The objectives of the study were to investigate whether there exist significant differences in occupational stress with regard to the age, category of nurse, years of experience, employment status, and nature of shifts. The total sample used for the study were 75 nurses from psychiatric and general hospitals. The tool used for data collection was the Occupational Stress Index by Dr. A.K. Srivastava and Dr. A.P. Singh. The collected data was statistically analyzed using SPSS (Statistical Package for Social Sciences) version 20. T-test and one way ANOVA were used. The findings of the study indicate significant differences in occupational stress with regard to age, years of experience, employment status, and nature of shifts. However no significant differences were seen in occupational stress with regard to category of nurse.

Keywords: Occupational Stress, Job Stress, Psychiatric Nurses, General Nurses

1. Introduction

Mental health care is an essential but often forgotten component of health care. A mental illness is usually long lasting than mental health problems, and causes more distress and disruption to life. A mental health professional is a health care practitioner who offers services for the purpose of improving an individual's mental health or to treat mental illness. This broad category includes psychiatrists (D.O. or M.D.), psychiatric nurses (RNMH, RMN, CPN), clinical psychologists (Psy.D or Ph.D.), clinical social workers (MSW or MSSW), mental health counsellors, professional counsellors, pharmacists, as well as many other professionals. These professionals often deal with the same illnesses, disorders, conditions, and issues; however, their scope of practice differs.

Although various countries have different systems for delivering health care to their citizens. Nurses comprise the largest employee group in the health care sector. Nurses also make a significant contribution to levels of patient satisfaction and quality of care. Nursing is a profession within the health care sector focused on the care of individuals, families, and communities so they may attain, maintain, or recover optimal health and quality of life. As members of the largest health care profession, the nation’s 2.9 million nurses work in diverse settings and fields and are frontline providers of health care services. Psychiatric nursing or mental health nursing is the specialty of nursing that cares for people of all ages with mental illness or mental distress, such as schizophrenia, bipolar disorder, psychosis, depression or dementia. Nurses in this area receive more training in psychological therapies, building a therapeutic alliance, dealing with challenging behaviour, and the administration of psychiatric medication.

Nursing is a profession that can be both rewarding and challenging at the same time. Since nurses represent the majority of the workforce, they are often targeted by hospitals as a way to cut down their health care costs. However not everyone can take up nursing as a career vocation, and not everyone that takes it up actually succeeds either. Nurses play a very important role in the medical industry. But despite being recognized and valued, nurses still have to face several difficulties and challenges in their profession. Some of these challenges are easy to overcome but others are quite complicated for the nurses to handle. Long working hours, Less compensation, Workplace violence, Lack of respect from others, Exposure to hazardous chemicals, Exposure to diseases are some of the factors that cause stress in nurses.

Occupational Stress

Stress, in general, and occupational stress in particular, is a fact of modern life that seems to have been on the increase. Hans Selye first introduced the concept of stress into the life science in 1936. He defined stress as "The force, pressure, or strain exerted upon a material object or person which resist these forces and attempt to maintain its original state.”

In an organizational context, occupational stress is also known as job stress and/or work stress. These terms are often used interchangeably in organizations, but its meaning refers to the same thing (AbuAlRub, 2004; Larson, 2004). It has two major dimensions: physiological stress and psychological stress. Physiological stress is often viewed as a physiological reaction of the body (headache, migraine, abdominal pain, lethargic, backache, chest pain, fatigue, heart palpitation, sleep disturbance and muscle ache, as well as changes in eating, drinking, sleeping and smoking habits) to various stressful triggers at the workplace (Antoniou et al., 1998; Beehr et al., 2001; Critchley et al., 2004; Mansor et al., 2003). For example, psychological stress is often seen as an emotional reaction (anxiety and depression burnout, job alienation, hostility, depression, tension, anger, anxiety, nervousness, irritable and frustration) as a result of the stimuli at the workplace (Antoniou et al., The Romanian Economic Journal Year XII, no. 34 (4) 2009 2003; Millward, 2005; World Health Organization, 2005).
2. Literature Review

Rajna Golubic, Milan Milosevic, Bojana Knezevic, Jadranka Mustajbegovic (2009) studied what occupational stressors are present in nurses working environment. Questionnaires were distributed to a convenient sample of 1392 (59%) nurses employed at four university hospitals in Croatia n = 2364. The response rate was 78% n = 1086. Data were collected using the Occupational Stress Assessment Questionnaire and Work Ability Index Questionnaire. Six major groups of occupational stressors: Organization of work and financial issues, public criticism, hazards at workplace, interpersonal conflicts at workplace, shift work and professional and intellectual demands were identified. Higher educational level has been shown to have positive effects on the preservation of good work ability. Nurses with secondary school qualifications perceived hazards at workplace and shift work as statistically significantly more stressful than nurses a with college degree.

