

## Occupational Stress among Staff Nurses in Aizawl City

Mercy Chingnunhoih\*

Lalnunhlimi\*\*

Zoengpari\*\*\*

### Abstract

*Nursing as a profession has been reported as an occupation that has a high level of stress. The current study aim to assess the occupational stress among nurses based on their working experiences and category of hospitals. The data for the present study was collected using self-administered Occupational stress Index Questionnaire from 35 Mizo staff nurses working in Government Hospitals and 35 Mizo nurses from Private Hospitals. Statistical analysis was calculated using Independent 't' test for both the hypotheses and results show that no significant differences were found in occupational stress among staff nurses working in government hospitals and private hospitals as well as in the nurses working experiences at both at  $\alpha .01$  and  $.05$  respectively. However there exist mean level differences of stress both in comparing between nurses based on their working experiences and category of hospitals. This study will bring greater attention for the Hospital administrations to better identify and recognize stressful factors, plan measures to reduce the level of stress and improve the working conditions as well as the wellbeing of the nurses; and pave way for studying more about coping strategies, work motivation and job satisfaction using the same population.*

**Keywords:** Stress, Occupational stress, Nurses, Working experiences, Mizo

### Introduction

In the modern life where it is said to be the world of achievement, stress is a common problem. Ellis (1999) defined stress as a feeling of tension which is both emotional and physical. It is a discomforting response of person, in particular situations. The two basic kinds of stress in which we will be focusing is on the physiological and psychological stress. A nor-

mal person finds stress everywhere-for example within the family, workplace, organizations, social or economic activity, etc. From the time of birth till death, an individual, on every occasion is exposed to various stresses. Nowadays, stress is a subject which is difficult to keep away. It has been discussed not only in our daily conversations but as well in televisions, radios, newspapers, etc.

\* Ph.D scholar, Department of Psychology, Mizoram University

\*\*MA Psychology, Mizoram University

\*\*\*Associate Professor, Department of Psychology, Mizoram University

This paper examine the level of occupational stress among the staff nurses working in Private and Government hospitals located in Aizawl city. It has been found that there is a limited studies conducted to examine the level of stress among working staff nurses in hospitals especially in Aizawl city of Mizoram. This present study is relevant because nursing as a profession is a demanding and highly stressful occupations and it is believed to affect extensively the physical, emotional and mental health of the nurses. The findings from this paper can be used to highlight the differences of stress level based on different demographic background.

### **Occupational stress**

Occupational stress maybe defined as a stress which is related to one's job. Canish and Swindle (1994) defined occupational stress as mental and physical condition which affects an individuals' productivity and effectiveness; personal health and quality of life. Research has revealed that the demands of an occupation can be stressful, straining and can have a profound emotional, psychological and physical effects on the lives of the workers. Numerous research has been conducted over the past few years (such Karasek& Theorell, 1990; Spielberger&Reheiser, 1994; Quick et.al.,1997) and clearly illustrated that occupational stress has adverse influence on productivity, health, absenteeism and satisfaction. Stress caused by occupation has been a major threat for many workers

and it became the most important serious health issues in this modern world. (Lu, Cooper, Kao, & Zhou, 2003). In this regard it has become one of the most popular topics for applied research in Psychology as well as in areas of social and medical sciences.

### **Nursing:**

Nursing is a profession that is within the health care sector. The main aim of nursing is focused on the care of individuals, families or communities who are more vulnerable and are physically or mentally unhealthy so that they may enable to maintain or recover good health and quality of life. It is considered one of the noblest professions as they deal with the needy and ill in a manner based on the individual's physical, emotional, psychological, intellectual, social and spiritual needs.

Unlikely to the status and popularity, nursing has been identified as an occupation that has high levels of stress. The increasing level of stress among nurses greatly affected their psychological well-being as well as physical wellbeing. Among all the health professions, nursing tends to be regarded as one of the most stressful and straining occupation. (Adali, Priama, &Plati, 2000). A research which has been conducted by Eleni, et al., 2010 to study the occupational stress among nursing staff between the capital and regional hospital nurses (150 nurses during one month) found that there exist difference levels of stress between the two samples. They also found that there is an

increase in the stress level among the nurses mainly because of the increased work overload along with conflicts regarding work and family roles.

