



# A Study to Assess the Efficacy of Stress Soothing Sustenance Education on Knowledge and Stress Eating Attitude Among Night Shift Working Nurses

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**Abstract:** To assess the effectiveness of Stress Soothing Sustenance Education on knowledge and attitude on stress eating among night shift working nurses at selected hospitals in Dindigal district. Methodology: Quantitative approach, A quasi experimental design was adopted to assess the effectiveness of stress soothing sustenance education on knowledge and stress eating attitude among night working nurses (100 samples in selected hospitals in Dindigal district. Purposive sampling technique was utilized to choose the samples. Stress Soothing Sustenance Education was administered, and the level of knowledge and stress eating attitude was assessed by using a self structured questionnaire and modified Salzburg stress eating attitude scale and contrasted with the pre test and post test levels of knowledge and stress eating attitude among night working nurses. Results: The Research findings revealed that the post test mean knowledge score of night shift nurses was 7.59 and the post test mean stress eating attitude score was 31.22. The calculated paired 't' value (55.458 and 22.819) for knowledge and stress eating attitude shows that there was a high statistical differences at  $p < 0.001$ . Conclusion: The results revealed that the stress soothing sustenance education was an effective intervention tool in enhancing the knowledge and stress eating attitude regarding stress reducing dietary practices among night shift nurses.

**Keywords:** Knowledge and stress eating attitude, Stress soothing sustenance.

## 1. INTRODUCTION :

Stress is defined as a state of mental or physical strain in relation to internal or external stimuli, a common emotion that may be taken for the granted. The term 'Stress' refers to processes involving perception, appraisal and response to noxious events or stimuli

Professional nurses focus on providing of their patients. The personal health of the nurses however is often an overnight in this demanding career. Negative health effects and poor health practices seem to more prevalent with those who regularly work the night shift

Night time shift nurses, whose invaluable contributions to the properly being of suffers and the fulfillment of nursing teams. It is comprehensible that the work of night shift nurses goes unrecognized, because they may be being concerned for patients at the same time as the rest of the sector sleeps

Dietary practices is defined as an observable actions or behaviour of food habits, variety of foods, drinks and Nutrients in diets and the frequency with which night shift working nurses are habitually consuming

### 1.1 Objectives:

1. To assess and compare the pretest and post test level of knowledge and attitude regarding stress reducing dietary practices among night shift nurses.



2. To assess the effectiveness of Stress Soothing Sustenance Education on knowledge and stress eating attitude among night shift nurses working at selected Hospital in Dindigal district
3. To correlate the mean differed level of stress eating attitude score among night shift nurses working at selected Hospital in Dindigal district

## 1.2 Statement of the problem:

A Quasi experimental study to Assess the effectiveness on stress soothing sustenance education on knowledge and stress eating attitude among night shift working nurses at selected hospitals in Dindigul district.

## 1.3 Hypothesis:

- ❖ There is no significant difference between pre test and post test level of knowledge score and stress eating attitude score among night shift nurses at selected Hospital in Dindigul district at  $P < 0.05$  level
- ❖ There is no significant correlation in the mean differed level of knowledge score with the mean differed level of stress eating attitude score among night shift working nurses at selected Hospital in Dindigul district at  $P < 0.05$  level.

## 2. Methodology:

A Quasi experimental Research Design was adopted in order to assess the impact of stress on dietary practices and the effectiveness of stress soothing sustenance education on knowledge and stress eating attitude among night shift nurses at selected Hospital in Dindigul district. The independent variable of this study was stress soothing sustenance education. The dependent variables were knowledge and stress eating attitude. The study was conducted in selected hospital in Dindigul district. The study samples included where night shift working nurses at selected hospitals in Dindigul district, and the study sample size consists of 100 night shift working nurses selected by purposive sampling technique. The tool consists of two parts ie, data collection tool and intervention tool. The data collection tool used in this study was a self structured knowledge questionnaire and modified Salzburg stress eating attitude scale. After a brief introduction about self and study, collected the filled demographic variables, life style and behaviour pattern, dietary pattern assessed nutritional status and administered pre-test assessment tools. The intervention tool (Stress Soothing Sustenance Education) was administered which lasted for 10 minutes, demonstration of body mass index [BMI] calculation which took about 10 minutes.

**Table1. Assessment of knowledge**

Content	No. of Questions
Concept of stress on food behavioral pattern	10

**Table 2. Scoring and interpretation of knowledge**

Scores	Level of knowledge
$\leq 50\%$	Inadequate knowledge
51 – 74 %	Moderately adequate knowledge
75 – 100 %	Adequate knowledge

**Table 3. Assessment of the modified Salzburg stress eating attitude scale**

Statements	I eat much than usual	I eat less than eat	I eat more than eat	I eat much more than usual
Score	1	2	3	4

**Table 4. Scoring and interpretation of stress eating attitude (Modified Salzburg stress eating attitude scale)**

Scores	Level of stress eating attitude
$\leq 50\%$	Unfavorable stress eating attitude
51 – 74 %	Moderately Unfavorable stress eating attitude
75 – 100 %	Favorable stress eating attitude



Part B – The Interventional tool ( Stress Soothing Sustenance Education ) was administered which included multimedia video teaching towards the concept of stress lightning dietary practices covered the meaning of stress, how we can overcome the stress, physical signs and symptoms, how to lighten the stress by using dietary modification, the link between junk foods and stress which lasted for 20 minutes.

