AN EVALUATION OF STRESS AMONG NURSES IN KANYAKUMARI DISTRICT, TAMIL NADU, INDIA

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Abstract:

Stress is some form disturbances in emotions and physical tensions. Almost all kinds of jobs are stressful. Among those, nursing is the most stressful yet rewarding job.The nurses faces an increasing level of stress which affects their job performance. It also affects their personality and their attitude towards patients. Therefore it is very important to understand the various factors and provide them a healthy environment. The aim of this study is to identify the various factors that causes stress and adopt various strategies to control and manage stressful situations. Data were collected from 390 nurses in Kanyakumari District using snowball sampling. Analysis used was weighted average and independent sample t test. A statistical significance difference between gender and on various stress factors were foundand alsobetween the workstations of the nurses onvarious stress factors. The main factors of work stress are lack of support by management, someone withholding information which affects their performance and so on. Hence the hospital management should develop some strategies to deal with these stresses so it doesn't affect their performance. It is observed that the stress level differs between male and female nurses.

Keywords: Stress; Nurses; Work stress factors; Personal stress factors.

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Introduction :

Nursing is a profession where it holds the responsibility of taking care of patient's health. Whenever there's a necessity for somebody, nurses' work indefatigably to meet the wants of them. Nursing as a profession includes a name for sympathy and perseverance towards patients. Nurses are health professionals offer centered and extremely personalized care. They are also in great demand. The employment of registered nurses is projected to grow 15% by 2022, a way quicker rate when put next to any or all alternative occupations, consistent with the Bureau of Labor Statistics.

Nurses are the most demanding healthcare professional all over the world. Countries like New Zealand, Republic of Ireland, Switzerland, The Netherlands, Israel, Norway, Australia, United States, Iceland and Luxembourg ready enough to pay more for nurses.

The Asian continent has largely developed over the past 25 years. China's increasing middle class has led to a growth in the number of available nurses in the country.

Nursing in India:

Nursing in India started and developed only after invasion by the British. In post-independence period, various committees were formed to study the situation of nursing profession in the country. Various changes were brought from time to time in education and service system as well as in the rules and regulations.

Trained Nurses of India (TNAI) was formed in the year 1908 and the Indian Nursing Council (INC) was established in the year 1947, which thereafter upgraded the basic educational qualification requirement for candidates desiring to undergo nursing education

After establishment of the INC, most of the states in India established their State Nursing Councils (SNC). The SNCs were responsible for maintaining the standard and uniformity in nursing education. Main function of SNCs was to conduct examinations and the registration of qualified nurses to permit them to practice.

It was noticed that there is great disparity between the available and required number of nurses as per the population and the set INC norms in the nurse/ patient ratio. Shortage of nursing personnel, between 1980-1990s, might have been due to migration of trained nurses to overseas countries, especially in the Gulf countries for higher salary and perks. Nursing profession, being entirely job-oriented, there is great demand for qualified nurses all over the India. Number of men entering this female dominated profession have been increasing in the last few years. It is a clear indication of increased demand for nurses.

It is necessary that managements of government and public sector hospitals should think on the lines of administrators of corporate hospitals and improve working and image of health services, including efficient patient care rendered in the public hospitals. One way of improving health services in the public sector is to maintain the INC prescribed nurse: patient ratio (1:3), at least to some extent in certain departments to give better service. If that is adopted by government hospitals, it would help the government-managed hospitals to gain public confidence.

Adoption of NABH accreditation shall certainly improve the quality of nursing care, which will be more patient-oriented even in public sector and government hospitals. Proper and controlled use of information technology is playing wonderful role in raising their performance standard.
In future, the concept of a 'nursing practitioner' and research in nursing, need to be encouraged more along with evidence-based nursing practice.

Nursing in Kanyakumari District, Tamil Nadu:
At Kanyakumari district, health care delivery system to the rural has been provided by 9 Block Primary Health Centers, 27 additional Primary Health Centers, 11Urban Primary Health Center and 267 Health Sub Centers. Through these health centers curative and preventive services are being extended to the rural community. There are nearly 11 nursing colleges and produces an average of 500 qualified nurses every year.

Issues of concern: Due to the nature of their work, nurses establish a good relationship with patients and their relatives, which create different forms of tension that may lead to various stressful situations. Hence, nurses have found themselves in an increasingly tough, demanding

and delicate situation. They begin to show emotional signs of stress (angry outbursts, dissatisfaction, over sensitivity, fear, depression, etc.), as well as intellectual and mental signs of stress (feeling of incompetence, unable to complete the task, inability to concentrate on work, irrationality, etc.)