A number of researches have also been carried out to see the differences of stress level among various nurse groups. Although many researches has found the main cause of their stress level to be more likely similar (Bryan, Fairbrother, & Fenton, 2000; Eleni, et al., 2010). There seems to be differences of stress level among nurses of different sociodemographic variables, the status, years of working and the kind of hospitals they are working at. Yeh & Huang in 2007 conducted an exploratory study of perceived occupational stress among newly graduated nurses and studied the relation between stress, demographic and work variables. The study found that newly graduated nurses were most stressed because of the workload, interpersonal relationship and ward management in turn. Likewise, in another study conducted to measure the occupational stress among staff nurses at selected private hospitals in Raipur. Using non experimental descriptive survey design, the results shows that 78% of the sample nurses were reported likely to be stressful and the conditions such as age, education, and area of living and previous stress management class were found to effect of the level of stress among the nurses. (Nair, 2016)

In a study conducted in a University by Dua in 1994 to assess the effects of job stressors on physical health, emotional

health and job satisfaction, the result revealed that younger staffs are more stress in relation with their job compared to the older staff. The reason behind the differences was that older staffs have habitually gotten to a stage where career development is not their major concern anymore thus leading to the younger staffs that were concern about developing their career ahead of them to have higher stress and concerns to worry about.

Another study conducted by Raungsrijan and Suppapitiporn, 2011 who study the stress and the factors of stress of registered nurse in Private hospitals and non-private. Their result showed that 63% of the nurses in a private hospital had high levels of stress, which was associated with disrespect from patients, colleagues and supervisors. Contrary to that it has been found that nurses working in public sector hospitals report more work related stress than private hospital nurses. (Pongruengphant & Tyson, 1997; Tyson, Pongruengphant, & Aggarwal, 2002) In a related study conducted by Dr. Prabhat Kumar Pani, 2016 in examining the relationship between age and occupation stress among nurses employed in hospitals in Jamshedpur city of Jharkhand, results indicated that different age groups of nurses differed in their stress level. The age groups "below 25" were reported to have the high scores on their stress level when compared to the nurses in the other age group. These findings was consistent with the findings by Malcolmson et al., (2003) which indicates "younger, less experienced teachers report both more

stress and lesser ability to cope with it, as compared with their older and more experienced colleagues". From the above literatures that have studied on occupational stress among nurses, nursing as a profession has been found to be a stressful jobs and the stressors range from being over work load, inadequate staffing, and absence of trained and experienced staff. It was also evident that depending on the demographic variables the level of stress has also been found to be varied. Most of the research indicates that newly graduated nurses, younger age groups as well as educational degree have an effect on the level of stress the nurses faced in their work. It would be interesting to find out whether there exist difference in the stress level among the Mizo staff nurses based on their working experiences and the place of working.

