

Job Performance and Chronic Fatigue Syndrome in Nurses

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Abstract

The current study was an attempt to examine the role of chronic fatigue syndrome in job performance of nurses by comparing with normal group. A total sample of 100 nurses from IGMHC, Shimla (HP) was drawn for the purpose out of which 50 were suffering from chronic fatigue syndrome (CFS) and 50 were normal. The main findings point to the following facts: (i) On the indices of job performance viz., punctuality, public dealing, efficiency, nursing knowledge and interpersonal communication, normal group has been rated significantly higher by their doctors as compared to the CFS nurses with t-values being 4.34** $p < .01$; 8.22** $p < .01$; 7.03** $p < .01$; 2.32* $p < .05$ and 2.17* $p < .05$ respectively. (ii) On the variable of obedience, no significant difference was observed. (iii) Overall, there was significant difference between CFS and normal nurses on total job performance score with t value = 3.97** $p < .01$. The results clearly reveal the deleterious effects of CFS on the job performance.

Keywords: Chronic fatigue syndrome (CFS), Nurses, Job performance, Normal group

1. Introduction

Chronic fatigue syndrome is a debilitating and complex disorder characterized by profound fatigue that is not improved by bed rest and that may be worsened by physical or mental activity. Persons with CFS most often function at a substantially lower level of activity than they were capable of before the onset of illness. In addition, to these key defining characteristics, patients report various non-specific symptoms including weakness, muscle pain, impaired memory and/or mental concentration, insomnia, chest pain, dizziness, night sweats chronic cough, weight loss, shortness of breath, psychological problems like depression, anxiety, irritability, panic attacks etc., and several associated physical, constitutional and neuropsychological complaints (CDC, 1994).

Chronic fatigue syndrome also called Myalgic Encephalomyelitis (ME) is characterized by persistent or relapsing debilitating fatigue for at least six months in the absence of any other definable diagnosis (Jason & Wagner, 1998).

Many symptoms of CFS including severity of fatigue may be periodic, fluctuant and induced by physical and mental activities including trauma and stress. Fatigue is the most obvious symptom and is characterized by severe mental and physical exhaustion sufficient to cause a 50% reduction in patients' activities. For most patients, the onset is gradual, some have an acute onset that resembles a flu-like illness. The fatigue in CFS is distinct from the fatigue of neuromuscular disorders, but is similar to that found in disorders of the central nervous system such as multiple sclerosis, parkinson's disease and multiple system atrophy. The exact incidence and prevalence of CFS are unknown, but the incidence has been estimated at 1/1,000. The illness is observed primarily in young adults (ages 20 to 40), though people of every age, gender, ethnicity and socio-economic status group can have CFS and women are affected by CFS 4 times the rate of men according to Harrison's principles of internal medicine.

As chronic fatigue syndrome has no pathognomonic features, diagnosis is difficult. In addition to persistent fatigue, CFS includes 8 characteristic symptoms according to centre for disease control (CDC, 1994):

- Post-exertional malaise (relapse of symptoms after mental or physical exertion);
- Unrefreshing sleep;
- Substantial impairment in memory/concentration;
- Muscular pain;
- Pain in Multiple joints;
- Headaches of a new type, patterns or severity;
- Sore throat; and
- Tender neck or lymph nodes.

According to Kaplan and Sadock (1999), the women sufferers frequently report the symptoms and experience greater level of anxiety, confusion, depression and total mood disturbances. Not only this, studies have shown that CFS changes the lives of women who suffer with the disease and disrupts their relationship, careers and perception of themselves comparatively, more to that of men because of role ambiguity, role conflict and workload (Tuck and Wallace, 2000). One such section in women who are looked up to with lot of hope of expectations during hospitalization have been nurses. Nurses are more susceptible to CFS because stress from excessive workload is the primary cause. Nurses assigned to rotating shifts are more prone to greater health problems than workers on permanent shifts, regardless of the time of day of the permanent shifts. The nurses are the “work horses” of the hospitals and back pains and injuries are an occupational hazards of nurses (Costa, 2001) and Abdalkader and Hayajneh, 2006) as they are on their toes long hours and rush from one critical service to another throughout the day and night. All these factors contribute to burnout affecting their health as well as their job performance. The effects of CFS on jobs are costly and are reflected in lower productivity, efficiency, reduced motivations, absenteeism, etc. (Kennedy et al., 2004).