A pre-study was conducted among nurses in Kanyakumari District and found that most of the nurses were facing difficult and delicate situations from doctors, patients and their relatives. This creates a psychophysical imbalance and ends up in showing emotions like anger,fear,depression and dissatisfaction and lead to make errors.Nearly 52% of the nurses were highly dissatisfied in their job because of the stress they face in their daily routine. In order to address such issues this study was made.

Objectives of the study:

The primary objective of this research study was

1.   To identify the various work and personal related factors that most often cause stress among the nurses in Kanyakumari District.

2.   To find, how stress affect theirsatisfaction level.

3.   To identify the methods used for reducing or eliminating stress by nurses.

Methodology:

The research was descriptive in nature. A survey based questionnaire was used as data collection tool. A standard questionnaire was prepared after having two round of discussion with the selected well experienced doctors and nurses. The questionnaire consists of four categories. First category consist of demographic variables, the second category consist of general information about their work and the environment, the third category is the various work related factors and thefourth category is the various personal related factorsthat causes stress among nurses. This questionnaire was pre-tested with 20 nurses and modified.

Sampling Administered

The sampling method adopted for this study is Snowball sampling. A method of data collection using online since it very cost effective and very fast in collecting the responses.A sample size of

390 respondents was selected from Kanyakumari district using this sampling technique, 16% were male and 84% were female respondents.Most of them are working in private hospitals (76%) and in government hospitals (24%). 76% of the respondents belong to the age group of 21-30, 22% were between 31- 40 and 2% were 41 and above. 21% of the respondents hold a Master degree in nursing,66% holds a Bachelor degree and13%were completed a Diploma

Reliability:

The reliability of the instrument was measured by the Cronbach's alpha coefficient. It is suggested that the values of all indicators should be above the recommended value of 0.60. Cronbach's alpha coefficients of all the tested variables are above 0.60 which suggesting the composite measure is reliable.   The reliability of data for work stress factors was confirmed by Cronbach's α with a value of 0.904; and 0.871 regarding the frequency ofpersonal stress factors.

Table 1. The Cronbach's alpha coefficients of study variables

S.no	Variables	Number of items	Cronbach's α value
1.	Work stress factors	13	0.904
2.	Personal stress factors.	13	0.871

Testing of Association

The following Hypothesis statement: tested

1. Are there any statistically significant differences between the two genders of respondents (women, men) in the factors that most often cause workplace stress?

2. Are there any statistically significant differences between the two groups of respondents (Work station) in the factors that most often cause workplace stress?

3.

Tools used for analysis:

1. Percentage analysis

2. Weighted average

3. Independent sampled t test

Analysis and Interpretation

1.   Weighted Average

1. **Work Factors**

The work related factors causing stress among the nurses in Kanyakumari district were studied and 13 factors causing stress identified. The weighted average method was applied to analyze.

Table 2: Weighted average values of work stress factors

S .no	Work stress factors	Weighted average	Rank
1	Withholding information affects performance	4.46	1
2	Lack of support by administration	4.03	2
3	Conflict with supervisor	3.7	3
4	Inadequate time to complete all nursing tasks	3.58	6
5	Insufficient staff to adequately cover the unit	3.51	7
6	Dealing with violent patients	3.28	13
7	Too much workload	3.51	7
8	Dealing emotional problems of patients	3.4	9
9	Fear of making mistakes	3.32	12
10	More work load, more chance of mistakes	3.35	11
11	Unreasonable demands by patients relatives	3.36	10
12	Being blamed for everything	3.64	5
13	Working with people all day is really strain	3.69	4

The mean value of all the work related stress factors was 3.60.