#### **Sample selection**

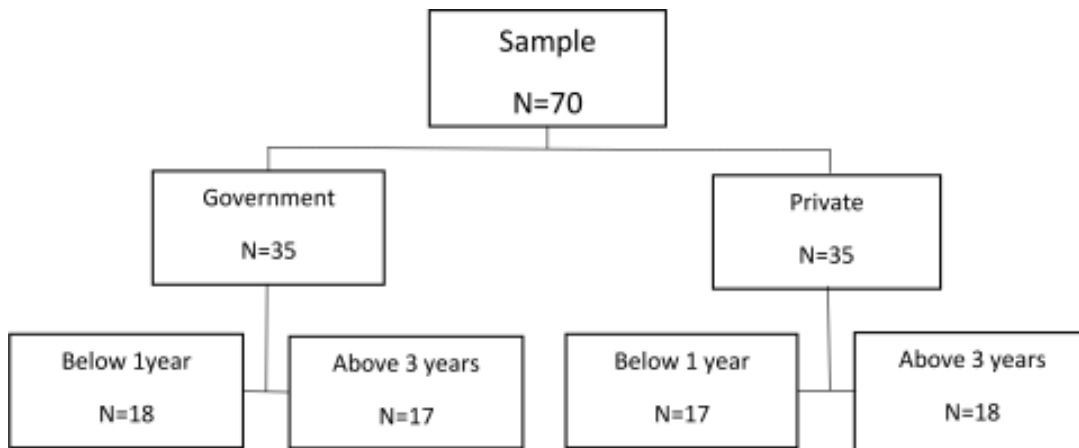
Non-probability Purposive sampling procedure was used to determine the occupational stress among Mizo nurses. 70 Mizo nurses (35 working as Government Nurses and 35 working as Private nurses; 35 nurses who work for less than 1 year and 35 nurses who work more than 3 years) residing in Aizawl City

were selected for the study. The samples represent the Mizo nurses working in Government Hospitals (Civil and Mimer) and Private Hospitals (LRM and Synod) with equal representation from each of the hospital.

#### **Research design**

The study in this paper employed descriptive statistics; **Independent T test** was used to assess the occupational stress across the variables presented in the socio-demographic details of the samples. The participants selected from Aizawl City represent nurses from 2 categories of hospitals (Government and Private) and years of working experiences (below 1 year and above 3 years). There is an equal representation based on all of these factors. Thus the study portrays 35 nurses who are working in Private Hospitals and 35 working in Government hospitals; and among the 35 nurses from the Government Hospital 18 nurses are taken as a sample for those who work for less than 1 year and 17 nurses for above 3 years. And among the 35 nurses from the Private hospital 17 nurses are those who work for less than 1 year and 18 nurses for above 3 years respectively.

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### Unit and criteria for selection:

The unit of analysis in the present study include only the staff nurses from the selected Hospitals in Aizawl City of Mizoram. The following are the criteria I set up for the selection of the participants:

- Registered Female staff nurses
- Hospitals should be located only in the Aizawl city
- Participants should only be from Mizo community
- Participants should have a working experiences of 1 year or above 3 years
- Participants should be able to understand English

### Procedure:

The data for the study was collected from the last week of September to the first week of October, 2018.

**Pilot Test:** For testing the validity and a line of enquiry for the self-administered Occupational stress index questionnaire, Pilot study was conducted using the same

OSI scale index to a sample of around 10 mizo working staff nurses.

**Main study:** the data for the present study was collected using self-administered Occupational stress Index Questionnaire from 35 mizo staff nurses working in Government Hospitals (Civil, Mimer) and 35 mizo staff nurses working in Private Hospitals (Synod, LRM). As per the APA (2003) ethical guidelines the anonymity, confidentiality, and ethics was maintained. After collecting the data it was tabulated for analysis. All the participants received a booklet containing demographic information (age, marital status, years of experiences, and type of hospitals) and the Occupational Stress Index Questionnaire by Dr. A. K. Srivastava and A. P. Singh (1984).

### Psychological Tools:

#### A) Demographic Information:

Participants were asked to report their age, marital status, working shift, years of working experiences and category of hospital to support the objectives of the study.

**B) Occupational Stress Index (OSI): 1984**

This scale was constructed and standardized by Dr. A. K. Srivastava and A. P. Singh. The inventory consists of 46 items of which 28 are true-keyed and 18 are false-keyed. Each item is provided with five Likert scale 'Strongly Agree', 'disagree', 'undecided', 'disagree', and 'strongly disagree'. 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.

**Statistical analysis:**

For testing the hypotheses in the study, appropriate statistical methods were applied:

1. Psychometric adequacies of the scale of the psychological measure was tested.
2. The questionnaire data are manually coded and are entered in the SPSS 20 package and the descriptive statistics,

graphical methods and reliability was analyzed using SPSS software

3. Independent T test was calculated to find effects of years of working experience and category of Hospitals on the dependent variable i.e. stress.

