fletcher, 1996). This might include conflicting demands, amount of work performed under pressure, degree of focus required, reaction time required etc. Decision latitude implies " the ability to make work-related decisions. When employees can make decisions related to the way they work, they are able to devise coping strategies than can mitigate the effects of stress" (Halpern, 2005). It can be understood as control over tasks and how these tasks are accomplished at the workplace. It has two components- Decision authority and Skill Discretion. Decision authority is the freedom to make independent decisions at the workplace. Skill discretion is the choice individual enjoys in using a variety of skills used for the job. It includes variety of tasks, opportunity for new work and creativity, developing new abilities etc. Demand Control Model is one of the best models that has been developed for explaining burnout and wellbeing at work (Karasek, 1979; Karasek & Theorell, 1990). According to this model, stress is a result of how pressing/demanding one's job is and how much control the individual has over their duties at the workplace.

Depersonalization and emotional exhaustion share a positive correlation with job demands and a negative correlation with job control (Lourel, Abdellaoui, Chevaleyre, Paltrier & Gana, 2008; Chiang, Birtch, & Kwan, 2010; Rafferty, Friend, & Landsbergis, 2001). Hence in the present study, it is hypothesized that *H1: There will be a significant influence of job demand on burnout and H2: There will be a significant influence of decision latitude on burnout.*

Social Support

Social support can be defined as a "relative presence or absence of psychosocial support resources from significant others" (Kaplan, Cassel, & Gore, 1977). It is also defined as the extent to which a person's basic social needs are realized through interaction with others (Thoits, 1982). There have been conflicting research findings regarding the link between social support and burnout. Maslach & Jackson (1984) have reported a significant, inverse relationship of burnout with social support. One study found that there is no cushioning relationship between burnout and social support (Ross, Altmaier & Russell 1989). In one research, greater social support was reported to be correlated with higher levels of personal accomplishment and lower levels of depersonalization and emotional exhaustion (Jacobs, & Dodd, 2003). Some researchers have found that there is a moderating effect of social support on burnout. (Russell, Altmaier, & Van Velzen, 1987). Some other researches have concluded that there is a lack of a strong association between social support and burnout (Jackson, Schwab & Schuler, 1986; Kruger, Botman & Goodenow, 1991).

One notable concept that has come out in recent years is that of perceived social support. It can be defined as cognitive assessment of being readily associated to others. Emotional Exhaustion and Depersonalization were strongly correlated with perceived social support (Brown, Prashantham, & Abbott, 2003). Hence in this study, we hypothesize that *H3: There will be a significant influence of social network on burnout.*

Although studies on burnout are on the rise in the West, there is a shortage of literature on burnout in the health sector especially here in India. There are only a handful of studies on burnout from Asian countries. Burnout in doctors is a pertinent issue which can have negative consequences like misdiagnosis and other errors which affects the treatment of patients. Understanding the predictors of burnout is important as it can help to find solutions for

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preventing burnout in doctors which will lead to better treatment of patients. Burnout also signals a serious threat to the well-being of the doctors. With the rapid change in society, the stressors leading to burnout are also increasing. This study will also shed light on ways to reduce stress in doctors.

1.   Method

The study followed a survey-method design. The sample consisted of doctors from the city of Allahabad in Uttar Pradesh. Convenience sampling was used to collect responses. The survey was distributed to 150 doctors, out of which only 130 were returned. Survey was collected within a week of its distribution to the target sample. 21 forms were rejected as they were incomplete. A total of 109 responses were used for analysis.

The data from private practitioners was distributed based on convenience whereas for government doctors the questionnaires were distributed through the Chief Medical Officer's office in Allahabad. The instructions were given individually on a one-to-one basis. Consent form was also included at the beginning of each set of questionnaire. All the questionnaires were collected after one week from the date of distribution.

The research questionnaire consisted of demographic questions and several measures including the Maslach Burnout Inventory-Human Services Survey (MBI-HSS) by Maslach, & Jackson (1981), Job demand and decision latitude (skill discretion and decision authority) measure was developed by Karasek (1979) and Social Network Scale by Lubben (1988).

Sample

55% of the participants were men and 44.95% were women. 55.96% of the respondents had a private practice, whereas 44% had a government (public) practice.

Age wise distribution of sample constituted 5.5% in the 20-29 years age group, 35.77% in the 30-39 years age group, 34.86% in the 40-49 years age group and 23.85% in the above 49 age group. 76.14% of the respondents were postgraduates, only 23.85% of respondents were holding a MBBS degree. 97.24% of the respondents were married and only 2.75% were unmarried. Majority (77%) of the respondents worked for 6 to 10 hours every day.15.5% worked for 11 to 15 hours and 5.5% worked above 15 hours. 1.83% of the respondents worked less than/up to 5 hours per day. 32.11% of the sample had 6-10 years of practice, 22.9% were in the 0-5 years group, 21.10% in the above 20 years of practice group.13.7% of the respondents belonged to the 16-20 group and only 10.09% in the 11-15 years of practice group. Finally, 38.53% of the respondents attended to 0-10 emergency cases per month. 28.44% attended to emergency cases above 40 per month whereas 18.3% attended 11-20 emergency cases per month.11% attended 21-30 emergency cases and only 3.66% attended 31-40 emergency cases per month.

