

The Situations that Cause to Stress of Doctors and Nurses in work Environment and Coping Strategies of Them *

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Abstract:

Background and aim: This study was conducted to determine the stress of doctors and nurses who worked at a State Hospital and their coping strategies with stress.

Methods: The sample of this study was consisted of doctors and nurses in State Hospital between 01.03.2014-30.06.2014 and at total 249 health professionals were taken to the study. Data was collected with a questionnaire form that improved by the researchers and Coping Strategies for Stress Scale. Descriptive statistics, chi square, independent samples t test were used to analyze data. Moreover, ethical committee approval, the permission of relevant public institutions and the consent of the participants were taken for this study.

Results: In this study, it determined that the causes of work stress are excessive work load, the lack of personnel and materials, communication problems related to patients and their companions (76.3 %, 61.0 %, 54.2 % for doctors and 65.8 %, 39.5 %, 52.1 % for nurses, respectively). Also, it established that participants suggest, improving work conditions, rewarding and increasing staff numbers to reduce work stress (81.3 %, 49.2 %, 50.8 % for doctors and 74.2 %, 66.3 %, 56.3 % for nurses). According to coping with work stress scale, the mean score of self-confident and optimistic approaches of doctors was higher than that the nurses ($p < 0.05$). In this study, doctors (61.0 %) said they would choose the same profession again, the nurses (63.7 %) stated that they would not choose the same profession again. This difference related to choice of profession was statistically significant ($p < 0.01$).

Conclusions and advices: In accordance with these findings, it is suggested that health professionals should share knowledge with hospital management and head nurses; learning effective ways of coping with stress at work, designing training programs for problem solving, promoting and rewarding the achievements of workers should be done

Keywords: coping with stress, health care workers, stress, work stress

I. Introduction

It is known that in our daily life we need to continue within a certain regular and continuous process. Stress is defined as total of effects as cognitive, emotional, behavioral and physical that could deteriorate of the body balance [1,2]. Human is a being that affects and is affected. Also, it must be remembered that work life and person could affect each other. Stress in work life is affected by individual characteristics of them, work life conditions, working units, intensive burden and interpersonal communications [1-6]. Stress in work life has very important place in terms of both institute and employee and so the situation about this should be determined. In the studies; it is suggested that health professionals could meet a lot of stress factors. These factors are work environment, work burden and time depression, lack of personal, long working durations, communication problems with patients and relatives and no awarding [3,5-7]. Again, in the studies; it is determined that stressors that in the work life could affect the body and mental health with job satisfaction of workers negatively and exhaustion increased because of it [8-10]. In another study; there was a positive relation between work stress and load with leaving from job in nurses [11]. As it seen, stress at work life could be reason for loss of personal and affect people as negatively. This study is aimed to determine stress factors at work environment for doctors and nurses and coping strategies of them so, get data for improving for this subject.

II. Methods

2.1. The type of the study and place

This study was conducted to determine the stress causes of doctors and nurses who worked at a State Hospital at Cappadocia Region in Turkey and their coping strategies with stress, as descriptive.

2.2. The universe of the study

The doctors and nurses who worked at the state hospital constituted the universe of the study. According to 2013 data of Provincial Directorate of Health; 100 specialist physicians, 10 practicing physician and 200 nurses have been working at the hospital.

2.3. The sample of the study

In the study, sample was not calculated, however, the doctors and nurses who accepted to participate to the study were taken to the study, it was completed with 249 health professionals as 190 nurses, 59 doctors. So, 80.3% of the universe was reached.

2.4. Data collection tools

Data was collected with an informative form that consisted of 18 questions related to sociodemographic characteristics of the doctors and nurses and stress factors at the work environment for them. Also, Ways of Coping Inventory (WCI) was used.

2.4.1. Ways of Coping Inventory (WCI)

This inventory that named as Ways of Coping Inventory was improved to determine the ways of coping with general or certain stresses by Folkman and Lazarus in 1980. It is an inventory that directed to the statute as 30 items. The first standardization study of inventory was conducted by Siva (1991) for our country. Inventory consists of 5 sub-groups as following; self-confident approach, helpless, obeying, optimist approach and looking for social support. This inventory that was used in a lot of study in our country is an inventory with 4 Likert type and its degrees are from 'never suitable' to 'very suitable'. Also it evaluates themselves. For evaluation the inventory, total score isn't calculated, sub scales are calculated separately. Scale measures two mean coping strategies with stress. It has got two dimensions as effective attitudes directed to problem and ineffective attitudes directed to emotions. Effective attitudes directed to the problem are evaluated as; 'self confident', 'optimistic' approaches and 'looking for social support; ineffective attitudes are as 'helpless' and 'obeying'. An increase at total score of sub scales could be thought as people use this coping strategy mostly (12).