**Ethical considerations:**

- All participants were asked if they want to participate and only those who voluntarily participate are chosen for the collection, taking into consideration to respect the rights of the participants for withdrawal at any point of time.
- Seek permissions and informed consent is taken from the Hospital administrations and the participants.
- Maintain confidentiality of the participants and the data collected
- Inform participants about the purpose of research and inform how the research should be used only for academic purposes
- Acknowledging the participants contributions

**RESULT AND DISCUSSION****Table 1: Demographic characteristics of study participants**

Characteristics		No.of Participants	Mean	Standard Deviation	Proportion (%)
Age		70	26.6	3.707	-
Marital Status	Single	53	1.24	0.432	75.7
	Married	17			24.3
Years of working	Below1	35	1.5	0.504	50
	Above3	35			50
Types of hospitals	Private	35	1.5	0.504	50
	Government	35			50

All the 46 questionnaires administered were completed making a 100% response rate. From the above table 1 it can be understood that the participants comprised of 53 (75.7%) of unmarried nurses and 17 (24.3%) of married nurses). The average mean age of the participants was 26 years and participants age range

from 22 years to 40 years old. (Fig4.1) Out of the 70 respondents, 35 nurses (50%) were from Private Hospitals and 35 nurses (50%) were from Government Hospitals, in which 35 (50%) had been in practice for below 1 years and 35 (50%) has been in practice for above 3 years.

**Table2: Mean, Standard deviation and T-value for occupational nurses between Government and Private Nurses.**

	CATEGORY_OF_HOSPITAL	N	Mean	Std. Deviation	t-value	Sig
OSITT	PRIVATE	35	139.9	10.9		
	GOVERNMENT	35	142.4	9.149		

For Hypothesis 1 i.e. there will be a significant differences in occupational stress between Government staff nurses and Private staff nurses, the above Table 2 shows that occupational stress mean score for nurses working in Private and Government hospitals was 139.89 and 142.37 with a corresponding standard deviation of 10.900 and 9.149

respectively. The t-value of the score was calculated to be -1.033 and p-value was above .05, it showed that the result was statistically not significant.

With aligned to the findings in this study, the result clearly indicates that there is no significant difference in the occupational stress of nurses working in

Government and private nurses. The main reason could be as nursing is considered to be one of the most stressful occupation (Adali, Priama, &Plati, 2000). So no matter where the nurses are working be it the hospitals run by the Government or the hospital run by some organization or private individuals what they experiences are more or less similar such as work overload, time pressure, dealing with life and death etc, therefore there is not much different in the level of stress experienced by them.

Although the result was significantly not difference, mean level in Table2shows that Government nurses experienced higher occupational stress level when compared to the Private Nurses. This may be possible because the nurses working in the Government hospitals look after wider populations concerning with their physical disorder to their psychological

disorders. Besides their ward range may be larger i.e. covering more wards/ departments leading to crowding, more work responsibility with little time, shortage of nurse in the government hospitals, and less organized.

The above findings is supported by a study conducted by Raungsrijan and Suppaitiporn,2011 who study the stress and the factors of stress of registered nurse in Private hospitals and non-private. Their result showed that 63% of the nurses in a private hospital had high levels of stress, which was associated with disrespect from patients, colleagues and supervisors. And in contrast to the findings from the study by Raungsrijan and Suppaitiporn, it has been found that nurses working in public sector hospitals report more work related stress than private hospital nurses. (Pongruengphant& Tyson, 1997; Tyson, Pongruengphant, & Aggarwal, 2002)

**Table 3: Mean, Standard deviation and T value for occupational nurses based on their years of working experience.**

Measure	Years of experience	Mean	Standard deviation	N	t value	Sig.value
OSI	Less than 1 year	141.54	10.193	35	0.342	0.733
OSI	Above 3 years	140.71	10.072	35		

For hypothesis 2: there will be significant difference in occupational stress between staff nurses who are working for 1 year and who are working for above 3 years, results shows that overall occupational stress mean score for nurses work-

ing for less than 1 year and above 3 years was 141.54 and 140.71 with a corresponding standard deviation of 10.193 and 10.072 respectively. The t-value of the score was calculated to be .342 and p-val-



ue was above .05, it showed that the result was statistically not significant.

