"A QUASI EXPERIMENTAL STUDY TO EVALUATE THE EFFECTIVENESS OF LAUGHTER THERAPY ON LEVEL OF STRESS AMONG STAFF NURSES WORKING IN ONCOLOGY UNIT AT SELECTED HOSPITALS, RAJASTHAN"

SURENDRA SAINI

Ph.D Scholar, JJT University, Jhunjhunu, Rajasthan

surendra.bsaini@gmail.com

ABSTRACT

Stress is an unavoidable condition of life. Although we can't eliminate it we can use our understanding of stress to control its effect and thereby enjoy more productive and satisfying life both at work and elsewhere. Some of the behavioral consequences for individuals experiencing chronic stress are sleep disorders, change in the eating habits, increased smoking, more alcohol consumption and nervous mannerism such as rapid speech, fighting and rudeness towards others. The most extreme cases of stress result in workplace violence. Where a person end up physically attacking or even killing co workers Performance decline is perhaps the most studied behavioral consequence of stress. However optimal degree of stress is essential to obtain the proper performance. We all know that trying to eliminate stressful situations in our daily lives is wishful thinking. Therefore the real solution lies in learning how to cope with stress on a daily basis. One must voluntarily activate his /her Para sympathetic nervous system at the end of each day to drain off the stress and tension which accumulated during the day. When you are under stress your emotion is too high and it drains the energy. Energy exercises are necessary to boost up energy. The concept of laughter has been

conceptualized from ancient times. One of the simple &easiest forms of energy exercise which is gifted from god for human being is laughter. Laughter reduces stress &tension thereby enhancing well being.

1. INTRODUCTION

Stress is a universal experience. Stress is a part of being alive. Stress is a person environment interaction. Right from the time of birth till the last breath drawn; an individual is invariably exposed to various stressful situations. Individual requirement for stress reduction vary widely. Nurses are in a unique position to assist individuals in identifying adaptive coping strategies. Stress has reached epidemic proportion in today's society and efforts aimed at its control are essential. The term stress was coined by Hans Selye in 1993.He defined stress as the nonspecific response placed upon the body that is common result of any demand.

Elakuvana Baskararaj (2011) stated that the word stress is used in two ways; the first refers to the subjective feeling of tension experienced in the physiological, mental, or spiritual realms as a response to environmental events that are perceived as threatening. The second use of the word commonly refers to those environmental events that result in internal feeling of stress. Stress is a term that is used to define body's physiological and or psychological reactions, circumstances that require behavioural adjustment. A stressful event or situation appears as a problem only when perceived as a threat by the individual. Therefore the individuals stress perception is more important than the stress itself.

Michie(2002)stated that the stress is very close to occur daily and its believed to affect human health and well being. Over the decades, scholars have been defining stress in many different ways, but the general accepted definition is a situation where the resource of an individual are insufficient to cope with the external demands or pressure and this situation would then affect humans physiologically as well as psychologically. Almost every individual undergoes any form of stress either in home or at workplace which creates an imbalance in the mental functioning.

Mohajan(2012)stated that stress would also occur at workplace renowned as occupational stress. Occupational stress is defined as hazardous physical and emotional response that occurs in consequence with situation where the demand of job exceeds workers capabilities. Occupational stress in industrialization would have grown at alarming stage since 40 years ago. Stress at work place, if in lower stage, would stimulate the working motivation among workers and as a result, the performance would increase. However a prolonged high level of stress could cause a workers mind and body to react in different way which would affect productivity.

Norgudist(2014) stated that stress factors at work place or better known as occupational stressors are

important to be controlled in order to avoid negative impacts toward organizational business activities.

2. NEED FOR THE STUDY

Occupational stress is a recognized problem among health care workers. Nursing has been identified as an occupation that has high level of stress. It was found that job stress brought about hazardous impact not only on nurses health but also in their abilities to cope with job demands. Understanding the meaning of the cancer experience of each individual patient is essential for the nurse to better assist survivors. Some patients may wish to return their normal lives as soon as possible. Such behaviour could potentially result in patients not attending schedule follow up appointments, other survivor may cancer advocate or few may act as active members of cancer support group. Still others may become allow their live to resolve around the cancer and May even become resistant to giving up the illness role.