Measures

Burnout was assessed using the Maslach Burnout Inventory-Human Services Survey (MBI-HSS) by Maslach, & Jackson (1981). This version of the scale consisted of 22 items with seven point anchored response format. These items measured four components: depersonalization (5 items), personal accomplishment (8 items) and emotional exhaustion (9 items). The reliability coefficients for three subscales are .71 for personal accomplishment, .79 for depersonalization and .90 for Emotional exhaustion. Research have found that MBI subscales are stable (correlation in the range of .50 to .82) over time (Leiter & Durup,1996). For the present study the scores of the three dimensions were added, after reverse scoring for personal accomplishment. Thus, a high score indicating more burnout.

Decision latitude (decision authority and skill discretion) and Job demand measure was developed by Karasek (1979). The job demand subscale has 7 items. The decision latitude subscale has a total of 8 items (4 for skill discretion and 4 for decision authority). All responses were obtained on a 5 point Likert-type scale (where 1=never and 5=extremely often). Coefficient alpha values ranged from .79 to .88 for job demand and .77 to .85 for decision latitude. Xie (1996) examined the items through factor analysis and found that all the items weighted on two factors as advised by Karasek (1979).

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Social engagement was measured using the Social Network Scale by Lubben (1988). The abbreviated version with 6 items was used for this study. This version measures the perceived support by family and friends. The reliability for LSNS-6 was found to be .83 .It also correlated significantly with overall physical health and distressing symptoms.

2. Results

Statistical Package for Social Sciences Version 23 was used for the analysis of data.

All 6 relationships among the study variables were found to be statistically significant (See Table 1).

Table 1- Intercorrelation Among Study Variables (N=109)

	1	2	3	4
Burnout				
Social network	-.236*			
Job demand	.239*	-.210*		
Decision Latitude	-.354**	.245*	.210*	

*p<0.05, ** p<0.01

All the correlations amongst study variables were modest but significant. Social network and decision latitude correlated negatively and significantly with burnout (r=-.236, p<.05 and r=-.354, p<.01). Higher scores on these dimensions are associated with lower burnout and vice-versa. Job demand shared a significant and postitve correlation with burnout (r=.239, p<.05). Higher scores on job demand are associated with higher scores on burnout and vice versa.

A hierarchical regression analysis was conducted to assess the contribution of social network, job demand and decision latitude on burnout after controlling for demographic variables. The results are presented below.

Table 2- Multiple Hierarchical Regression Analysis results for Burnout (N=109)

	β	
	Step 1	Step 2
Age	-.010	.024
Gender	1.770	-2.597
Practice Duration	-.303	-.280
Type of practice	8.806**	5.412
Avg. working hours	.639	.772
Avg. emergency cases	-.003	-.005
Social Network	-	-.458
Job Demand	-	1.251**
Decision Latitude	-	-1.495**
R Square	.149**	.330**
R Square Change	-	.181

*p<0.05, ** p<0.01

(Step 1:$F_{(6, 102)=}$ 6.31 $p<.01$, Step 2: $F_{(9,99)}$=5.42, p<.01)

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Dependent Variable: Burnout

Step 1 Predictors: Avg. Emergency cases, Age, Gender, Avg. Working Hours, Type of practice, Practice Duration

Step 2 Predictors: Avg. Emergency cases, Age, Gender, Avg. Working Hours, Type of practice, Practice Duration, Job Demand, Social Network, Decision Latitude

In the first step, demographic variables (age, gender, practice duration, type of practice, average working hours and average emergency cases) were entered in the regression equation. It contributed significantly to the regression model $F_{(6,102)=}6.31$, p<.01.This accounted for 14.9% variance in burnout. Out of all the demographic variables (Step 1), type of practice had a significant effect on burnout ($\beta = 8.806, p < 0.01$). The mean for burnout was higher in government doctors in comparison to doctor working in a private sector (34.97 and 25.27 respectively).

In Step 2, job demand, decision latitude and social support were added to the model. The second model explained 33% variance in burnout. The model was significant ($F_{(9,99)}=5.421$, p<0.01). 18.1% of variance was contributed by the three variables viz job demand, decision latitude and social support added in the second step. Beta value for perceived social support was found to be insignificant ($\beta = -.458,$). Job control and decision latitude has a significant influence of burnout ($\beta = 1.251$ and -1.495 respectively). Several assumptions of linear regression were checked. Multicollinearity (correlation amongst predictor variables) was checked through Variance Inflation Factor values which were in the acceptable range (average value was less than 2). Other assumptions like independence of error, homoscedasticity, normality of error was also checked and the results were satisfactory.

