



The Effectiveness of Stress Management and Physical Activity to Working Stress Reduction on Nurses

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Abstract

From the first forty cases of working stress on workers, work stress incidence on nurses is located at the top of the list. The suitable handling and management for nurses are crucially required. Working stress management is a program to help someone overcome stress. The purpose of this research is to find out the effectiveness of stress management and physical activity towards working stress on nurses in TK II Putri Hijau Hospital. This research is using a quasi-experimental design with one group pretest-posttest design. The population in this research consists of 152 people and all of them are being examined using stress questionnaires to earn the stress level. Nurses who have medium stress level are chosen to be the samples of this research, which consist of 42 nurses that are being divided into 2 groups with 21 people in each group. Therefore, 21 people obtain stress management training treatment, and the other 21 people receive physical activity treatment. In this research, the Stress Scale (PSS-10) which is a self-report questionnaire is being used. Moreover, the data is processed using parametric analysis, which is Wilcoxon. Based on the research, it is found that stress management training and physical activity has a significant effect on the reduction of nurses working stress in TK II Putri Hijau Hospital Medan.

Introduction

Stress occurs to every individual regardless of gender, age, position, position, or socioeconomic status. Stress response can also vary from person to person, because stress is a process of different perceptions of stress symptoms that arise.

In a study by The National Institute of Occupational Safety and Health (NIOSH), it shows that jobs related to hospitals or health have a high tendency to be exposed to work stress or depression, while the American National Association for Occupational Health (ANAHO) places work stress on nurses. is in the top rank of the first forty cases of work stress in workers (Nursalam, 2019).

Measuring stress levels found 13 nurses experiencing stress (Taylor, 2003). Nurse Stress in Inpatient Installation of RSJD Dr. Amino Gondohutomo Semarang found that the symptoms that arise in nurses' stress include negative emotions such as irritability or unpleasant moods, fatigue, more alertness, high voice intonation, unrealistic thinking, and worry. The nurses argue that a mental hospital patient will not know when he is yelled at or angry (Fendina et al., 2018).

One of the hospitals in Medan City is the Putri Hijau Medan Hospital. Rumkit Tk II Putri Hijau Kesdam I / BB is based on previous research which aims to identify and examine the Description of Work Stress in Nurses at the Putri Hijau Level II Hospital in Medan in 2018. This study uses a descriptive approach. The population in this study were all nurses who worked at the Putri Hijau Level II Hospital Medan totaling 101 people and the sample of this study was 101 people. The results of this study indicate that as many as 84 people (83.2%) of respondents experienced mild stress, as many as 16 people (15.8%) experienced moderate stress, and as many as 1 person experienced severe stress from a physiological aspect, as many as 88 people (87.1 %) experienced mild stress, while as many as 13 people (12.9%) experienced moderate stress from a psychological aspect, and as many as 88 people (87.1%) experienced mild stress, while as many as 13 people (12.9%) experienced moderate stress from the aspect of behavior (Fadilah et al., 2010). Thus, it can be seen that the stress experienced by nurses varies widely because stress is a perceptual process that is individual in nature. Nurses who experience stress will experience physical, emotional, and mental exhaustion in their work environment.

If this stressful state is allowed, it can cause disturbance to nurses. Disturbances that occur can be in the form of disturbances from the nurse in the form of emotions, not cooperative in communicating, and some even experience pain so they don't come to work (Nesse, 1998).. Disturbances can also occur from the side of hospital management, such as the patient feels that the nurse is unfriendly, difficult to communicate with, poor performance, often late and not available. This will have an impact on service quality. Nurses are the foremost health workers in providing health services which should reflect friendly service with a smile, greeting and touch. (Goodman & Clemow, 2010; Parshall, 2003).

Various forms of stress management can be done such as relaxation, physical exercise, stress management programs through training and health programs (Eriksen et al., 2002). Based on research stress coping training and physical exercise are quite effective in reducing stress.

