

# An Assessment Of Level Of Work-Related Stress Among Nursing Officers In Sri Jayewardenepura General Hospital In Sri Lanka

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**Abstract:** Stress is a state of emotional, cognitive, behavioral and physical reactions to unfavorable situations and is characterized by high levels of arousal, distress and feelings of not coping. It has major behavioral and health implications. Stress has a special significance in health care where the workers experience both psychosocial and physical stress. As front-line health care workers who are in the wards for twenty four hours a day, Nursing Officers are at high risk of stress, due to their enormous responsibilities. In the ward setting they act as the link between the physicians, patients and the community.

**Index Terms:** Community, Enormous, Feeling of not coping, link, Nursing Officers, Unfavorable, Work related stress.

## 1 INTRODUCTION

WORK related stress is the stress which arises due to involving in work. This is a unique and unavoidable situation in any profession and most of the time it helps a person to prepare psychologically and physically to deal with responsibility. Work related stress is defined by the National Institute for Occupational Safety and Health Administration (NIOSH) as “the harmful physical and emotional responses that occur when the necessities of the occupation do not go with the capabilities, resources, or needs of the employee”. Work related stress is not harmful as we feel all the time. Up to a certain level stress could be beneficial to the organization as it increases the efficiency and effectiveness of the employers. Therefore it is not reasonable to discuss in a negative context all the time as it has a positive value as well. The phenomenon of stress in the place of work is of great significance in health care. It is one of the most demanding professions and justified considering and investigating work-related stress, since performance declines under stressful situations. In the current context “quality” and “productivity” is vital for organizational survival. Therefore, stress at workplace becomes a concern to institutional administrators. Among the health care professionals especially nurses are considered a high risk group regarding work stress and burnout. (Jogindravati, 2013)

## 2 OBJECTIVES

To assess the level of work-related stress among nursing officers in Sri Jayewardenepura General Hospital in Sri Lanka.

## 3 METHODS

A hospital based descriptive cross sectional study was carried out in a pioneer semi government teaching hospital in Sri

Lanka. A total 402 Nursing Officers participated and a self-administered questionnaire was used to evaluate the level of stress in Nursing Officers.

### 3.1 Questionnaire

The questionnaire developed by the Principal Investigator (PI) to obtain necessary information on socio demographic characteristics and service related factors to describe their relationship with the level of work related stress. Socio demographic characteristics included age, sex, ethnicity, religion, marital status, level of education, distance from the residence to the hospital and whether having children and if so their age. Service related factors considered were working unit, grade, total service period and years of service in SJGH. The *Nursing Stress Scale* was used assess the level of stress among nursing officers. Pamela Gray Toft, James G. Anderson (1981) developed this instrument to assess the frequency and the major sources of stress perceived by nurses in hospital units. This is the most widely used and well known scale which consists of 34 items that describe situations that have been identified as causing stress for nurses in the performance of their duties. It provides a total stress score as well as scores on each of seven subscales that measure the frequency of stress experienced by nurses in the hospital environment. (Pamela Gray- Toft, James G. Anderson, 1981). Minor modifications to this questioner were made to suit the Sri Lankan context considering the cultural and other health sector related issues.

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### 3.1 Sub scales and items of the questionnaire

Seven sub scales and 34 items are classified under the

following main categories.

Factor 1: Death and dying	:	7 items (B3, B4, B6, B8, B12, B13 and B21)
Factor 11: Conflict with physicians	:	5 items (B2, B9, B10, B14, and B19)
Factor III: Inadequate preparation	:	3 items (B15, B18, and B23)
Factor IV: Lack of support	:	5 items (B2, B9, B10, B14, and B19)
Factor V: Conflict with other nurses	:	5 items (B5, B20, B22, B24, B29)
Factor VI: Work load	:	6 items (B1, B25, B27, B28, B30 and B34)
Factor VII: Uncertainty concerning treatment	:	5 items (B17, B26, B31, B32, and B33)

## 4 RESULTS

Numerical data were summarized as means and standard deviations and categorical data were summarized as percentages. Analysis of variance (ANOVA) and post hoc analysis was carried out to assess the statistical significance of Socio-Demographic and service related characteristics with the different factors which affect level of stress of Nursing Officers. All inferential statistics were tested at 5% significance ( $p < 0.05$ ). Dependent variable, the work related stress was assessed in the following manner. Level of overall work related stress was calculated by the total score obtained from B1 to B34 and total score that measures the overall frequency of stress experienced by a nurse was evaluated by adding the

individual's responses to all 34 items. The scores obtained for these questions were calculated for mean and means were compared. Total scores range from 0 to 102, with higher scores indicating more frequent stress.

### 4.1 Level of stress

The mean stress score for the each factor was calculated and the mean total score for each respondent was calculated. There was a total of 34 items to measure stress. Each choice carried scores as follows, never (0), occasionally (1), frequently (2) and very frequently (3). Accordingly total scores range from 0 to 102.

**Table 1** Distribution of factors and scores allocated

Factor	No of items	Maximum score
Factor I: Death and dying	7	21
Factor 11: Conflict with physicians	5	15
Factor III: Inadequate preparation	3	09
Factor IV: Lack of support	3	09
Factor V: Conflict with other nurses	5	15
Factor VI: Work load	6	18
Factor VII: Uncertainty concerning treatment	5	15
<b>Total</b>	<b>34</b>	<b>102</b>

### 4.2 Stress score

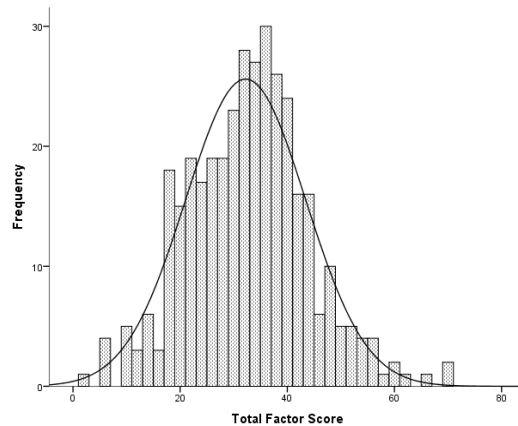
Table 4.13 shows that the analysis of total scores and the mean score was 32.2.

**Table 4.13:** Summary of vital statistics on stress score of the study population

Statistic	Value
Mean	32.2
Median	32.5
Mode	35
Std. Deviation	11.2
Minimum	02
Maximum	70

The distribution of total score was in a normal distribution according to the test of normality (Shapiro-Wilk value 0.993 df =360, p

= 0.93).



**Figure 1:** Distribution of total score

This study revealed that high stress levels were significantly associated with 24-33 year age group ( $p < 0.001$ ), residing in own home ( $p = 0.025$ ), spouses home ( $p = 0.032$ ), loneliness ( $p = 0.033$ ), having children of less than six years of age ( $p = 0.017$ ), three to five years of service ( $p = 0.001$ ), nursing grade 111 ( $p = 0.03$ ) and working in paying wards ( $p = 0.001$ ). Good financial status was associated with significantly low stress level ( $p = 0.027$ ).

## 5 CONCLUSIONS

A high level of work-related stress among Nursing Officers is a considerable health issue which needs to be addressed by health care managers implementing effective coping strategies.

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