2.5. Ethical dimension of the study

Before the study, institute consents from Ethical Institute of Nevşehir Hacı Bektaş Veli University (2014/06.02), Turkey Government Hospitals Nevşehir city center Government Hospital Association General Secretary and verbal consents from participants were taken.

2.6. Data evaluation

Data was evaluated by IBM SPSS 15.0 (Statistical Package for Social Sciences) (Chicago, ILL, USA) package program and $p < 0.05$ was accepted as significant as statistically. Data that was calculated by measurement was shown as arithmetical mean, standard deviation; and another was shown as percentage. Also, data was evaluated by using Cronbach's Alpha, importance test between two means (independent t test) and chi-square test. Homogeneity of variances was checked with Levene test.

III. Results

According to Table 1; it is determined that 39% of doctors and 35.8% of nurses was 32-37 years old; 66.1% of the doctors was men, 78.9% of the nurses was women; 69.5% of the doctors and 77.4% of the nurses was married; 33.9% of the doctors and 40.5% of the nurses have worked for 10-20 years. Also; 54.2% of the doctors and 87.9% of the nurses worked as guard style; 71.2% of the doctors and 40.5% of the nurses followed a publication; 61.0% of the doctors and 36.3% of the nurses wanted to choose the same profession. (Table 1).

Table 1. Informative characteristics of health workers in the study

| Informative characteristics | Doctor (n=59) | | Nurse (n=190) | |
|---|---------------|------|---------------|------|
| | S | % | S | % |
| Age | | | | |
| 20-25 years | 4 | 6.8 | 27 | 14.2 |
| 26-31 years | 14 | 23.7 | 35 | 18.4 |
| 32-37 years | 23 | 39.0 | 68 | 35.8 |
| 38 year and over | 18 | 30.5 | 60 | 31.6 |
| Gender | | | | |
| Female | 20 | 33.9 | 150 | 78.9 |
| Male | 39 | 66.1 | 40 | 21.1 |
| Marital status | | | | |
| Marriage | 41 | 69.5 | 147 | 77.4 |
| Single | 18 | 20.5 | 43 | 22.6 |
| Time of working | | | | |
| 0-1 Year | 6 | 10.2 | 9 | 4.7 |
| 1-5 Years | 3 | 5.1 | 27 | 14.2 |
| 5-10 Years | 20 | 33.9 | 38 | 20.0 |
| 10-20 Years | 20 | 33.9 | 77 | 40.5 |
| 20 Years and over | 10 | 16.9 | 39 | 20.5 |
| Chronic disease | | | | |
| Yes | 11 | 18.6 | 34 | 17.9 |
| No | 48 | 81.4 | 156 | 82.1 |
| Type of working | | | | |
| Guard type | 32 | 54.2 | 167 | 87.9 |
| Shift type | 27 | 45.8 | 23 | 12.1 |
| Following occupational publication | | | | |
| Yes | 42 | 71.2 | 77 | 40.5 |
| No | 17 | 28.8 | 113 | 59.5 |
| In service training | | | | |
| Yes | 39 | 66.1 | 169 | 88.9 |
| No | 20 | 33.9 | 21 | 11.1 |
| Willing to choose the same profession | | | | |
| Yes | 36 | 61.0 | 69 | 36.3 |
| No | 23 | 39.0 | 121 | 63.7 |
| Getting reward because of his/her studying | | | | |
| Yes | 16 | 27.1 | 37 | 19.5 |
| No | 43 | 72.9 | 153 | 80.5 |
| Being punished because of his/her studying | | | | |
| Yes | 14 | 23.7 | 26 | 13.7 |
| No | 45 | 76.3 | 164 | 86.3 |