Muhammad Jamal, Vishwanath V. Baba (1992) investigated the relationship of shift work and department-type with employees' job stress, stressors, work attitudes and behavioural intention. Data were collected by means of a structured questionnaire from nurses working in eight hospitals in a large, metropolitan city in eastern Canada. One-way ANOVA, MANOVA and two-way ANOVA were used to analyse data. Results generally support the prediction that nurses working on fixed shifts were better off than nurses working on rotating shifts in terms of the dependent variables of the present study. The prediction that nurses working in non-intensive care departments were better off than nurses working in intensive care departments received mixed support at best.

3. Problem Definition

To assess significant differences in Occupational Stress among psychiatric and general nurses.

4. Hypotheses of the Study

H0: Significant differences exist in Occupational Stress with regard to age.
H1: Significant differences exist in Occupational Stress with regard to category of nurse.
H2: Significant differences exist in Occupational Stress with regard to years of experience among nurses.
H3: Significant differences exist in Occupational Stress with regard to employment status among nurses.
H4: Significant differences exist in Occupational Stress with regard to the nature of shifts (during the last 3 weeks).

5. Participants

The population of the study were nurses from psychiatric and general hospitals. The numbers of respondents were 75 in total inclusive of both, psychiatric and general nurses. Out of which 35 nurses were taken from psychiatric hospital and 40 from general hospital. These nurses were residing in the state of Goa. Purposive sampling was employed to choose the participants.

6. Tool Used

Occupational Stress Index

The Occupational Stress Index (O.S.I.) is developed by Dr. A.K. Srivastava and Dr. A.P. Singh. The scale consists of 46 items of which 28 are true-keyed and 18 are false-keyed. The items relate to almost all relevant components of the job life which cause stress in some way or the other. Each of the items is to be responded to as either strongly disagree, disagree, undecided, agree, and strongly agree. The reliability index ascertained by split half (odd-even) method and Cronbach’s alpha-coefficient for the scale as a whole were found to be .93 and .90 respectively. The reliability indices of the 12 sub-scales were also computed on the split half method. The validity of the Occupational Stress Index was determined by computing coefficients of correlation between the scales on the Occupational Stress Index and the various measures of job attitudes and job behaviour. The coefficients of correlation between the scores on the level of Occupational Stress Index and the measures of job involvement, work motivation, ego-strength and job satisfaction were found to be .56 (n=225), -.44 (n=205), and -.51 (n=500), respectively. The correlation between the scores on the Occupational Stress Index and the measures of job anxiety was found to be 0.59 (n=400). The employees’ scores on the Occupational Stress Index have been found to be positively correlated with their scores on the measures of mental ill health, standardized by Dr. O.N. Srivastava.

7. Results and Discussion

H0: Significant differences exist in Occupational Stress with regard to age of nurses.

<table>
<thead>
<tr>
<th>Measur e</th>
<th>Age</th>
<th>Mean</th>
<th>Standard</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Stress</td>
<td>21-30</td>
<td>16</td>
<td>21.6</td>
<td>33.34</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>14</td>
<td>16.4</td>
<td>25.25</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>13</td>
<td>7.84</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Above</td>
<td>11</td>
<td>8.79</td>
<td></td>
</tr>
</tbody>
</table>

**P<0.01: Highly Significant

Table 1 indicates mean, standard deviation and f ratio for occupational stress as a function of age. One way ANOVA was computed to find significant differences in occupational stress as a function of age. Overall mean score and standard deviation for nurses between the age group of 21-30 years, the mean score obtained was 149.70 and 16.41, for nurses between the age group of 31-40 years, the mean score obtained was 149.70 and 16.41, for nurses between the age group of 41-50, a mean score of 130.50 and standard deviation of 7.84 were obtained and for nurses between the age group of 50 and above, the mean score obtained was 114.80 and standard deviation of 8.79. Also comparing the means we see that occupational stress decreases with age and the nurses in the age group of 21-30
experience more occupational stress as compared to the other nurses in the other age groups. F-ratio was computed to be 33.25 and was statistically significant at 0.01 level.