The new survey says nurses experience extreme level of stress and lack of sleep, due to 12 hours shift, high shift timings, poor diets, and heavy work load are some of the key contributors to the high stress levels. The national survey result indicated that the nurses are experiencing poor sleep patterns and have poor nutritional habits. For instance 64% of survey respondents said that they rarely get seven to eight hours sleeps a night, and only 17% able to achieve sleep, 77% don't regularly eat properly, which 31% rarely eat at lead two balanced meals per days. Balancing personal and professional lives also seemed to be issues for respondent with 82% saying is difficult to strike a work left balance. Stressful events, or crisis, are common part of life .They may be sociological or biological in nature, and there is often little that a person can do to prevent them. As the largest group of health care providers nurses are in an excellent position to help to promote healthy out come for people in time of crisis. Most occupational health and safety researchers agreed that psychological stressor was heavily exposed among nurses during their work routine.

3. OBJECTIVE

1.   To assess the pretest and post test level of stress among staff nurses working in oncology unit in experimental and control group.

2.   To evaluate the effectiveness of laughter therapy on level of stress among staff nurses working in oncology unit in experimental group.

3.   To find out the association between the post test level of stress among staff nurses working in oncology unit with selected demographic variable in experimental group.

4. ASSUMPTIONS

1- Staff nurse working in oncology unit will have certain level of stress.

2- Laughter therapy will reduce the stress.

3- Laughter therapy will improve the coping of individual.

4- Laughter therapy is the natural stress reduction method.

5. HYPOTHESIS

H1: There will be a significant difference between the pre-test and post- test level of stress among staff nurses working in oncology unit in experimental group

H2: There will be a significant association between the post-test levels of stress among staff nurses working in oncology unit with the selected demographic variables in experimental group

6. REVIEW OF LITERETURE

Olga Riklikiene.et al.,(2015)conducted a survey to investigate work related stress, job satisfaction, and intent to leave : a survey among nurses in primary health care centers in Lithuanian. General practice and community care nurses from 4 primary healthcare centers of Kaunas city was participated in the survey .Extended nursing stress scale was administered to the samples the result revealed that most frequent stressful situations for nurses were related to patients death and dying, as well as to situations of patient care and communication with their relatives.

Divin Kumar KJ (2014) conducted a survey by making questionnaires containing perceived stress scale Copenhagen burnout inventory(CBI),and general health questionnaire(GHQ-28) to all 603 nurses posted in 33 government hospitals of central India. The result revealed that 63 nurses (21%)had psychological distress .144 nurses (48.32%) had perceived stress scale about 17.nurses age and service well found to be negatively collected which stressors and burnout .proportion of the nurses with a high degree of burnout were 27.2%,9.4% respectively for personal ,work and client related burnout categories .More nurses employed in ICU ,maternity ward, general family wards, surgical ward ,and medical ward had will related burnout comparing with other wards.

K.Srinivasan (2014) conducted a descriptive study to investigate job stress among staff nurses in Villupuram District,Tamilnadu to describe the job stress prevailing among staff nurses employed. The sample consist of 50 staff nurse selected by random sampling technique .The data collected was systemically processed and analyzed .the study reveals that the majority(86%) of the respondents were female and were married Majority(70%) of them was from the backward community and less than half(44%)of the respondents were

from a rural back ground. The major finding of the study revealed that nearly half of the respondents experience high level of stress in the dimensions of individual job and organizational stressors. However, only 36% of the respondents experience high level of stress in the dimension of group stressors   .Finally, 46% of the respondent experience overall high levels of job stress.

Barry A .Farber (1987)has conducted a descriptive study to assess the sources and extent of satisfaction, stress and burnout in suburban teachers 365samples were selected .Researcher used   65 item liker   type of teachers attitude survey(TAS).The research reveals that   satisfaction consisted of experiences that make teachers feel sensitive to and involved with students as well as colleagues; stresses were related to excessive paperwork, unsuccessful administrative meeting ,and the lack of advancement opportunities in teaching. The study revealed that the majority of teachers surveyed had not lessened their involvement in their work and were still committed to teaching, 20- 25% appeared vulnerable to burnout, and 10-15% were already burnout. Most at risk were those teaching at a junior high school level. The researcher concluded that issues that were addressed with respect to burn out included teacher administrator relationship and teachers perceived lack of a psychological sense of community.

Kama AzidaKamarulzaman et.al..,(2017) has conducted a cross sectional study to identify the level of perceived stress and also   investigate the relationship between occupational stressors and perceived stress level among182 nurses in the cancer hospital, Malaysia. The data were collected by using self-administered questionnaire which consist of nursing stress scale and perceived stress scale .The result revealed that majority of the nurses perceived high level of stress and six variables namely workload, death and dying, inadequate preparation, lack of support ,conflict with physician and conflict with other nurse have relationship with occupational stress. The finding of the study concluded that lack of other staff support has the strongest influence on stress among nurses in cancer hospital, followed by conflict with physician. It's also recommended that strong and positive relationship between nurse's supervisors and physician can decrease stress level among nurses.