This is in line with previous research on Stress Management Training in Mental Hospitals, it was found that the provision of stress management training was quite effective in reducing stress on nurses. In addition, other techniques that are quite effective in reducing stress levels are through relaxation therapy.

Therefore, proper handling and management of work stress is needed. Work stress management is a program to help someone deal with stress. Through stress management, a person is equipped with knowledge and skills to be more aware of the factors that cause stress and develop effective stress management methods through providing information and relaxation techniques. Management interventions are designed to improve a person's ability to manage the sources of their stress. Stress management techniques can be practiced and applied in life. Therefore, this study will provide stress management training treatment and physical activity training which is expected to reduce stress for nurses at the Putri Hijau Level II Hospital.

Methods

The research design used a Quasi experimental approach, namely the pretest-posttest group design (5). In this design, there are two groups, namely a group given stress management training treatment and a group given physical activity treatment in the form of progressive relaxation techniques. The population in this study were all inpatient nurses at the Putri Hijau Level II Hospital in Medan, totaling 152 people. The sample in the study was obtained by purposive sampling technique, namely nurses who have a moderate minimum stress level. Based on the results of the initial measurement, there were 42 nurses who had a moderate

level of minimal stress. Measurement of stress levels using a questionnaire adopted from the Perceived Stress Scale (PSS) which consists of 10 items. The stress management scale was developed by researchers from the Lazarus theory and the measurement of relaxation techniques was carried out with a checklist of relaxation techniques that were directly assessed by the expert when physical activity was carried out. Data analysis using Wilcoxon test.

Intervention steps includes Pre test (O1): conducted 1 week before the training to see the results of the spread of the work stress scale. Treatment (X) The treatment given is stress management training for nurses. This training is held for 6 hours (1 day), groups are given lecture methods, discussions, role play and practice. Training on the implementation of physical activities to reduce stress for 1 day, the group will be given direct practice in the form of implementing simple relaxation and simple breathing techniques.

Follow up was done once, namely 1 week after training. Post-Test (O2): the Post-Test stage is carried out for 2x, namely after the training is given a questionnaire regarding understanding of stress management and the ability of physical activity and 1 week after training a stress questionnaire (PSS) is given. Post-test nurses' job stress scale was seen after 1 week after training, and during that time a follow-up was carried out for training.

The stress management training consists of 6 hours of meetings by dividing the training activities into several sessions, namely; (1) Opening and training contracts; (2) Recognizing stress and its symptoms; (3) stress coping; (4) How to control stress in the workplace; (5) Dealing to stress. Meanwhile, physical activity is a progressive relaxation activity which includes breathing techniques and light muscle stretching movements.

Result and Discussion

The characteristics of nurses at the Level II Green Princess Hospital Medan indicated that the age of nurses who were respondents in the young adult stage were 17 respondents (40.5%) and respondents who were in the middle adult stage were 25 respondents (59.5%). The majority of respondents were female, namely 36 people (85.7) and only 6 male respondents (14.3%). And seen from the length of time the nurses worked, most of the respondents had a working period of around 5-10 years, namely 20 nurses (50%), while those who worked for 0-5 years were 11 people (26.2%) and nurses who had worked more than 10 years as many as 10 people (23.8%).

Table 1. Characteristics of Nurses at Putri Hijau Level II Hospital Medan

No	Characteristics	F	%
	Age		
1	Early Adult (Years)	17	40.5
2	Middle Adult (Years)	25	59.5
	Total		100
	Sex		
1	Male	6	14.3
2	Female	36	85.7
	Total	42	100
	Years of Service		
1	0-5 years	11	26.2
2	5-10 years	21	50.0
3	>10 years	10	23.8

	Total	42	100
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The Effect of Stress Management Training on the Reduction of Stress Levels at the Level II Green Princess Hospital Medan

From the results of stress management training, it was found that there was a decrease in the degree of stress where previously there were 21 nurses with moderate stress levels decreasing to 14 nurses (67%) and as many as 7 nurses (33%) had decreased to a mild stress level. Based on the bivariate test, the asymp.sig value was obtained. (2 tailed) has a value of 0.001 <0.05, it can be concluded that the hypothesis is accepted. This means that there is an effect of stress management training on reducing stress levels of nurses at the Level II Green Princess Hospital Medan.

