



Influence of Job Stress and Nurse-Physician Collaboration on Job Satisfaction of Nurses and Doctors in Ekiti State, Nigeria.

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ABSTRACT

The study examined the underlying factors that influence job satisfaction of nurses and doctors in Ekiti state of Nigeria. One hundred and ninety one professionals, comprising one hundred and two nurses and eighty nine doctors responded to the Perceive Stress Scale, Collaboration and Satisfaction about Care Decisions, and Minnesota Satisfaction questionnaire. The results using the 2X2 Analysis of Variance showed that job stress has effect on job satisfaction of the respondents [$F(1,187) = 161.64, p < .01$]. The effect of nurse-physician collaboration on job satisfaction of the respondents was also confirmed. [$F(187) = 22.28, p < .01$]. There is also a significant interaction effect of job stress and nurse-physician collaboration on job satisfaction of the respondents [$F(187) = 6.89, p < .01$]. Stress managements strategies and collaborative practice were suggested.

Key words: Job stress, Job satisfaction, Nurse-Physician collaboration

INTRODUCTION

The concept of job satisfaction has been widely defined by different people. Locke [7] specified that job satisfaction is a pleasurable or positive emotional state resulting from appraisal of one's experiences. Generally speaking, job satisfaction is the extent to which workers are happy on their jobs. Health care organisation that wants to achieve qualitative service delivery requires satisfied and happy staff. The ability of any health care organisation to achieve its goals is a function of its ability to attract, retain and maintain competent and satisfied staff into its employment. Job satisfaction in staff nurses and physicians should be of great concern to any health care organisation and the society as a whole because nurses and doctors hold sensitive positions in most health care setting. Health care organisations will suffer so greatly as a result of job dissatisfaction of nurses and doctors. That is why the need arises for the underlying factors of job satisfaction to be identified and necessary recommendations made for effective health care delivery.

Although several factors contribute to nurse's job satisfaction and retention factors currently addressed in nursing literature include autonomy, job stress and nurse-physician collaboration [5]. These factors often have been identified as being related to job satisfaction instruments, theories and conceptual models [2].

Job stress is straining the body in the workplace while nurse-physician collaboration is partnership or working relationship between nurses and doctors. Various researches have shown that these two variables exert great influence on job satisfaction. Blegen [3] indicated the importance of the relationship between job satisfaction and nurses' perceptions of a positive work environment, cohesive and collaborative staff relations; that favourable work environment and collaboration between nurses and other health care providers go a long way to influence their job satisfaction.

In the aspects of organizational and managerial affairs, a strong negative relationship has been found between nurses' occupational stress and job satisfaction. and it has been reported that high levels of occupational stress results in increasing turnover rates and causes more and more nurses to leave their jobs. Also a high level of occupational stress caused by heavy workload has been found to reduce nursing quality, and can threaten the lives and security of patients [8].

When the relation between the years of experience in nursing practice and nurses' commitment was investigated, no statistically significant association could be revealed.

Nursing and medical job satisfaction is a critical challenge to any health care organisation. It has become one of the most pressing concerns for hospitals worldwide. The crisis will only deepen if the underlying factors are not addressed. This study is therefore poised to examine nursing and medical stressful working conditions and complete nurse-physician collaboration and their influence on job satisfaction among nurses and doctors. Job life is one of the most important parts of our daily lives which cause a great deal of stress. People with higher percentage of job stress may not be satisfied with their job and therefore, they will not feel happy working in the organisation. They are bound to be dissatisfied when they feel frustrated or "burnout". The study of Landabergis [6]; Terry, Nelson and Richard [9], show that high level of work stress are associated with low level job satisfaction.

This work therefore seek to examine the following objectives:

- Find out whether job stress has effect on job satisfaction of nurses and doctors in Ekiti State.
- Determine whether nurse physician's collaboration will have effect on job satisfaction of nurses and doctors.
- Find out whether job stress and nurse physician collaboration will interact to affect job satisfaction of nurses and doctors

To determine which of the two professions are the job satisfaction actually affected by job stress

METHODS

The study was carried out in the Federal Medical Centre Ido-Ekiti, in Ekiti State Nigeria. A stratified random sampling method was used to draw 200 nurses and doctors from 20 different specialities in the Federal Medical Centre, Ido-Ekiti in Ekiti state. The Participants that completed the questionnaire comprised of 102 nurses and 89 doctors, out of which 68 were female nurses and 34 male nurses; 26 were female doctors and 63 male doctors.

The variables studied were job stress and nurse physician collaboration and job satisfaction. Job stress was measured with perceived stress scale (PSS) by Cohen, Kamarck & Mermelstein [4]. It has established reliability and validity of 0.85. It contains 10 self-report items with a five-point scale: 0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, 4 = very often. The scores on the items 4,5,7 and 8 are reversed. While Nurse Physician Collaboration was measured using Collaboration and Satisfaction About Care Decisions (CSACD) developed by Baggs [1]. Reported Cronbach's Alpha for internal consistency of collaboration is 0.93 and its reliability is 0.90. Minnesota Satisfaction Questionnaire (MSQ) developed by Weiss, Dawis, & England [10] was employed to measure job satisfaction. It was validated for American and Nigerian use.

The research made use of factorial design involving two independent variables (job stress, and nurse physician collaboration) and one dependent variable (job satisfaction). Each of the independent variable appeared at two levels: high and low job satisfaction and collaboration respectively. The mean was use to dichotomise the scores, scores above and below the mean are regarded as high and low job stress respectively. Scores above the mean were regarded as high in collaboration and those below were low in collaboration. The 2 x 2 Analysis of variance was used to test for the main and interaction effect of the independent variables on the dependent variable.