Figure 1: Chart representing the weighted average values of work stress factors
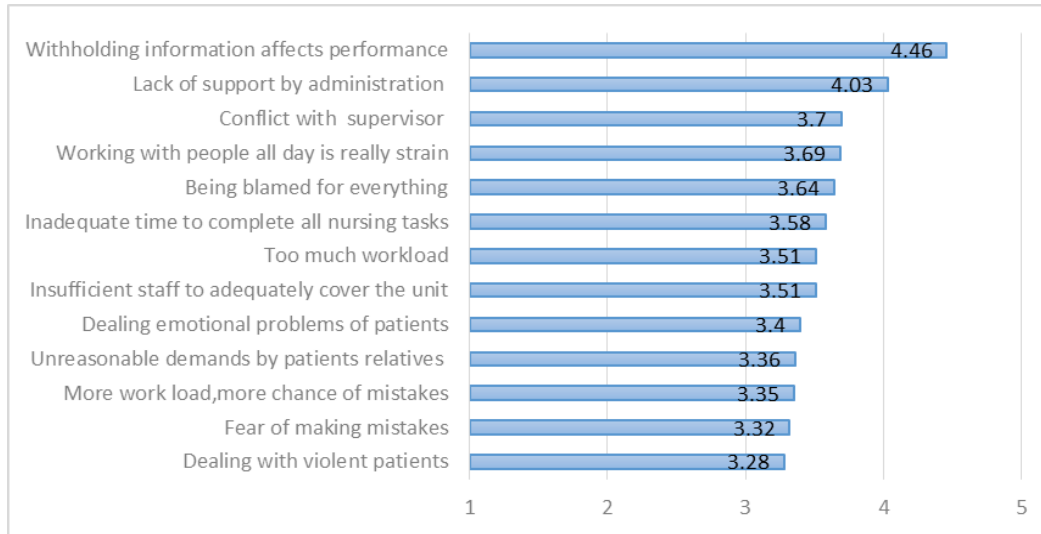
From the analysis it was known that performance of the nurses were affected when someone withholds the information(M = 4.46) followed by the factors , Lack of support by nursing administration (M = 4.03),Conflict with a supervisor (M = 3.70),Not enough time to complete all nursing tasks (M=3.58),Not enough staff to adequately cover the unit(M= 3.51),Having to deal with violent patients(M=3.28),Feels working too much (M=3.51) ,dealing with emotional problems very calmly(M=3.40),Fear of making mistakes(M=3.32), More work load, chances of making mistakes(M=3.35),Patients relatives making unreasonable demands (M=3.36) Being blamed for everything(M=3.64),Working with people all day is really strain (M=3.69). The values of these factors ranges between 3 to 4.5, whichrefers the nurses experiences stress from moderate to high level.

2.   The Personal Factors

The personal factors causing the stress studied and 13 factors are identified for study.The weighted average method was applied to analyze

Table 3: Weighted average values of personal stress factors

S.no	Personal stress factors	Weighted average	Rank
1	Being shouted at or being the target of spontaneous anger	4.4	1
2	Excessive monitoring	3.94	2

3	Allegations made against them	3.71	3
4	Opinions and views ignored	3.46	5
5	Love being with family	3.42	6
6	Being the subject of teasing and sarcasm	3.12	13
7	Spreading of gossip and rumors about them	3.33	9
8	Persistent criticism of work and effort	3.41	7
9	Repeated remainders of mistakes	3.26	11
10	Being ignored	3.28	10
11	Being humiliated	3.26	11
12	Difficulty in working with other gender	3.37	8
13	Discouraged by the job they do	3.48	4

The mean value of all the personal related stress factors was 3.46.

Figure 2: Chart representing the weighted average values of personal stress factors
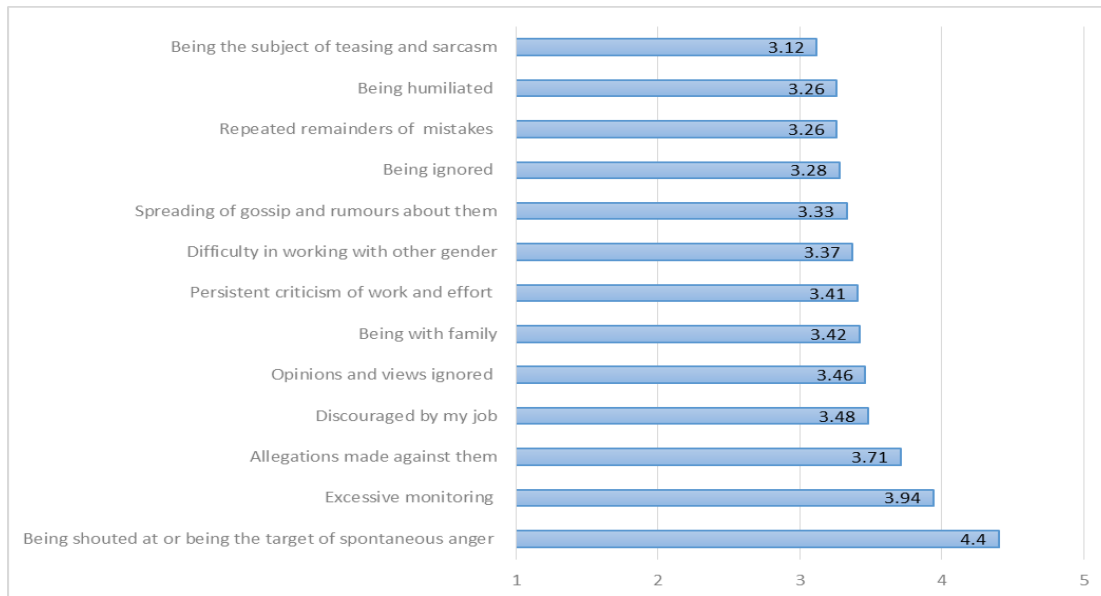
From the analysis it was found that, among all personal stress factors the nurses were highly stressful when they were shouted at or being the target of spontaneous anger (M=4.4),followed by Excessive monitoring of work (M=3.94),Having allegations made against them(M=3.71),Having their opinions and views ignored (M=3.46), like to spend too much time