Table 2. The distribution of the stress factors at work environment according to profession groups

| Stress factors at work environment | Doctor (n=59) | | Nurse (n=190) | |
|--|---------------|------|---------------|------|
| | S | % | S | % |
| Work overload | 45 | 76.3 | 125 | 65.8 |
| Personal/ material deficiency | 36 | 61.0 | 75 | 39.5 |
| Communication problems with the patients and relatives | 32 | 54.2 | 99 | 52.1 |
| Intensive patient | 29 | 49.1 | 62 | 32.6 |
| Not rewarding | 25 | 42.4 | 104 | 54.7 |
| No team working | 21 | 35.6 | 53 | 27.9 |
| Fear of doing mistake | 18 | 30.5 | 49 | 25.8 |
| To be haven't got guard permission | 15 | 25.4 | 42 | 22.1 |
| Emergency intervention | 13 | 22.0 | 49 | 25.8 |
| Pressure of boss | 13 | 22.0 | 41 | 21.6 |

*It is given more than one answer. Percentage was calculated for total 'n' in every group.

When we investigated Table 2; doctors and nurses stated their work stress was because of more work burden, personal and material deficits, communication problems with the patients and relatives, intensive patient, not being rewarded (76.3%, 61.0%, 54.2%, 49.1%, 42.4%, respectively for doctors; 65.8%, 39.5%, 52.1%, 32.6%, 54.7%, respectively for nurses).

Table 3. The distribution of the advices for decreasing stress at work environment according to profession groups

| The advices for decreasing stress at work environment | Doctor (n=59) | | Nurse (n=190) | |
|---|---------------|------|---------------|------|
| | S | % | S | % |
| Improving working conditions | 48 | 81.3 | 141 | 74.2 |
| Supplying enough material | 34 | 57.6 | 79 | 41.6 |
| Team work | 31 | 52.5 | 68 | 35.8 |
| Increasing personal number | 30 | 50.8 | 107 | 56.3 |
| Rewarding | 29 | 49.2 | 126 | 66.3 |
| Decreasing guard number | 26 | 44.1 | 88 | 46.3 |

*It is given more than one answer. Percentage was calculated for total ‘n’ in every group.

The advices of the doctors and the nurses for decreasing stress at work environment are seen at Table 3. It is determined that the doctors and the nurses advice to improve working conditions, supply enough material, team work, increase personal number and rewarding (81.3%, 57.6%, 52.5%, 50.8%, 49.2%, respectively for the doctors; %74.2, %41.6, %35.8, %56.3, % 66.3, respectively for the nurses).

Table 4.Score means for ways of coping inventory of the doctors and the nurses

| Ways of coping inventory | Doctor ($\bar{x} \pm SD$) | Nurse ($\bar{x} \pm SD$) | Test |
|----------------------------|--------------------------------|-------------------------------|------------------------------------|
| Self-confident approach | 15.13±3.41 | 13.74±2.76 | 2.845 £ p<0.05 |
| Helpless approach | 8.72±3.84 | 9.71±3.38 | -1.894 £ p>0.05 |
| Obeying approach | 6.03±3.10 | 6.07±2.64 | -0.109 £ p>0.05 |
| Optimist approach | 9.89±2.83 | 9.03±2.42 | 2.298 £ p<0.05 |
| Looking for social support | 6.44±1.95 | 6.65±1.92 | -0.737 £ p>0.05 |

£ Independent t test

According to Table 4; it is determined that the subscale dimensions that self confident approach and optimist approach of the doctors were higher than the nurses’ and the difference between the groups was significant as statistically (p<0.05).Also, in terms of helpless and obeying approachwith looking for social support score means, the difference between doctors and the nurses was not important as statistically (p>0.05)(Table 4).

Table 5. Thewilling statutes for the same professionof the doctors and the nurses

| Profession | Willing to choose the same profession | | | | Total | | X ² |
|------------|---------------------------------------|------|-----|------|------------|------------|---|
| | Yes | | No | | S | % | |
| Physician | 36 | 61.0 | 23 | 39.0 | 59 | 100 | X²=11.264 p<0.01 |
| Nurse | 69 | 36.3 | 121 | 63.7 | 190 | 100 | |

It is seen that the willing to choose the same profession of the physicians and the nurses at Table 5. Sixty-one percent of the physicians stated they wanted to choose the same profession but 63.7% of the nurses stated they didn’t want to choose the same profession again. About this title, the difference between the physicians and the nurses was found as significant as statistically (p<0.01).