After the intervention a post test assessment on the level of knowledge and eating attitude among night shift nurses on the 7th day was done. The data collected was analyzed and compared to identify the effectiveness of Stress lightening dietary education among night shift working nurses.

The findings proved that the Stress Soothing Sustenance Education effectively improved the knowledge and stress eating attitude of night shift working nurses towards the concept of stress lighting dietary practices with the improvement in the mean level of knowledge and stress eating attitude among night shift working nurses.

## 2.1 Ethical consideration:

Ethical approval was obtained from the ethical clearance board, the head of the Institution and the Dean and Vice Principal of Palani Government Hospital in dindigul district, to conduct the study in the hospitals. The researcher has followed fundamental ethical principles.

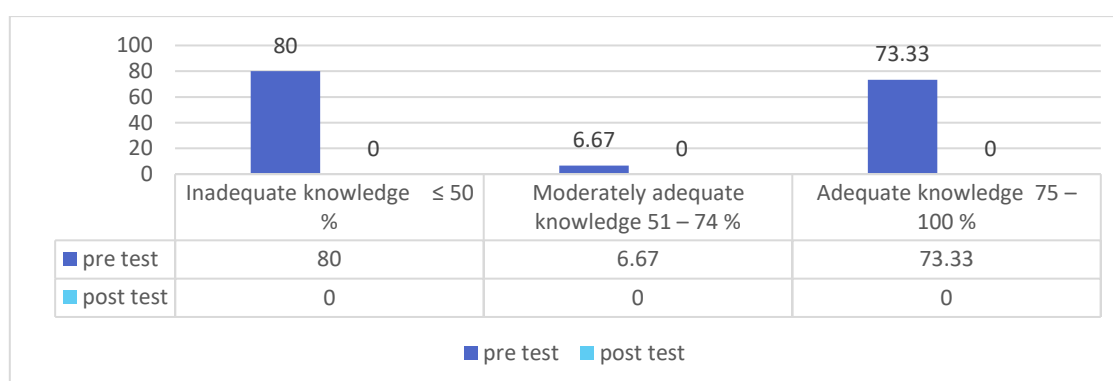
## 2.2 Statistical analysis

Descriptive statistical were used to describe demographic variables. The paired ‘t’ test was used to compare the pretest and posted levels of knowledge and stress eating attitude. Coefficient correlation was used to correlate knowledge and stress eating attitude. ANOVA was used to find out the association of knowledge and stress eating attitude with selected demographic variables and Lifestyle behaviors, dietary pattern among night shift working nurses.