WoonhwaKo(2016) conducted a descriptive, cross sectional study to identify stress level and stressful factors oncology nurses working in oncology outpatient unit and to explore coping behaviours of the nurses. The sample consists of 40 registered nurse and licensed practical nurses. The data were collected by used nursing stress scale, and a demographic questionnaire. The result that revealed more than half of respondents reported being moderately stressed .the study concluded that the outpatient oncology nurses experienced a moderate degree of in the work related stress. Hence nurses must be able to take care themselves to maintain their health conditions and to reduce or prevent stress at work. Outpatient oncology nurses should be nurtured and supported through tailored interventions at multiple levels for finding effective coping strategies and developing self-care competencies nurse can control their stress become more satisfied, and improve life quality. Therefore, the quality of patient care and the retention of nursing staff likely will improve.

NevinOnan et.al.(2015)has conducted a descriptive study To find out the relationship between perceived stress, communication skills and psychological symptom among oncology nurse in oncology unit. The sample consists of 102 nurses working in oncology unit selected by convenience sampling technique. The data was collected through questionnaire form, perceived stress scale, communication skill assessment scale (CSAS) and brief symptom inventory (BSS).The study reveals that nurses received 16.85 point from PSS,73.34 point from CSAS and lastly 32.68point from BSI .84.3% of the nurses reported experiencing communication problems with angry and agitated patients. There was a negative correlation between PSSandCSAS.A positive correlation was found between PSS and BSI, and all other sub dimensions. The researcher concluded that improving communication skills of oncology nurses and interventions for their perceived stress level may have effects as promoting their own psychological health as well as decreasing communicational difficulties with the patients and their families and thus it may affect the quality of care.

7- CONCEPTUAL FRAME WORK

Conceptual frame work for research study present measurement on which the purpose of the study are based the frame works provide the perspective from which the investigator views the problem. The study was designed to evaluate the effectiveness of Laughter therapy on stress among staff nurses working in oncology unit. The study was based on the concept practicing laughter therapy on stress among staff nurses working in oncology unit. The

investigator adopted the modified Imogene king's goal attainment theory (1971). The theory is based on assumption that the human being is open system who is interacting constantly with their environment. Major concept in this theory of goal attainment is Interaction, Communication, Perception, Transaction, Role, Stress, Growth & Development, Time and Space.

8. METHODOLOGY

This Chapter describes the methodology followed to evaluate the effectiveness of the laughter therapy on stress among staff nurses working in oncology unit. This phase of the study included research approach, design, the setting population, sample size and sampling technique, included research approach, design, the setting population and exclusive criteria for selection variable, development and description of tools, data collection and plan for data analysis.

RESEARCH APPROACH

A Quantitative evaluate research approach was adopted by the researcher to evaluate the effectiveness of Laughter Therapy on stress among staff nurses working in oncology unit.

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RESEARCH DESIGN

Non randomized control group design was adopted for this study.

$$E \quad O_1 \quad X \quad O_2$$

$$C \quad O_1 \quad \text{--------} \ O_2$$

E - Experimental group

C - Control group

O_1 - Assessment of Pre test level of stress among staff nurses working in oncology unit in experimental group and control group.

O_2 - Assessment of Post test level of stress among staff nurses working in oncology unit in experimental group and control group.

X - Administration of Laughter Therapy.

8. ANALYSIS AND INTERPRETESION

DESCRIPTION OF DEMOGRAPHIC VARIABLES OF THE STAFF NURSES WORKING IN ONCOLOGY UNIT IN EXPERIMENTAL AND CONTROL GROUP

Table 1: Frequency and percentage distribution of demographic variables of the staff nurses working in oncology unit in experimental and control group

N = 60 (30 + 30)

S.No	Demographic Variables	Control group (n=30)		Experimental group (n=30)	
		Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)

1.	Age (in years)				
	a. 25 – 30 years	27	90	27	90 b.
	31 – 35 years	3	10	2	6.67 c. 36
	– 40 years	0	0	1	3.33 d.
	Above 41 years	0	0	0	0
2.	Gender				
	a. Male	0	0	0	0 b.
	Female	30	100	30	100
3.	Religion				
	a. Hindu	24	80	27	90 b.
	Christian	1	3.33	3	10 c.
	Muslim	5	16.67	0	0 d.
	Others	0	0	0	0
4	Marital status				
	Married	27	90	22	73.33
	Un married	3	10	8	26.67
	Divorced	0	0	0	0
	Separated	0	0	0	0
5.	Educational Status				
	a. Diploma	18	60	26	86.67
	b. UG	12	40	2	6.67
	c. PG	0	0	2	6.67
6.	Working Hours				
	a. 6 hrs/day	0	0	1	3.33
	b. 8 hrs/day	21	70	13	43.33