Taking all these into account, the gamut of the present study is to see the effect of chronic fatigue syndrome in the nurses’ job performance and also to explore the differences, if any between the suffered group and the normal group with regard to their job performance as nursing is a noble profession and a demanding job. Due to dual and triplet roles at home, work place and hospitals, nurses are trapped and there is a vicious circle of fatigue affecting their body and mind which might play havoc role with their job performance in terms of work place errors and medication dispensing errors. Nursing is the most significant area due to the nature of the job as she has to act like Florence Nightingale (sister) day and night and has to come up to the expectations of doctors and patients.

2. Method

2.1 Design

t-test was applied to find out the significance of differences between CFS nurses and normal nurses on the total score on job performance and its various indices.

2.2 Sample

In the present study, subjects were nurses with and without certain chronic fatigue syndrome (CFS) from Indira Gandhi Medical College, Shimla (H.P.). A total of 100 nurses were selected out of which 50 nurses were those who scored high on DePaul University Fatigue Questionnaire and 50 were normal. The sampling technique was purposive.

2.3 Tools

- Adapted DePaul University Questionnaire (Jason, 1997); and
- Job Performance Questionnaire (Singh & Malhotra, 2001).

(1) Adapted DePaul University Fatigue Questionnaire (Jason, 1997):

This questionnaire is the modification and adaptation of the work of L.A. Jason (1997). It is constructed to assess the symptoms of chronic fatigue syndrome. This questionnaire consists of 13 questions asking about qualitative and quantitative information regarding health. It also includes the list of major and minor symptoms of CFS which helps to diagnose the symptoms of CFS. This test identifies physical symptoms, cognitive difficulties and mood difficulties associated with CFS. Scoring was done on 3 point scale. Maximum score of 3 was given for every negative answer, 2 for moderate and 1 score was given for the item that presented the positive side of the

subjects well-being. The Chronbach alpha of this questionnaire is 0.82 and the test- retest reliability with the sample of adult workers is 0.86.

(2) Job Performance Questionnaire (Singh & Malhotra, 2001):

This questionnaire consists of 36 items to be rated on 3 point scale (Yes, uncertain, no). For every yes answer, score of 2 was given, for uncertain, 2 scores and for 'No,' a score of 1 was given. This questionnaire contains 6 dimensions/indices containing 6 items each. These indices are as follows: punctuality, public dealing, obedience, efficiency, nursing knowledge and interpersonal communication. Nurses were evaluated by doctors on all the indices of job performance. Total score on job performance was obtained by adding all the scores on the 6 dimensions. The test-retest reliabilities are all in the acceptable range varying from a low of 0.65 for interpersonal communication to a high of 0.80 for punctuality.

3. Results

The means, standard deviations and t-values for indices of job performance viz., punctuality, public dealing, obedience, efficiency, nursing knowledge, interpersonal communication and total job performance score for nurses with CFS and normal nurses are reported in Table 1.

Results reveal that CFS nurses reported significantly lower level of punctuality with $t = -4.34, p < .01$; lower level of public dealing, $t = -8.22, p < .01$; lower level of efficiency, $t = -7.03, p < .01$; lower level of nursing knowledge, $t = -2.32, p < .05$ and lower level of interpersonal communication, $t = -2.17, p < .05$. On total score on job performance, nurses suffering from CFS were rated significantly lower by their doctors as compared to normal nurses with t being $-3.97, p < .01$. Whereas, no significant difference was observed between the two groups with regard to their obedience. Results clearly reveal the hazardous impact of chronic fatigue syndrome on the job performance in nurses.

4. Discussion

The present study was undertaken to observe the effects of chronic fatigue syndrome on the job performance of the nurses. Chronic fatigue syndrome (CFS), also referred to as the immune dysfunction syndrome, is a distinct disorder with specific symptoms and physical signs, which ought to have been present for more than six months which include short term memory, loss or severe inability to concentrate that affects work, school or other normal activities, sore throat, swollen lymph nodes in the neck or armpits. The onset is usually gradual and happens due to a faulty life style, lack of sleep, bad eating habits, work overload and stress due to graveyard shifts especially in the case of nurses who barely get quality sleep and negate their diet by consuming a lot of junk food (Jason et al. 1998). The present results throw light on the deleterious effects on the job performance of the nurses as observed and rated by their doctors.