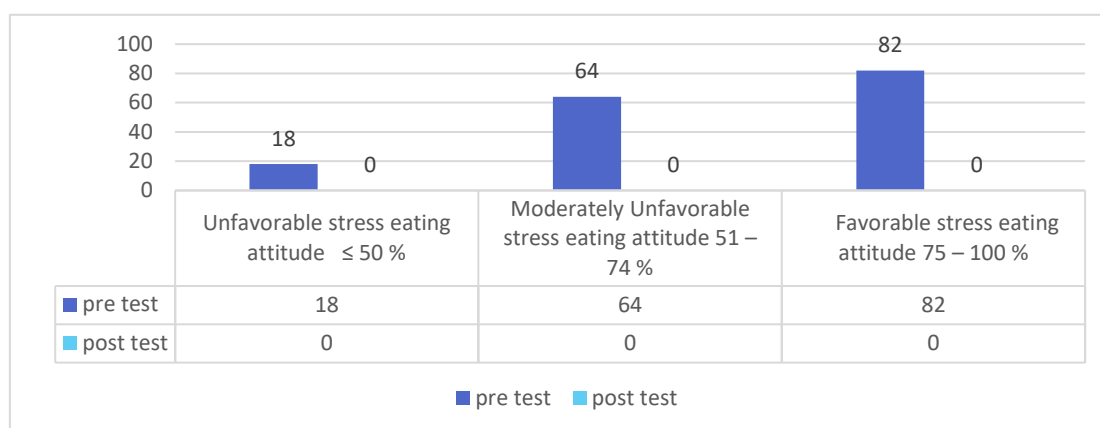
## 3. Results

Most of the night shift nurses 55(54.4%), where in the age group of 25 to 35 yrs with regard to gentle of the night shift nurses 92(92.5%) of them where women, with regard to marital status of the night shift nurses 75% of them were married, 37(37.5%) participants had bachelor’s degree education and 35 (35%) of them had work experience of 1-3 years, and 85% belongs to the Hindu religion, 72 (72.5%) were living in a rural area, 80 (67.5%) are staff nurses and 52 (51.6%) participants where fixed night shift pattern. 36 (36.7%) had done 11 - 20 weeks in the past one year, 43 (43.3%) living in a joint family, 78(78.3%) of them have more than 3 members in their family, 42 (42.5%) had a monthly income of above Rs 25000, with regards to health - related problems. 85 (85.8%) of them don't have any health-related problems. 42 (42.5%) night shift nurses working more than 10 hours, 53 ( 53.3%) taking 1 - 2 hours rest per day, 84 (84.2%) would not have any leisure time activity, 49 (49.5%) had sufficient amount of sleep, and 53 ( 53.3%) would have a sleep of 4 - 5 hours per day. 85 (85%) were non vegetarian and 55 (55.6%) participants would consume meals at regular intervals, 55.8% of them skip meals rarely, 61 (61.7%) participants would skip meals at dinner and 38 (38.3%) would skip meals at breakfast, 80(80.8%) of them have a good appetite, 88(88.8%) participants have not follow any diet restriction. 55 (55.0%) of them have the habit of eating snacks at night; 53 (53.3%) participants would consume biscuits, bread, and crackers at night and 34 ( 34.2%)participants drinking coffee between meals.

Median, mean, and standard deviation values of weight were 46.0, 51.6, and 8.68; median, mean, and standard deviation values of height were 157.19, 157.6 and 9.85. Regarding the BMI range of night shift nurses, 48 (48.3%) of them were normal body weight, 25 (25.0%) of them were obese, 17 (17.5%) of them were normal weight and 9 (9.2%) of them were underweight.



**Figure: 1 Assessment and comparison of pretest and post test level of knowledge regarding stress lightning dietary practices among night shift working nurses.**



**Figure: 2**  
Assessment and comparison of pretest and post test level of stress eating attitude regarding stress lightening dietary practices among night shift working nurses.

**Table 5 : Effectiveness of Stress Soothing Sustenance Education on knowledge and stress eating attitude among night shift working nurses N=100**

Variable	Test	Mean	S.D	Mean Difference	Paired 't' Test & p-value
knowledge	Pre test	2.38	0.80	6.01	t = 55.33
	Post test	8.51	0.75		
Stress Eating attitude	Pre test	22.63	2.95	9.41	t = 22.75
	Post test	32.12	3.41		

Figure 1,2 and table 5 depict the assessment and comparison of pre test and post test level of knowledge and stress eating attitude regarding stress lightening dietary practices among night shift working nurses with paired 't' test and inferred high level significant differences pertaining to knowledge and stress eating attitude at  $p < 0.001$ . Thus the stress soothing sustenance education regarding stress lightening dietary practices was proved highly effective in improving the knowledge and stress eating attitude among night shift working nurses.

Test	Mean	S.D	Karl person's Correlation 't' value	Inference
knowledge	6.06	1.17	r = 0.301 p=0.001	Moderate positive correlation between knowledge and stress eating attitude score
Eating attitude	9.36	4.14		

**Table 6 :** Depicts that there is a moderate positive correlation between knowledge and stress eating attitude score among night shift working nurses in selected hospitals.

#### 4. Discussion

The correlation of the mean differed knowledge and stress eating attitude score was done using Karl Pearson's coefficient correlation and revealed that there was a moderately positive correlation between the knowledge and stress eating attitude scores of night shift working nurses. Thus, the stress soothing sustenance education has depicted that the improvement in the knowledge affected the enhancement of stress eating attitude regarding stress lightening dietary practices.

The post test analysis on the level of knowledge of night shift working nurses revealed that the mean difference in the level of knowledge was 6.06 with a value of 56.35 and a P value of 0.0001, and the mean difference in stress eating attitude was 9.45 with a paired t value of 23.8 and a P value 0.0001, the level of knowledge and eating attitude score in the post test were found to be statistically highly significant. This value indicates the effectiveness of Stress Soothing Sustenance Education on the level of knowledge and eating attitude towards the concept of stress lightening dietary education.



### **5. Limitations:**

The investigator has found little complicity in setting permission. The present study was conducted only in selected hospitals at Dindigul district. Hence the findings may not apply to night shift working nurses of other district. The investigator found difficulty in collecting data from the night shift working nurses in morning as the urge to go home after the working hours.

### **6. Conclusion:**

The study aim at assessing the effectiveness of stress soothing sustenance education on knowledge and eating attitude among night shift nurses. The findings of the study revealed that the mean improvement in knowledge and stress - eating attitude scores within night shift working nurses.

Thus the study findings provide enriched evidence stress soothing sustenance education was an effective intervention tool in enhancing the knowledge and stress eating attitude regarding stress lightening dietary practices among night shift nurses.

### **7. Author Contribution Statement**

Conceived and designed this study let the over all research proceed and provided critical revision to the manuscript, responsible for methodology and witting of the result and discussion, selection of the study conducted literature review, contributed to the survey design, Dean cum Principal Dr. Esther Rakel assisted in final editing and ensured that relevant ethical consideration were addressed through out this study.

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