Table 6.The situation of following any publication of the physicians and the nurses

| Profession | Following publication | | | | Total | | X ² |
|------------|-----------------------|------|-----|------|------------|------------|--|
| | Yes | | No | | S | % | |
| Physician | 42 | 71.2 | 17 | 28.8 | 59 | 100 | X²=16.961 p<0.001 |
| Nurse | 77 | 40.5 | 113 | 59.5 | 190 | 100 | |

When we investigated their following any publication(Table 6); 71.2% of the physicians and 40.5% of the nurses followed any publication. For the following any vocational publications, the difference between the physicians and the nurses was found significant as statistically (p<0.001)(Table 6).

IV. Discussion

Stress at work life is affected by the personal characteristics of people, studying conditions, unit that worked in, intensive work burden and interpersonal communications [1-6]. Stress has got an important place for both worker and the institute and the situation should be determined. In this study; the physicians and the nurses showed the more work overload in first order as stress reason (Table 2). Work overload, personal and material deficiency could cause work load and time distress, so they are among stress trigger factors. However, in a study of Callaghan et al. (2000); nurses stated that their major stress reason was work overload; in another study it is found that the nurses who stated they lived work load and time distress had got high level stress [7]. In another studies; as similar to these, work overload was the reason of the stress, mostly [5-8, 13-15]. These results showed that stressors are not only belonging to our country, they are common problems in all over the world and from past to present these have been continued.

In the studies, it is suggested that work overload and stress affected the job satisfaction negatively, cause to exhaustion and relation with leaving from profession [8-11]. Job satisfaction is known as effective on protecting mental health against work stress [10]. Clegg (2001) suggested that in the physicians and the nurses, with increased work stress, satisfaction and performance decreased. In a study of Nur (2011); there was a negative relation between stress and job satisfaction, and in the study of Myhren et al (2013) there was a negative relation between exhaustion and job satisfaction [8, 10]. In this study; 63.7% of the nurses and 39% of the physicians stated that they didn't want to choose this profession again, they didn't get reward for their workings (Table 1). Working conditions are known as important for choosing profession. Negative working conditions could affect the job satisfaction and exhaustion so their leaving from profession could be seen. In this study, work overload and conditions could be effective on willing to choose the profession. Also, being unproductive of physicians and the nurses for along time for stress and work overload could be reasons of exhaustion.

Nurses and the other health professionals stated that the reasons of the work stress as work load, communication problems, personal/material deficiency, negative work conditions, work unit, critical patient care and inexperience [5-8, 13-16]. In this study, also, the results are parallel to the others.

Prolonged and intensive stress decreases the immunity system of body and make easy to get psychosomatic problems [2]. Headaches, gastrointestinal problems, fatigue, advanced high blood pressure, asthma, gastritis, cancer, heart attack and depression could occur. In addition to these, stress decreased work performance, pleasure level from life and could destroy the emotional and social relationships with the near relatives [2,17,18]. So, some strategies for coping should be used. Coping strategies are defined as physical, cognitive, emotional and behavioral efforts for decreasing stress level [2]. In the study, it is shown that the physicians used more effective ways from the nurses (Table 4). Şenand friends (2012) found similar results about being more confidential of doctors [19]. It is thought that the physicians' following publications could be effective in self confidence (Table 6).

In the studies, it is seen that, for coping with stress, nurses looked for their friends and colleagues, they used looking for support dimension, participated to the enjoyment activities and used active planning and looking for help dimensions [4, 14, 20]. In another study, it is determined that with increased tension about work, self confident approach and optimist approach decreased in nurses [21]. Again, in a study that was conducted with primary health care professionals, there was a relation between job satisfaction and coping with stress; with increased satisfaction, more effective strategies were used [22]. In the study, it is determined that nurses could not cope with stress effectively (Table 4). For nursing, attention, willing and capability are provisions. Believing for being successful in this profession and going on with desire should be thought as conditions for coping with stress. But, 63.7% of the nurses stated that they didn't want to choose this profession again (Table 5). This situation could affect their coping with stress. Also, their success in coping with stress could contribute to the fatigue; management should take attention about this condition.

V. Conclusions and Advices

In this study, it is determined that the reasons of stress for the physicians and the nurses were work overload, personal/material deficiencies, communication problems with the patients and relatives. And also, they stated that for decreasing stress, firstly work conditions should be improved. Again, it is found that the physicians used more effective coping strategies than the nurses; more than half of the nurses didn't want to choose this profession again and follow regarding publications. According to these results, it is suggested that hospital management and health professionals should share these subjects, some education programs should be organized about effective coping strategies and problem solving abilities, health professionals should get rewarded, according to work load, planning should be done related to personal and material deficiencies.

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