Stress management is a program for controlling or controlling stress aimed at identifying the causes of stress and knowing techniques for managing stress, so that people are better at mastering stress in life than being crushed by stress itself.

From this activity, before the stress management training was carried out, it was found that most of the nurses, namely 13 (61.9%) of the 21 nurses, were less skilled in stress management methods. Strategies that are usually carried out by nurses at the Level II Green Princess Hospital when they are facing stressful problems are that for the first time they usually feel angry, lazy to do assignments, find friends to "vent" whose goals are to relieve their feelings, then try to surrender. This strategy is called an emotional strategy and does not solve the problem at hand. This strategy is a strategy that focuses on the emotions that arise as a result of the problems at hand, so that they become angry, anxious, or grieved. According to experts Wade and Tavis, at this stage, people often need to talk about the incident continuously to other people such as friends, family or coworkers in order to accept, understand, and decide what to do after the incident is over.

After the training is carried out, it is hoped that the participants, in this case the nurse, can carry out stress management strategies that are centered on problems, namely problem solving strategies. This strategy can be done by formulating existing problems, making alternative solutions by considering the positive and negative aspects of the solutions that will be taken and finally making a decision to act.

However, there are nurses who have not changed their stress skills and understanding after being given stress management training. This is because it is influenced by the coping ability of each individual, one with another. There is a possibility that respondents have good coping skills and adapt quickly, but some are inadequate. In addition, the stressful experience varies from one person to another. This is probably the reason why one subject has a different stress reduction. It is also found from previous research that differences in work tenure and age determine a nurse's coping ability. New nurses are relatively less precise in dealing with stress than nurses who have worked for a long time.

After getting stress management there were some respondents who did not experience changes in stress levels even though they had been given stress management techniques 3 times a week. This is because it is included in the level of stress, which is related to the tension in everyday life and causes a person to be alert and increase the perception area.

These results indicate that the decrease in the stress level of each individual is different even though the stimulus that causes an increase in stress levels and the treatment given is the same. This is influenced by a state of stress lived individually. So, even though the situations or stressors faced are the same, the appreciation of the degree of stress differs from one individual to another. Cognitive assessment will give weight to the stress experienced, whether it will be judged as something threatening or not. This assessment then also influences individuals to try to overcome it.

In stress, known as stress coping, stress coping itself is a person's attempt to overcome the problem which is considered a stressor (source of stress) to reduce or eliminate the feeling of stress he feels. Self-management can include self care (sports, formal relaxation, informal relaxation, medication, rest, health care, eating and drinking), cognitive (distracting thoughts and praying), avoidance (distraction and keeping busy), connectedness (communication with friends or family. , socializing with the community, raising animals, and socializing), pleasurable activities (doing activities outside or inside the house, using the media such as TV, computers and cell phones), and achievement (doing homework, and making a priority list). The things done by respondents in this study are in accordance with previous research, respondents in this study stated the methods used to deal with stressful conditions, namely traveling, playing with friends, watching TV, listening to music, worshipping, eating, and sleeping, to relieve conditions. perceived stress. And should be added by finding a solution to the problem at hand

The Effect of Physical Activity Implementation on Stress Level Decrease in Putri Hijau Level II Hospital Medan City

The results showed that there was a decrease in stress levels in one measurement after physical activity, which experienced mild stress to 8 respondents (38%) and 13 respondents (62%) experiencing moderate stress. The results of the physical activity of respondents who were skilled in physical activity were 6 people (28.6%), 14 respondents (61.9%) who were sufficiently capable of carrying out physical activity (61.9%) and nurses who were still less capable were only 2 people (9 , 5%).