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	c. 10 hrs/day	9	30	16	53.33
7.	Year of Experience				
	a. 2 – 3 years	26	86.67	27	90
	b. 4 – 6 years	4	13.33	1	3.33
	c. >6 years	0	0	2	6.67
8.	Monthly Income				
	a. < Rs.10,000	27	90	28	93.33
	b. Rs.10,000 – 15,000	3	10	2	6.67
	c. More than 15,000	0	0	0	0
9.	Type of family				
	Nuclear	21	70	9	30
	Joint	9	30	21	70
10	Family Support				
	a. Adequate	29	96.67	26	86.67
	b. Moderately Adequate	1	3.33	4	13.33
	c. Not Adequate	0	0	0	0

The table 1 reveals that in the experimental group, majority 27(90%) were in the age group of 25 – 30 years, 30(100%) were females, 24(80%) were Hindu, 27(90%) were married, 18(60%) were Diploma, 21(70%) had 8 hrs working hours, 26(86.6%) were 2 – 3 years of experience, 27 (86.6%) had .less than10,000 Rs as their monthly income, 21(70%)were belongs to nuclear family and 29(96.67%) had adequate family support. Whereas in the control group, majority of 27(90%) were in the age group of 25 – 30 years, 30(100%) were females, 27(90%) were Hindu, 22(73.33%) were married, 26(86.6%) were diploma, 16(53.33%) had10 hrs working hours, 27(90%) were 2 – 3 years of experience, 28(93.33%) had< Rs.10,000 monthly income, 21(70%) belong to joint family, and 26(86.6%) had adequate family support.