Comparing the mean score of the stress level between the 2 groups it was seen that occupational stress decreases with the increase in the year of experience. In other words, nurses who have been working for more than 3 years shows slightly lesser stress level than those who were recruited in the hospital for less than 1 year.

The probability of the stress level to decreased with the increase in the year of experience as observed in the mean scores in Table 3 may be because of the working experiences the nurses with older recruits has when compared to the newly recruited nurses. The nurses who have been working longer may have learnt and been equipped with coping strategies when faced with stressful situations which help them to be better in handling the stress that has come together with their workload.

Nonetheless the findings in the present study as shown in Table 3 indicates that there is no significant differences between nurses based on their working year experiences. The possible reason could be less comparison was calculated only on 2 groups and lesser sample size. In similar study conducted by Viegas, 2013, the findings reported differences in stress level among different years of working experiences where 4 groups were compared (below 1 year, 1-10 years, 11-15 years and above 15 years). This wide range between the years of experience and con-

ducting one way ANOVA helped in finding out the differences more in detail as compared to the present study where only below 1 year and above 3 years of working as a nurse in hospitals are being studied. Apart from the limited sample size and the less variables and groups being studied, another possible reason could be of that although the more experienced nurses has better adaptation and cope well with stress, still they will be filled with overwork, underpay, unseen circumstances, looking ways for promotion that may result in causing them stress similar to the newly recruited nurses.

The past studies and literature conducted on the nurse to assess their stress level based on their working experiences supported the findings of the study. A study conducted on Job related stress among nurses working in Jimma Zone public hospitals, South West Ethiopia: a cross sectional study indicated that there is no variation in job-related stress due to educational qualification, & length of service/ experience in nursing (Tadesse ,Ashagre , & Tefera , 2016). Uthaman, T., Chua, T. L., &Ang, S. Y. (2016) in their study reported that older experienced nurses have higher stress level due to personal health concerns and limitations, computerization and shift work. However contradicting to it, Yeh& Huang in 2007 in their study they found that newly graduated nurses were more stressed than older recruited nurses because of the workload, interpersonal relationship and ward management in turn. In other findings by Ali Mohammad Mosadeghrad in 2013 found

that nurses with more experiences were less likely to get stressed than the lesser experienced nurse.

### CONCLUSION

The main aim of the research was to assess the occupational stress among the staff nurses working in hospitals located in Aizawl city. In total there are 70 participants with equal number of representation of nurses from the Government hospitals and Private hospitals. The data were analyzed using descriptive statistics to describe the socio-demographic details and used the mean, standard deviation, and bar graphs. For analyzing the data based on the hypotheses, t test was used. As hypothesized in the present study:

1. No significant differences were found in occupational stress among staff nurses working in government hospitals and private hospitals at both at  $\alpha$  .01 and .05 respectively
2. No significant differences were found in occupational stress between staff nurses who are working for 1 year and

who are working for above 3 years both at  $\alpha$  .01 and .05 respectively

### Limitations:

1. The sample is purposive and thereby it limits the generalization to other samples with similar characteristics and the generalization of the findings should be done with caution. Besides small sample size i.e. only 70 participants is not enough to make general conclusion.
3. The findings cannot be generalized and represent the whole Mizo staff nurses of Aizawl city, Mizoram because the sample has been taken from 4 hospitals (2 Government and 2 Private). The study to be generalized need analysis from more hospital nurse sample.
4. The design of the study employs quantitative where it was self-administered by the sample using only one scale to assess the stress level. These pose limitation in terms of bringing the participants biases and cultural limitation in the responses.

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