Based on the results of the bivariate test, it is known that the asymp.sig. (2 tailed) has a value of 0.005 <0.05, it can be concluded that the hypothesis is accepted. This means that there is an effect of physical activity on reducing the stress level of nurses at the Level II Green Princess Hospital Medan

The results of this study support the statements of previous studies which state that breathing techniques and exercise are methods of reducing stress response symptoms. Research conducted by Fendina et al., (2018) states that the results show that there are significant differences between the experimental group and the control group. It was also found that the measure of the effect of breathing exercises on stress decreased by 64%. Thus it can be stated that breathing exercises are effective in reducing stress on peer support.

progressive and autogenic muscle relaxation is effective in reducing adolescent stress at SMK N 1 Depok. Compared the effect of progressive relaxation with meditation using breathing on

stress levels in hypertensive patients. The results obtained show that meditation using breathing is more effective in reducing stress levels than progressive relaxation.

The quickest way to deal with the physiological stress of stress is to calm yourself down and reduce your body's physical stimulation through meditation or relaxation. According to Scheufele, progressive relaxation is learning to alternately compress and relax muscles, as well as lowering blood pressure and stress hormones (51; 57).

The results of this study indicate that respondents who received progressive muscle relaxation exercises 3 times for 30 minutes experienced a decrease in stress scores and students stated that they felt relaxed and comfortable after progressive muscle relaxation training activities. Progressive muscle relaxation therapy that is given will inhibit the blocked feedback pathway between the muscles and the mind by activating the work of the parasympathetic nervous system and manipulating the hypothalamus to focus positive thoughts and attitudes, so that stress stimulation will be reduced and will provide a feeling of relaxation.

In this study, there are several physical activity exercises carried out with the aim of reducing stress, the first is physical exercise. This exercise is a routine activity that has been carried out by the management of the Putri Hijau Level II hospital, which aims to make employees physically and physically healthier. The second is relaxation exercises which can later be done independently. This relaxation training is progressive muscle relaxation which is the simplest and easiest method of relaxation to learn by tensing and relaxing the muscles of the body.

Progressive muscle relaxation can be performed in a comfortable position in a chair. Progressive muscle relaxation is carried out over a period of 15-30 minutes, with a frequency of 2 times a day and within one week to see a reduction in stress levels. Progressive muscle relaxation exercises can reduce psycho-logical effects such as stress and mental tension. Progressive muscle relaxation directs attention to differentiating the feelings experienced when a muscle group is relaxed and compared with a muscle in a tense state. This relaxation technique is a movement that tense and relaxes muscles in a part of the body that can provide a relaxed and comfortable feeling which in turn can help relieve feelings of anxiety and stress.

In this activity, progressive muscle relaxation therapy is carried out, namely 3 sessions directly in one meeting. In session one, identifying the muscle tension you feel, followed by session two, namely the implementation of muscle relaxation with 13 movements and the third session, namely evaluating the results of therapy. The movements are carried out by tightening and relaxing the muscles in one part of the body at a time. This toning and relaxing motion is performed consecutively to distinguish the feeling experienced when a muscle group is relaxed and compared to when the muscles are tense.

This is in accordance with that progressive muscle relaxation is part of relaxation therapy which consists of 3 sessions. This therapy is used as a coping skill that teaches when and how to exercise relaxation and comfort under conditions that can cause anxiety. This therapy is performed by tightening and relaxing the muscles in one part of the body at a time to provide a feeling of physical relaxation.

In this activity the respondents were asked to demonstrate the movements exemplified by the facilitator. After that the facilitator asks for the movement to be done alone and feels relaxed after the movement. After that, to ensure that the movements were done correctly, the facilitator asks to do it independently and the facilitator immediately assesses the accuracy of the movements. From the results of physical activity, it shows that nurses' skills have increased in performing these movements. Previously, it was considered that they could not do it but after the training some nurses were able to do it. This ability shows a decrease in the stress level of the nurse who is the respondent.

Conclusion

Stress management training activities and physical activities are effective in reducing stress for nurses. Thus, if the nurse feels work stress, the nurse can perform simple relaxation techniques at work or manage stress through positive activity and focus on problem solving.

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