with family (M=3.42), Being the subject of excessive teasing and sarcasm(M=3.12) Spreading of gossip and rumors disturbs them (M=3.33),Persistent criticism of thier work and effort (M=3.41), Repeated remainders of errors or mistakes (M=3.26),Being ignored, excluded affects mind (M=3.28)Being humiliated or ridiculed in connection with their work (M=3.26),Difficulty in working with nurses of the other gender (M=3.37) Discouragedby their job(M=3.48).

3. Strategies for eliminating stress:

The strategies adopted for eliminating the stress level was studied and presented as below

Figure 3: Chart representing the coping strategies adopted by nurses.
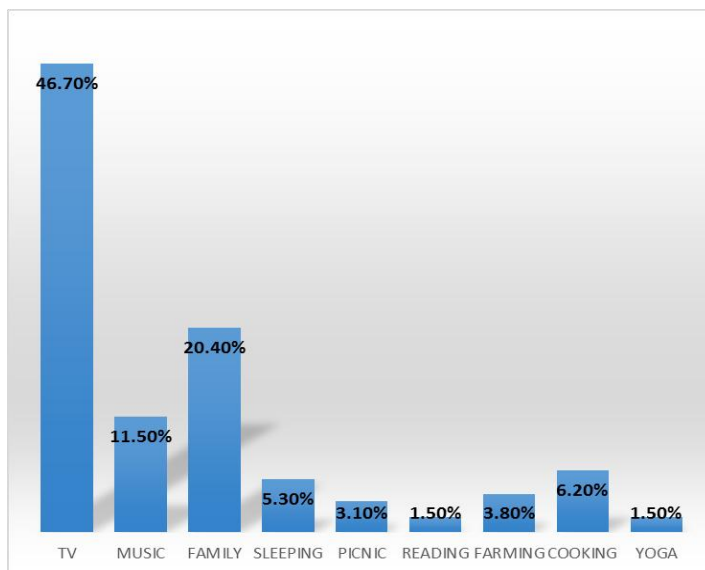
The survey also focused on identifying the various strategies adopted by nurses in eliminating stress through watching TV, listening Music, spending some quality time with family and kids. Few of them go out with friends, love reading, cooking, farming and sleeping. Only very few practice yoga in their free time.

2. Inferential statistics using independent samples t test

a. T-test for verifying the differences in stress factors between genders

An independent samples t-test was used to check if there were any statistically significant differences exist between genders in the variables that measure individual dimensions of work and personal stress factors.

Table 4: T-test for verifying the differences in stress factors between genders

Stress factor	Gender	N	M	t	p
Lack of time to complete their duties	Male	62	3.95	3.049	.003
	Female	328	3.52		
Opinions being ignored	Male	62	3.10	-2.334	0.02
	Female	328	3.53		
Willingness to spend time with family	Male	62	2.98	-2.531	.013
	Female	328	3.50		
Difficulty in working with other gender	Male	62	2.92	-2.783	0.007
	Female	328	3.46		
Discouraged by the job	Male	62	2.79	-4.649	0.000
	Female	328	3.62		

The results of the analysis show that there are statistically significant differences between both groups of respondents (women, men) in the following factors: Opinions ignored by the management (t=-2.334,p=0.02), Willingness to spend time with family (t=-2.531, p=.013), Difficulty in working with opposite sex(t=-2.783,p=0.007) and low salary (t=-4.649,p=0.000). These factors are much more stressful for women than men.

For the factor "Lack of time to complete their duties (t=3.049, p=.003)" is more stressful for male nurses than female nurses.

b.   T test for verifying the difference in stress factors between different workstations (Private, Government hospitals).