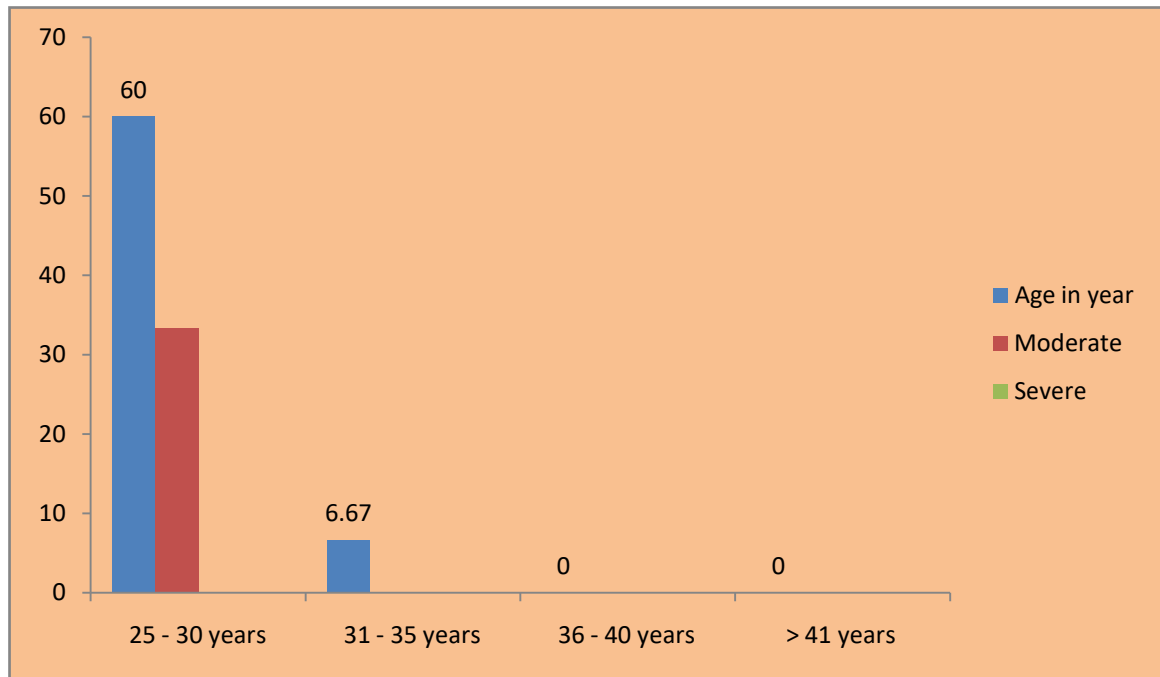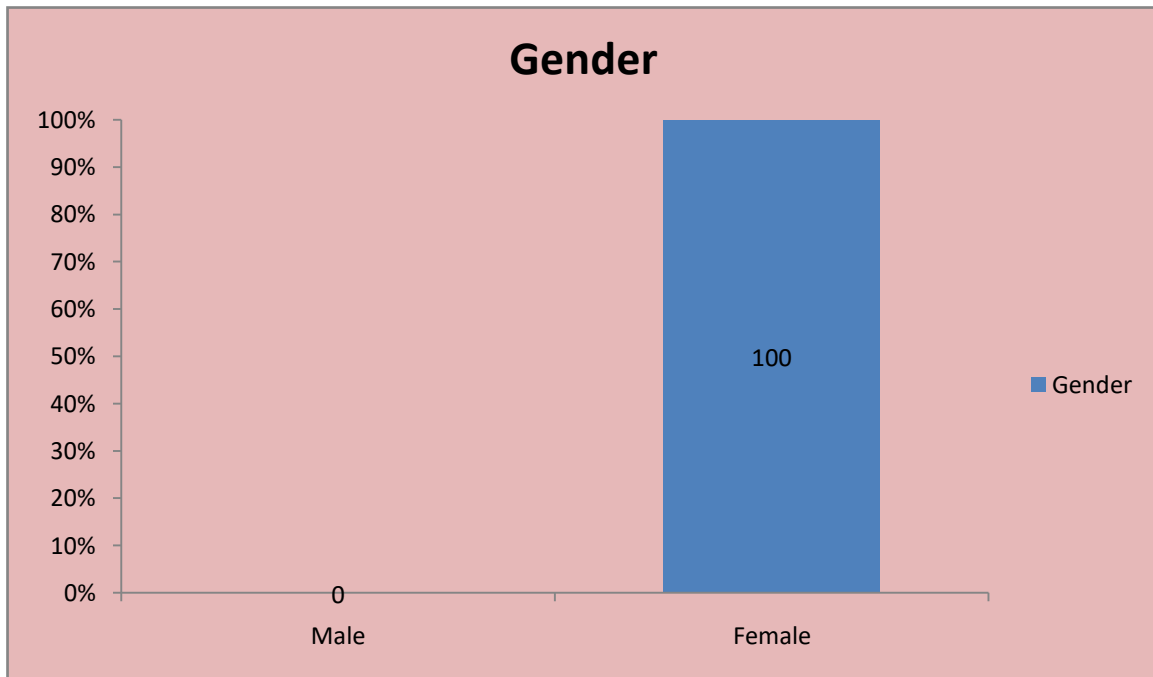
Figure3: Percentage distribution of age in year among staff nurses in the Experimental group
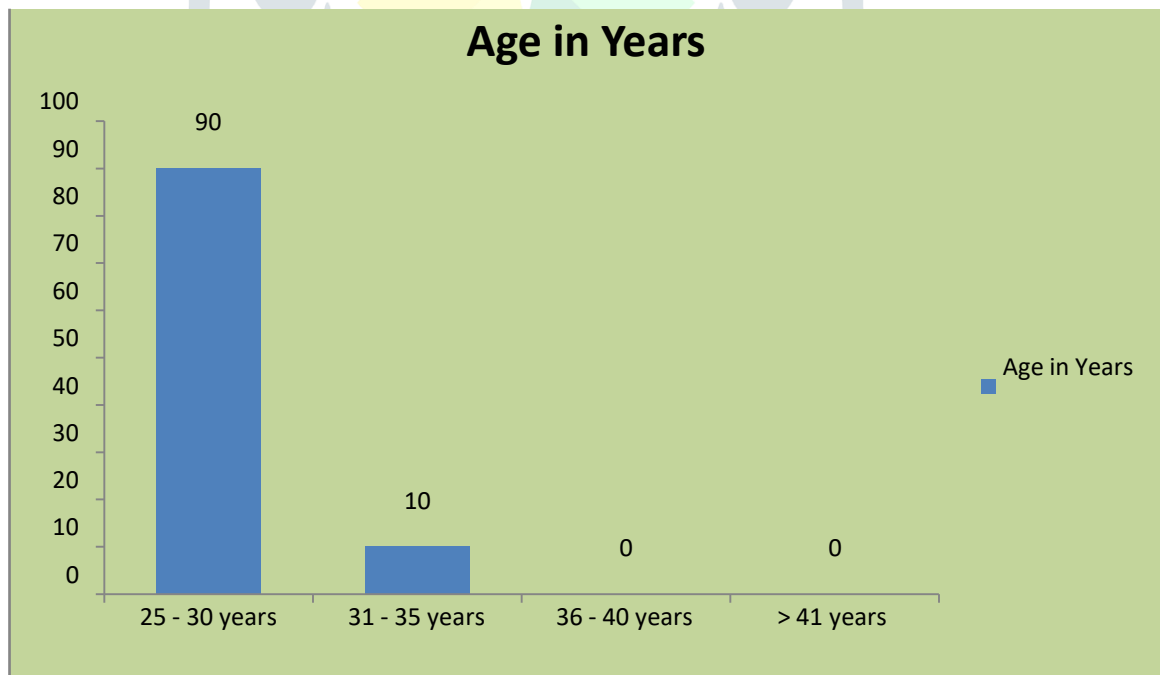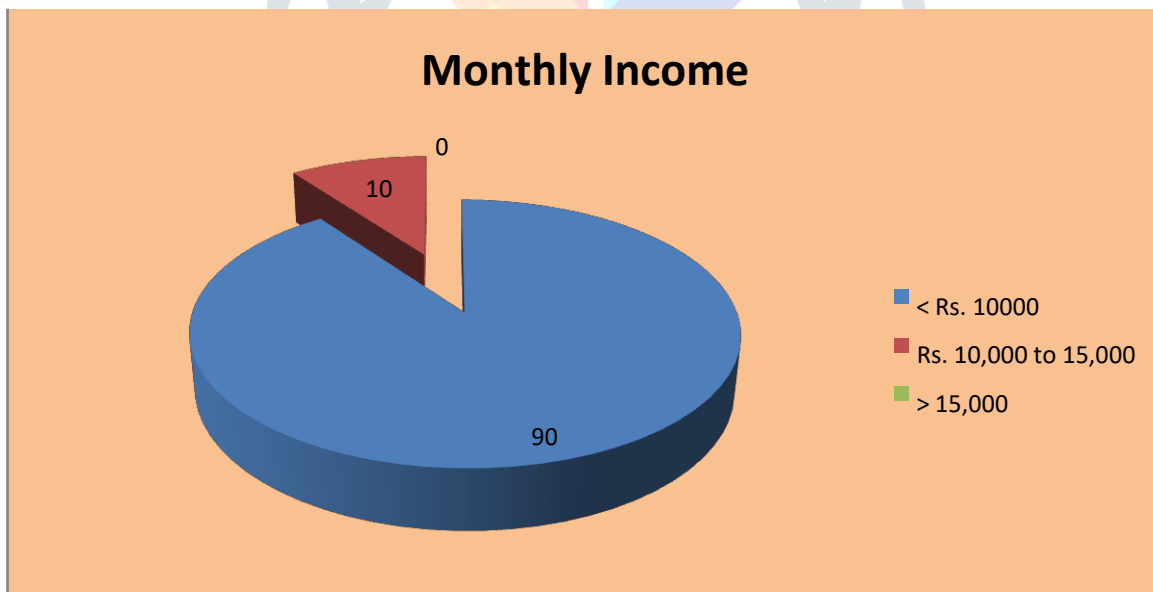
Figure 3: Percentage distribution of age in year among staff nurses in the Control group
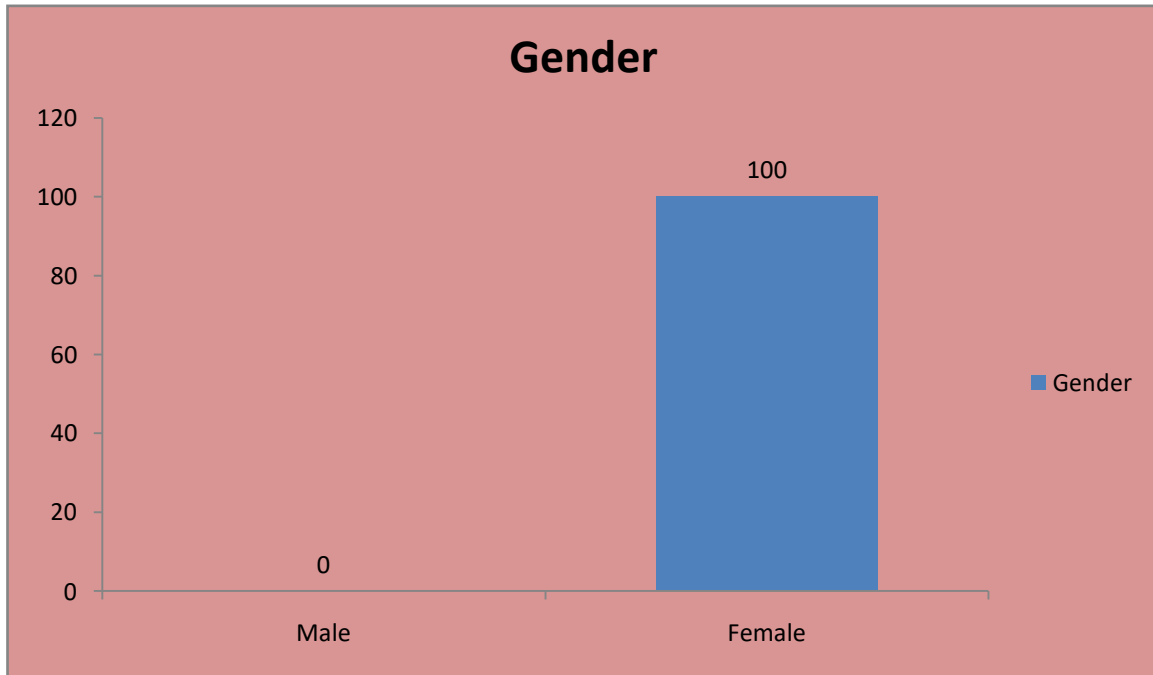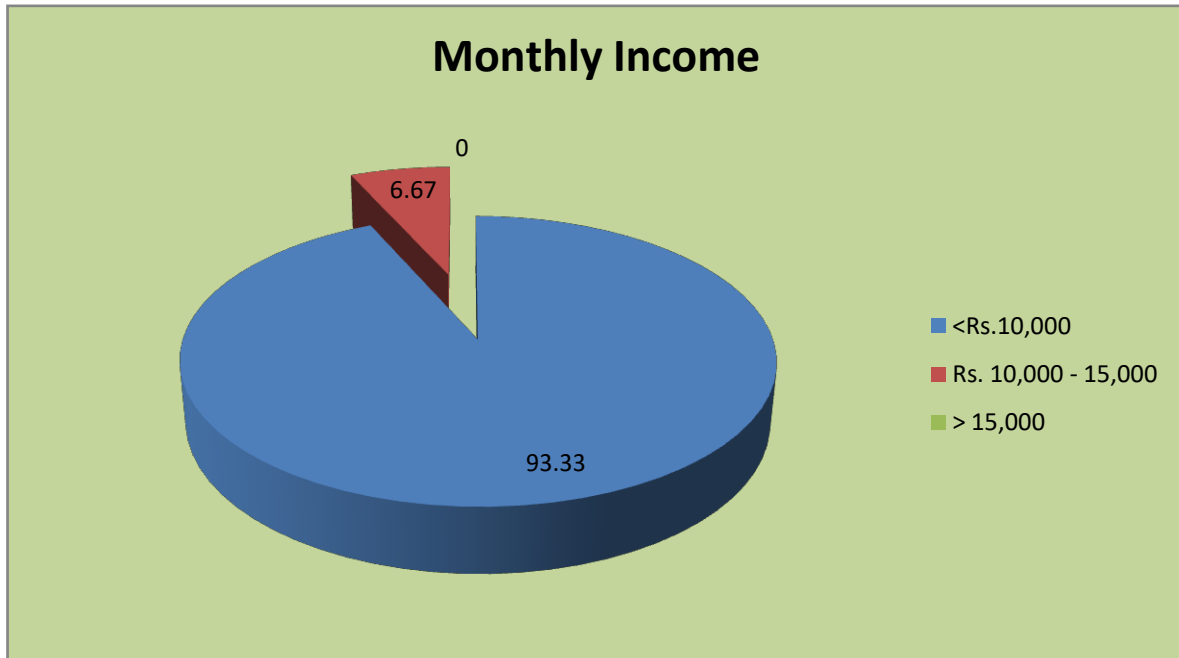