The above finding is probably because the older nurses tend to get adapted to their specific job conditions, gain knowledge of their political subsystems and increase their understanding of their particular organizational culture- all likely to enhance their learning how to more effectively cope with their job stressors as compared to the young nurses.

The finding is supported by Rebecca J. Erickson, Wendy J. C. Grove, (2008) who found that nurses under the age of 30 are more highly stressed out than their older counterparts, a result that supports what other researchers have previously shown (Aiken et al., 2001).

**Ha:** Significant differences exist in Occupational Stress and its dimensions with regard to category of nurse.

### Table 2: Mean, standard deviation and t-value for occupational stress as a function of category of nurse

<table>
<thead>
<tr>
<th>Measure</th>
<th>Category of nurse</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational stress</td>
<td>General nurses</td>
<td>141.29</td>
<td>22.22</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Psychiatric nurses</td>
<td>147.40</td>
<td>25.65</td>
<td></td>
</tr>
</tbody>
</table>

For occupational stress mean score for general and psychiatric nurses was 141.29 and 147.40 with a corresponding standard deviation of 22.22 and 25.65 respectively. The t-value was computed to be .07 which was found to be statistically insignificant. But comparing the means it can be seen that psychiatric nurses experienced high occupational stress as compared to the general nurses.

The above finding is probably because the nurses working in the general hospitals look after the population concerned with physical disorder where else psychiatric nurses are looking after the population with behavioral and psychological imbalances. The job of a psychiatric nurse is a tedious one and requires them to have great strength of mind along with having a gentle attitude towards the patients. Psychiatric nurses might face quite a lot of fatigue and have too many responsibilities with too little time. Due to which nurses working in the psychiatric hospitals have high occupational stress than nurses working in the general hospitals.

But however the above finding shows us that there is no significant difference in the occupational stress of psychiatric and general nurses. The reason could be no matter whether the nurses are working in general or psychiatric hospitals but the stress experienced by nurses is the same. However nursing is a stressful profession due to which the stress experienced could be the same.

The finding is supported by a study conducted by Qi, Y.-K., Xiang et al (2014) who compared the level of work-related stress between female nurses working in psychiatric and general hospitals in China. It was found that compared to the nurses working in the general hospital, those working in the psychiatric setting had a higher level of stress. In contrast to the above finding Muscroft, C Hicks (1998) conducted a study to investigate occupational stress levels among general and psychiatric nurses and found that general nurses reported stress levels that were significantly higher than those of psychiatric nurses and that they would be more likely to use workplace counselling services.

**Ha:** Significant differences exist in Occupational Stress with regard to years of experience among nurses.

### Table 3: Mean, standard deviation and t-value for occupational stress as a function of years of experience

<table>
<thead>
<tr>
<th>Measure</th>
<th>Years of experience</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational stress</td>
<td>Below 1 year</td>
<td>165.50</td>
<td>17.52</td>
<td>18.84**</td>
</tr>
<tr>
<td></td>
<td>1-10 years</td>
<td>157.10</td>
<td>24.29</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11-15 years</td>
<td>136.64</td>
<td>13.99</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Above 15 years</td>
<td>120.87</td>
<td>12.4</td>
<td></td>
</tr>
</tbody>
</table>

**P<0.01:** Highly Significant

One way ANOVA was computed to find significant differences in occupational stress as a function of years of experience among nurses. The mean score and standard deviation for nurses who had work experience in nursing below 1 year was 165.50 and 17.52 respectively. Nurses, who had work experience in the nursing field between one to ten years, obtained a mean score and standard deviation of 157.10 and 24.29 respectively. Nurses who had work experience between eleven to fifteen years obtained a mean score of 136.64 and standard deviation of 13.99 and those nurses, who had work experience above fifteen years, obtained a mean score and standard deviation of 120.87 and 12.40 respectively. Also comparing the means we see that occupational stress decreases with the increase in years of experience and the nurses who had below one year experience had more occupational stress as compared to the other nurse F-ratio was computed to be 18.84 and was found to be statistically significant at 0.01 level.

Observing the means it may be explained that there is decrease in occupational stress as the work tenure or years of experience increases, for which it can be reasoned that this tenure-related decline in stress occurs because of the experience nurses have on their side with an increase in work tenure, they may have learnt certain stress-coping tactics in the course of their experience, thereby enabling them to effectively deal with the stress triggered due to their personal and professional commitments.