Table 5: T-test for verifying the differences in stress factors between genders

Stress factor	Work station	N	M	t	p
Conflict with supervisor	Private	296	3.78	2.787	.006
	Government	94	3.45		
Dealing with emotional problems, calmly	Private	296	3.31	-2.669	.008
	Government	94	3.69		
Fear of making mistakes	Private	296	3.23	-3.187	.002
	Government	94	3.61		
Working people with all day is really a stressful	Private	296	3.60	-2.991	.003
	Government	94	3.99		
Disturbance in their work due to spreading of gossips and rumors about them	Private	296	3.24	-2.403	.017
	Government	94	3.61		
Persistent criticism of work and effort	Private	296	3.32	-3.243	.001
	Government	94	3.70		

The results of the analysis show that there are statistically significant differences between both groups of respondents (Private, Government) in the following factors:

In Conflict with supervisors, the nurses working in private hospital feels more stressful than others in government hospitals (t=2.787, p=.006).

The other factors like in dealing with emotional problems of the patients (t=-2.669,p=.008),Fear of making mistakes (t=-3.187,p=.002),Working people with all day is really stressful(t=-2.991,p=.003),Disturbance in their work due to spreading of gossips and rumors about them (t=-2.403,p=.017),Persistent criticism of work and effort(t=-3.243,p=.001) make the government hospital nurses more stressful than nurses in private hospitals.

Findings:

1.   The first objective is to find the various work and personal factors that caused stress among nurses. It was observed that the nurses rated "Someone withholds information which affects performance (M = 4.46)", "Lack of support by nursing administration (M = 4.03)","Being shouted at or being the target of spontaneous anger (M=4.4)" and Excessive monitoring of work (M=3.94) as high stressful factors which drastically affected their performance.

2.   From the study it is found that the average value of all work related factors were 3.60 and personal factors were 3.46,which infers that stress among nurses is caused mainly of work related factors.

3.   From the weighted average method,it was noted that the values all factors ranges from 4.5 to 3.0 which indicates there was a medium to high level of stress exist among them.

4.   The coping strategies used by nurses to overcome stress were watching TV (46.7%) and spending some quality time with family(20.40%).

5.   The results of the analysis show that their opinion being ignored, not able to spend time with family, difficulty in working with other gender and often discouraged by the job are more stressful for women than men.

6.   The factor "lack of time to complete the duties" were more stressful for men than women.

7.   An anotherhypothesis statement asked about whether there were any statistically significant differences between the two groups of respondents (private and government hospitals) in the factors that most often cause workplace stress. It was concluded that the surveyed nurses employed in government hospitals the factors of "Dealing with emotional problems of patients, Fear of making mistakes, Long Working hours, Spreading of gossips and rumors about them and Persistent criticism of work and effort were more stressful than nurses working in private hospitals.

8.   In Conflict with supervisors, the nurses working in private hospital feels more stressful than others in government hospitals.

Suggestions

•   The management may provide nurses with a safe working environment, improve their working conditions, provide the necessary information required for the individuals, improve the

organizational climate, improve interrelationship among the employees, and shape strategies for improving motivation in the workplace.

- Secondly, the management may teach them to identify and reduce stressful situations, how to cope with stress, and give them their support in their stressful situations. When the nurses are totally aware of themselves and in handling stressful situations, it will change the culture of the entire organization.Nowadays, we are moving towards an organizational culture in which mutual respect and assertive behavior are predominant.

- The management of all healthcare institutions may clearly define strategies for reducing stress likeprogrammes for improving well-being in the workplace, introduction of relaxation techniques as part of job training like yoga, walking, spending time in nature, workout at gym, etc, measures for ensuring proper safety at work and consequently protecting the health of nurses.

- Hospitals and especially patients benefit the most from healthy and rested nurses as their efficiency is increased, the errors made by them will be reduced and burnout doesn't occur. By introducing these strategies, it reduces the stress related illness among nurses and improves the quality of the work they do.

- A separate forum can be developed for the nurses to standardize their work in private hospitals.

Conclusion

The success of a health care institution depends on Doctors and Nurses. Just like doctors, nurses should also be given more respect as they are the one who takes care of the patients in the post-operative period. Nurses are considered as the backbone to the Hospitals. From the study it is noted that the nurses face an increasing level of stress from doctors, patients and relatives, this in turn affects the quality of work they do. Hence, the researcher concludes by saying that it's very important that the hospital administration should take proper responsibility in taking care of nurses' physical and mental health.

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