Figure 4: Percentage distribution of Gender among staff nurses in the experimental group

Figure: 4 Percentage distribution of Gender among staff nurses in the Control Group

Figure 5: Percentage distribution of Monthly income among staff nurses in the Experimental group

Figure: 5 Percentage distribution of Monthly income among staff nurses in the control group

9-MAJOR FINDINGS OF THE STUDY

In the experimental group, the majority 27 (90%) were in the age groups of 25 – 30years, , 30 (100%) were females, 27 (90%) were Hindu. 27 (90%) were Married,18(60%) were diploma, 21(70%) of them she working hours, 26 (86.6%) had 2-3 years of experience, 27 (90%) had. Family months income<10,000, 21 (70%) were belongs to nuclear family and 29(96.6%) had adequate family support. whereas in the control group majority 21(90%) were in the age group of 25-30 years, 30 (100%) were females, 27(90%) were hindu, 22(73.33%)were married, 26(186.6%) had Diploma, 10(53.33%) had working 10 hours, 27 (90%) had 2.3 years of experience, 28 (93.33%) had family months income (10,000 and 27(70%) were belongs to tent family, and 26(86.6%) had adequate family support. The analysis of pre test level of stress in experimental group, revealed that majority 21(70%) had moderate level of stress, 9(30%) had severe level of stress. The analysis of post test level of stress in experimental group, revealed that majority 19(63.33%) had mild level of stress, 11 (36.67%) had moderate level of stress. The analysis of pre test level of stress in control group, revealed that majority 2(6.67%) had mild level of stress, 18(60%) had moderate level of stress, 10 (33.3%) had severe level of stress and none of them had very severe stress the analysis of post test level of stress in control group, revealed that 2(6.67%) had mild level of stress, 17 (56.6%) had moderate level of stress, 11(36.67%) had moderate level of stress .

the comparison of pre test and post test level of stress in experimental group revealed that the mean pre test value of stress was 44.2 with SD 8.6 and the mean post test value of stress was 25 with SD 3.4, the calculated paired „t" test value t = 13.32 which was found to be statistically significant at $p < 0.05$ level. This clearly indicates that after administration of laughter therapy there was a significant reduction of the post test level of stress among staff nurses working in oncology unit in experimental group.

the comparison pre test and post test level of stress in control group, the mean pre test value of stress was 43.87 with 12.23 SD and the mean post test value of stress was 45.30 with SD 11.02, the calculated parried t value of = 0.060 was not found to be, statistically significant. This clearly indicates that administration of laughter therapy had significant effect post test level of stress among staff nurses working in oncology unit in experimental group than the control group. The post test mean level of stress in the experimental group was 25 with S.D 3.4 and in the control group the post test mean level of stress was 45.3 with 11.01 SD. The calculated unpaired test value = 7.74 was found to be statistically significant at $P < 0.05$ level. This clearly indicates that the administration of laughter therapy to the staff nurses working in oncology unit in the experimental group had significant effect in the post test level of stress than the control group. The demographic variables of Age in year, gender and family income had shown statistically significant association among staff nurses working in oncology unit and the other demographic variables had it shows significant association with post test level of stress among staff nurses working in oncology unit in experimental group.

10. CONCLUSION

 Laughter therapy was a   effective intervention in the time of stress.

Laughter therapy helps to reduce stress and to promote well being of the humans.

11- IMPLICATIONS OF THE STUDY

It includes nursing Practice, nursing education, nursing administration and nursing research.

NURSING PRACTICE

Laughter therapy can be given for staff nurses in multispecialty hospitals.

This technique will reduce their level of stress.

Nurses can also use this complementary therapy as a primary prevention of stress and related complication.

Health care institutions include this therapy as regularly.

The present study will enable the nurses practice   laughter therapy to protect themselves from the effect of stress.

NURSING EDUCATION

Student nurses can learn themselves and practice this laughter therapy to avoid stress.

The faculty members can motivate the students to practice laughter therapy session and can educate them regarding the importance and health benefits of laughter therapy.

Staff development programme need to be arranged, so that the nurses educators can encourage the students to practice laughter therapy to the patients in various health care setting.

Every college of nursing can conduct CNE related to literature for the faculty as a positive coping measure from stress.

NURSING ADMINISTRATION

Nursing administrator should motivate the public do laughter therapy.

Administration of both local, state, and central government can take necessary to step to publish articles in the journal explaining the importance and benefit of laughter therapy.

Nursing administrator can make arrangements for the practice of laughter therapy in various health care setting.

NURSING RESEARCH

Research can be conducted on various setting.

Researchers should focus on non-pharmacological intervention to reduce stress.

The finding should be disseminated through conferences, seminar, and publication of professional, national,

and international journal.

12- LIMITATION

The study was limited to assess the effectiveness of laughter therapy only on stress among staff nurses.

The duration of the laughter therapy was fixed for 20 minutes only/day study

The study was limited to 60 samples.

13- RECOMMENDATIONS

Based on the findings the present study recommendations are offered for further research.

A true experimental study can be conducted to evaluate the effectiveness of laughter therapy on level of stress among staff nurses working in oncology unit.

A similar study can be conducted to evaluate the effectiveness of laughter therapy among employee working in information technology unit.

A similar study can be conducted on patient with stress in mental health care setting.

A similar study can be conducted among working women in selected areas.

A similar study can be conducted in school going children before examination in various school.

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