The t-test analysis reveals the negative and detrimental effects of chronic fatigue syndrome on the total job performance and its dimensions in nurses as compared to their normal counterparts. On punctuality, public dealing, efficiency, nursing knowledge and interpersonal communication, CFS nurses have been found to be significantly lower to that of normal nurses with t values being $-4.34^{**}, -8.22^{**}, -7.03^{**}, -2.32^{**}, -2.17^{*}$ all significant at .01 and .05 levels respectively. On total job performance score also, CFS nurses have been found to be the poor performers with t -value being $-3.97^{**} p < .01$.

The reason being that chronic fatigue syndrome traps females more as compared to males and nurses being females encounter diversity of problems even in normal working situations. Some of these may be physical, physiological, psychological and social. Night work intensifies problems since they are working when the body clock is telling them to rest, but the nature of job says to work, not only and hence are not energetic in emergency but in normal conditions also thereby affecting their overall job performance in terms of efficiency, their dealing with the patients and communication skills (Jason et al., 1998).

Chronic fatigue syndrome encompassing excessive tiredness may be due to insomnia, changes in sleeping patterns, variations in length of shift periods and circadian rhythms. Nurses with CFS experience persistent tiredness which directly affects their memory, concentration causing inefficiency leading to deleterious consequences on the health care of the patients.

Sleep is a major concern, since it affects the health and the performance of nurses who are dealing with human lives. Condition becomes all the more dangerous if the nurses are suffering from chronic fatigue syndrome. The health care workers have indicated that they are exposed to all kinds of hazards. Any mistake or accident resulting from fatigue or stress can cost a life of the patient resulting in law suites and claims from patients (Yamauchi, Iwamoto and Harada, 2001).

The effects of CFS on mental functioning are complex. Some experts believe that this is due to depression which is common in CFS patients. One study found that CFS patients have shown slow motor speed and reduced working memory to the extent that had to lose the job than those without the condition (Hartel, 2000).

Night shifts have a heavier workload than the day shifts, nevertheless their present shifts either morning, evening or night. Nurses attributed this to the fact that there are fewer nurses working at night, more over, the ratio of nurses to patients working at night is not adequate and appropriate when contacted personally.

On the top of it, the temporary supporting night nurses are not as competent as permanent staff to deal with peculiar problems encountered in specialized units. This makes it necessary for the night nurses to throw more energy to keep their sections functioning to the desired health care standards thus leading to burnout and exhaustion and hence affecting their overall performance.

Work overload of the nurses to work extra hard is dependent on the intake of patients during a particular day and management is facing a problem of an unpredictable patient influx on each day. This worsens the condition of the nurses especially the ones who are suffering from chronic fatigue syndrome. All this leads to work conflicts, poor attitude which could irritate patients leading to conflict between staff and patients and even among staff thereby leading to low motivation and errors in administering health care (Verma, 2007).

To conclude, nurses are more susceptible to CFS because of their demanding job and the changing dynamics of the Indian family. The pressure to prove themselves inside the house, at work and with kids are prime reasons for their falling prey to CFS and affecting their job performance in totality.

Performance goes along with motivation which is the drive towards productivity which is essential to human lives and health care. Upon the study findings, it is recommended that nurses need a continuous medical screen. Supported by international Labour Organization (2001) permanent and rotating night workers are generally a population at risk and are to be included in medical screening, and hence should be given special attention as they are exposed to work load and extended working hours. Thus, psychologically supportive environment with rest room should be provided to relieve psychological stressors along with music, reading materials and games which provides relaxation and enhances motivation thereby increasing their overall performance (Perkins, 2001).

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Table 1. t-values on Indices of Job Performance in Nurses with Chronic Fatigue Syndrome and Normal Nurses (N=100; CFS Nurses = 50, Normal Nurses = 50)

Indices of Job Performance	Nurses	Mean	SD	t-values	Sig. Level
Punctuality	CFS	7.82	3.18	-4.34**	p<.01
	Normal	11.08	4.26		
Public Dealing	CFS	8.54	2.31	-8.22**	p<.01
	Normal	13.06	3.10		
Obedience	CFS	13.50	4.31	-1.81	N.S.
	Normal	15.04	4.15		
Efficiency	CFS	9.10	3.14	-7.03**	p<.01
	Normal	14.16	4.01		
Nursing Knowledge	CFS	11.06	5.36	-2.32**	P<.05
	Normal	13.50	5.14		
Interpersonal Communication	CFS	10.50	3.12	-2.17*	P<.05
	Normal	12.00	3.77		
Total Score	CFS	10.08	3.57	-3.97**	p<.01
	Normal	13.14	4.07		