RESULTS AND DISCUSSION

Table i: Descriptive table showing the mean and standard deviation of job satisfaction among those with high and low job stress and nurse-physician collaboration.

Variables	X	SD	N
High Job stress	39.17	7.33	115
Low Job stress	73.91	21.44	76
High Collaboration	69.77	22.31	70
Low Collaboration	43.29	15.66	121

Table ii: 2X2 Analysis of Variance summary table showing the main and interaction effect of job stress and nurse-physician collaboration on job satisfaction.

Source	SS	Df	MS	F
Job stress	29543.89	1	29543.89	161.64*
Nurse-physician collaboration	4072.21	1	4072.21	22.28*
Job stress and Nurse-physician collaboration	1258.81	1	1258.81	6.89*
Error	34178.54	187	182.77	
Total	94846.99	190		

* P< .01

The results in the table shows that there is a significant effect of job stress on job satisfaction of nurses and doctors [F (1,187) =161.64, p<.01]. There is a significant effect of nurse-physician collaboration on job satisfaction of nurses and doctors [F (1,187)=22.28 p<.01] there is a significant interaction effect of job stress and nurse-physician collaboration on job satisfaction of nurses and doctors [F (1,187)= 6.89, p<.01]. Therefore the hypothesis that there will be significant main and interaction effect of job stress and nurse-physician collaboration on job satisfaction of the respondents was confirmed.

Table iii: Independent t-test Table comparing nurses and doctors on job stress, nurse-physician collaboration and job satisfaction

Variable	N	χ	SD	SE	Df	t
Job Satisfaction	Nurses	102	44.46	17.35	189	6.18*
	Doctors	89	62.77	23.47		
Job Stress	Nurses	102	26.59	9.07	189	5.51*
	Doctors	89	18.28	11.72		
N/P Collaboration	Nurses	102	14.15	14.92	189	10.01*
	Doctors	89	39.46	19.93		

* P < .01

Table iii shows that there is a significant difference between doctors and nurses on job satisfaction, job stress and nurse/physician collaboration. Nurses reporting higher level of stress, lower level of nurse/physician collaboration and consequently lower level of job satisfaction compared with the doctors.

Table iv: Independent t-test Table showing the effect of job stress and nurse/physician collaboration on job satisfaction among nurses.

Variable	N	χ	SD	SE	Df	t
High collaboration	11	78.82	14.39	4.34	100	9.57*
Low collaboration	91	40.31	12.38	1.27		
High stress	86	38.32	8.29	.89	100	14.52*
Low stress	16	77.44	16.21	4.05		

* P < .01

Table iv shows that nurses that are high in collaboration are significantly higher in job satisfaction ($\chi= 78.82$) than nurses that are low in collaboration ($\chi =40.31$), [t(100) =9.57, p<.05]; also nurses that are high in job stress are significantly lower in job satisfaction ($\chi =38.32$) than nurses that are low in stress job ($\chi=77.44$)

Table v: Independent t-test Table showing the effect of job stress and nurse/physician collaboration on job satisfaction among doctors

Variable	N	χ	SD	SE	Df	t
High collaboration	59	68.08	23.19	1.28	87	3.14*
Low collaboration	30	52.33	20.63	2.27		
High stress	40	41.22	8.07	3.02	87	14.11*
Low stress	49	80.37	15.93	3.76		

* P < .01

Nursing and medicine are sensitive positions in health care organisations which should team up with a view to enhancing qualitative health care delivery. This consequently makes the job satisfaction of the two parties in the helping profession to be germane. The study carried out the evaluation of job satisfaction in relation to job stress and nurse-physician collaboration among nurses and doctors and found that those that reported low job stress and high

collaboration reported higher level of job satisfaction [$\chi = 73.91$ and 69.77 respectively] compared with their counterparts who reported high level of job stress and low collaboration who reported lower level of job satisfaction [$\chi = 39.17$ and 43.29 respectively].

This implies that the lower the job stress the higher the satisfaction derived from the job. Also the quality of the teamwork that exists enhances job performance and when high rate of success is recorded, this will then enhance the satisfaction that will be derived from the job, because the collaboration shows that the role of each party is appreciated by the other party.

It was also revealed in this work that job stress is inherent in hospital environment as 60.21% of the respondents reported job stress, which may result from work overload among other factors. Comparing doctors and nurses, there is a significant difference in the level of job satisfaction, job stress and nurse/physician collaboration experienced. Nurses seems to be more prone to stress than doctors, as nurses reported higher level job stress ($\chi = 26.59$), and low collaboration ($\chi = 14.15$), compared with the doctors who reported 18.28 mean level of stress and higher collaboration ($\chi = 39.46$). This may be due to the fact that the nurses are always with the patients and are closer to the patients than the doctors who only check on the patients, make their recommendations and leave them in the hand of the nurses.

There is also this aura of superiority among the doctors over the nurses, which, the nurses do not always agree with, which always bring about rivalry and may consequently affect the collaboration that should have existed between them, the nurses being at the receiving end.

In conclusion, there is a negative correlation between job stress and job satisfaction. When stress is high, job satisfaction is low and vice versa. So also Nurse-physician collaboration exerts a significant influence on job satisfaction. When there is high collaboration between nurses and doctors, job satisfaction is higher than when there is low collaboration. Health care organisations have to be aware of different facets of job satisfaction, so that effective policies and strategies may be put in place to address problem areas. Continuous monitoring of job satisfaction may be a useful tool to facilitate the development of the organisation. Therefore a non-stressful work environment coupled with good working relationship assures job satisfaction of nurses and doctors. Training and educational programmes for nurses and doctors, which focus on team work and working relationships, should be encouraged.

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