The finding is supported by Ali Mohammad Mosadeghrad (2013) they explored the status of occupational stress among hospital nurses in Isfahan, Iran. It was found that older nurses with more years of experience had less occupational stress than their younger colleagues.

**Ha:** Significant differences exist in Occupational Stress with regard to employment status among nurses.

### Table 4: Mean, standard deviation and t-value for occupational stress as a function of employment status

<table>
<thead>
<tr>
<th>Measure</th>
<th>Employment status</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational stress</td>
<td>Permanent</td>
<td>136.63</td>
<td>21.45</td>
<td>3.32**</td>
</tr>
<tr>
<td></td>
<td>Contract</td>
<td>154.63</td>
<td>23.70</td>
<td></td>
</tr>
</tbody>
</table>
For overall occupational stress mean score for nurses working on the permanent and contract basis were 136.63 and 21.45 respectively, with a corresponding standard deviation of 21.45 and 23.70 respectively. The t-value was computed to be 3.32 and was statistically significant at 0.01. Also comparing the means it can be seen that nurses working on the contract bases experienced high occupational stress than the nurses working on the permanent basis.

The above finding is probably because due to increase in unemployment, too much competition and lack of opportunities in many fields usually lead us to expect that nurses who are doing jobs on contract basis would be facing more job insecurity in the form of anticipating either termination of contract, or in the form of not getting extra benefits which other permanent employees usually receive, inadequate pay, inequality at work, too much work, staff shortage, lack of promotion, job insecurity and lack of management support. As a result nurses working on contract basis experiences more occupational stress in comparison to those working on the permanent basis.

The finding is supported by Ying-Jung Yvonne Yeh, Jyh-Jer Roger Ko, Yu-Shen Chang, Chun-Hsi Vivian Chen (2007) who examined job stress and work attitudes among temporary (i.e. fixed-term) and permanently employed nurses, temporary nurses in the sample were generally younger, less experienced, unmarried, or married without children. It was found that they suffer from greater job stress and lower affective organizational and occupational commitments compared to their permanent counterparts.

Ha: Significant differences exist in Occupational Stress with regard to the nature of shifts (during the last 3 weeks).

**P<0.01: Highly Significant**

The overall mean score and standard deviation for nurses who worked in the day shifts was 124.38 and 12.04 respectively. Nurses working during night shifts obtained a mean score of 143.25 and standard deviation of 20.26 and the nurses who worked during day and night shifts obtained the mean score and standard deviation of 155.87 and 24.77 respectively. F-ratio was computed to be 11.84 and was found to be statistically significant at 0.01 level. This indicates that nurses who worked during the day and night shifts for the last three weeks showed high job stress as compared to the other nurses.

The above finding is probably because schedules that force nurses to switch from nights to days rapidly can be physically hard on them, while schedules that require them to work most weekends or nights can be tough on their family and social life. Due to which nurses who worked during day and night during the past three weeks might have experienced frequent sleep disturbance and associated excessive sleepiness. Sleepiness/ fatigue in the work place which in turn can lead to poor concentration, absenteeism, accidents, errors, injuries, and fatalities. Therefore nurses have to be flexible and work either day and night shifts when required. Since the sleeping pattern is disturbed or totally altered, the body feels tired. These adjustments undertaken by the body can also cause stress.

8. Conclusion

As hypothesized in the present study, significant differences were found in occupational stress with regard to age among nurses; no significant differences were found in occupational stress with regard to category of nurse among nurses; significant differences were found in occupational stress with regard to years of experience among nurses; significant differences were found in occupational stress with regard to employment status among nurses; and lastly significant differences were also found in occupational stress with regard to the nature of shifts (during the last 3 weeks) among nurses.

9. Future Scope

- A similar study can be conducted by extending the population under study to include other sample relating to the same field such as doctors, health care professionals, and general practitioners.
- Other variables such as work motivation, organizational commitment and adjustment of nurses can also be studied.

References


**Author Profile**

Vijay Viegas is presently working as an Assistant Professor at the Post Graduate Department of Psychology St. Xavier’s College, Mapusa – Goa, India. Besides his regular teachinglearning activities he is actively involved in research, presentations, and publications in varied aspects of human psychology including health, well-being, employee welfare, social modernization and women empowerment and also on some philosophical issues like euthanasia and abortion. Vijay loves to travel and has travelled extensively all around the world. He believes his travels have led him to be a more mature and independent person as well as understand and accept various people, their cultures and lifestyles.