The results suggest, that the hypothesis H1 stating that there will be a significant influence of job demand on burnout has been accepted and hypothesis H2 stating that there will be a significant influence of decision latitude on burnout has also been accepted. Hypothesis H3 stating that there will be a significant influence of social network on burnout has not been accepted

3. Discussion

The study suggests some significant findings. Job demand leads to more burnout and decision latitude (job control) leads to less burnout. This finding is supported by the Demand Control Model by Karasek (1979) which states that high job demand coupled with low job control will lead to high strain in jobs. It is also supported by Job Demand-Resources (JD-R) model (Bakker, & Demerouti, 2007) which illustrates that job demand may invoke job strain which can lead to burnout. Previous researches were also found to be consistent with this finding. Schaufeli & Bakker (2004) found that burnout is predicted by job demand at the workplace. Schaufeli, Bakker & Van Rhenen (2009), through a longitudinal survey among 201 telecom managers, found that increase in job demand and decrease in job resources predicted burnout. Lourel, Abdellaoui, Chevaleyre, Paltrier & Gana (2008) in a study on 101 French firefighters found that job demand predicted depersonalization and emotional exhaustion. Thus, it can be said that job demand has a significant influence on burnout. In a longitudinal study by Bourbonnais, Comeau, Vézina, & Dion, (1998) which consisted of 1,891 nurses reported that low decision latitude is associated with a raised level of emotional exhaustion and psychological distress. Rafferty, Friend & Landsbergis (2001) in a study on 164 human service professionals found that low skill discretion was related to high depersonalization and emotional exhaustion. They also suggested that JDC model may present a good foundation for studying burnout. Lourel, Abdellaoui, Chevaleyre, Paltrier & Gana (2008) in a study on 101 French firefighters and found that job control predicts emotional exhaustion. Another study by Taris (2005) on 9,503 Dutch office workers from 28 occupations found that job control was inversely correlated and contributed to about 16% variance in job burnout. These finding gives support to the significant relationship between job control and burnout.

Social support was significantly correlated with burnout however did not show a significant prediction. Stevenson (1994) conducted a study on 2600 employees of a federal agency found that perceived social support is negatively related to burnout in employees and is highly significant. Jacobs & Dodd (2003) did a study on 149 college students and found out that low levels of burnout was predicted by social support, especially from friends. They concluded that more social support was associated with greater levels of personal accomplishment and lesser

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levels of emotional exhaustion and depersonalization. Koeske & Koeske (1989), in a study with social workers, found that social support from the side of co-workers can act as buffer against the negative effects of job overload on burnout. In a study in India on 136 human service professionals found that two components of burnout, depersonalization and emotional exhaustion were related to perceived support. The also found that relationships at work were much more strongly related to burnout than family/social relationships.

One salient finding of this study is that Government doctors experienced a significantly higher burnout as compared to doctors working in private hospitals. Some previous researches were found to be consistent with this finding. In a study on 159 doctors in Australia, the researchers reported that doctors working in the private sector had significantly lower mean scores for emotional exhaustion and depersonalization (Peisah, Latif, Wilhelm, & Williams, 2009). In a five year follow up study in Thailand, it was found that nurses working in the government/public sector reported more stress (Tyson, & Pongruengphant, 2004). In the Indian context, a study on 100 nurses from Chandigarh and Mohali found that nurses in the government setting reported high levels of burnout, whereas nurses on the private setting reported moderate to low levels of burnout (Katyal, 2013). According to them this might have happened because of high number of patients, bad work environment and lack of autonomy and resources. In another study on doctors and dentists in North India, the researchers stated that doctors in the private sector had lower burnout because they have a better work-life balance and more control over professional life and activities (Bhugra, Bhui & Gupta, 2008).

There are some limitations of this study. First, the sample size for this study was small (N=109). Also, the sampling method used was the convenience sampling method. These two limitations might intervene with the generalizability of the research findings for the current study. Another limitation for the present study is that self-report measures were used to study the variables under study. One major disadvantage of self-report measures is that they are prone to social desirability bias as well as other biases which are very hard to remove.

Our findings show that changes in job demand and decision latitude affect burnout at the workplace. Hence to reduce burnout, job demands needs to be lowered and job resources (autonomy, learning, feedback) should be provided by the management. Structural changes in hospitals can be implemented to increase job autonomy and reduce job demand on the doctors. Social network (perceived social support) of friends and family was also found to have a significant association with burnout which was inverse in nature. Organizations should have activities which tend to include family and friends, for example- office family trips, picnics etc. They should encourage their employees for a better work-life balance by providing information on its importance, especially in relation to burnout. The organizational policies should also support this by providing paid leaves, flexible timings and work from home. Although, this may be very difficult in case of doctors in some specialization which involves dealing with emergency cases and highly critical patients. Government doctors were found to be more prone to burnout than private doctors. Therefore, doctors working in the government setting should be protected against factors which lead to job burnout in this setting. Further at the policy level, more doctors should be recruited in government hospitals to reduce work overload.

Future suggestions include creating a model to understand antecedents, mediators, moderators and consequences of burnout. More researchers should study these variables in the Indian context as there is a dearth of researches and researches in western context would not do justice in explaining these variables in the context of Indian Organizations.

4.   Conclusion

In the present study on 109 doctors working in government and private hospitals in the city of Allahabad in Uttar Pradesh, India, it was found that job demand, decision latitude and social support were all significantly correlated with job burnout. Type of practice was the only demographic variable significantly predicting burnout. Job demand and decision latitude were significant predictors of burnout.

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