RESEARCH ARTICLE

Job Satisfaction among Nurses and Doctors in a Tertiary Hospital in North-West Nigeria: A Cross- Sectional Study



Emmanuel Ajuluchukwu Ugwa 1, Liman M Muhammad 2, Charity C Ugwa 3

Obstetrics and Gynaecology Department, Aminu Kano Teaching Hospital, Kano, Nigeria 2 Accounting Department, Bayero University, Kano, Nigeria

Abstract

Background and Objectives: This study was undertaken to assess the levels and correlates of job satisfaction among nurses and doctors in Aminu Kano Teaching Hospital (AKTH), and to compare job satisfaction level between nurses and doctors.

Methods: In a cross-sectional study, 350 nurses and doctors in Aminu Kano Teaching Hospital were surveyed. Socio-demographic data, employment characteristics and job satisfaction data were collected using questionnaire. Correlation between job satisfaction and socio-demographic and employment characteristics was examined using Chi-square test and Pearson coefficient. P < 0.05 was considered as statistically significant.

Findings: No significant difference in the average daily duration of work was found between nurses and doctors. The average length of service was significantly higher in nurses than in doctors (P = 0.03). Nurses were found to be significantly more satisfied with their job as compared with doctors (P = 0.001).

Conclusions: The finding that nurses in the surveyed hospital are more satisfied with their job compared with doctors is interesting because the nurses are generally thought to have more difficult work conditions and lower wages. Hence, further research worth to be conducted to identify the relevant reasons.

Keywords: Psychological Empowerment, Organizational Commitment, Hospital Administrative Staff, Hospital Management, Hospital Performance, Healthcare Services Delivery, Healthcare Workers, Human Resources

Background and Objectives

Job satisfaction is a strong predictor of employees' well-being [1] and a good predictor of decisions of employees to leave a job [2]. Managers have significant effects on people who work for them, and some of those effects are reflected in how people feel about their work [3]. Therefore, job satisfaction is an issue of paramount importance for both employers and employees. Employers benefit from satisfied employees as they are more likely to profit from lower staff turnover and higher productivity if their employees experience a high level of job satisfaction.

The concept of job satisfaction is relatively new in the health sector of some countries. Several researches have been conducted on various categories

*Corresponding author: Emmanuel Ajuluchukwu Ugwa, Obstetrics and Gynaecology Department, Aminu Kano Teaching Hospital, Kano, Nigeria, Tele: +2348035851872, Email: drajulugreatgod@hotmail.co.za

of health workers such as physicians [4], dentists [5], doctors [6], nurses [7], physiotherapists [8,9], and primary health care workers [10] in different parts of the world. A recent report on ophthalmologists showed 78.5% satisfaction rate at Owo in Ondo state, Nigeria [11]. This is higher than 69.5% [12], 50% [13] and 40% [14], 30% [15] elsewhere. In Pakistan, 56% of doctors expressed dissatisfaction in their jobs [16]. In another study, job satisfaction among nurses was reported to be 63.3% [17]. In 1976, Lockes [18] examined the nature and causes of job satisfaction.

Shortage of human resources is a major problem facing Nigerian health system, where a significant fraction of population lives in rural areas. Most of the district health services are provided by clinical health officers, especially those trained to provide services that would normally be provided by fully qualified doctors or specialists. As doctors and nurses are the mainstay of the Nigerian health service at the district

³ Nursing Services Department, Aminu Kano Teaching Hospital, Kano, Nigeria

level, it is important that they are supported and motivated to deliver standard services to the community. Studies on job satisfaction among doctors and nurses remain scanty in Nigeria and the African continent where shortage of health manpower and high burden of the disease are prevalent.

The implication of job satisfaction of health workers on patient care, patient satisfaction, patient outcome, and overall health care delivery cannot be over-emphasized. The majority of studies conducted to assess job satisfaction among health professionals have been conducted in the developed countries. The Millennial Development Goals seek among other things to reduce the indices of poor health by various fractions by 2015, but the human resource in the health sector needs to be motivated in order to achieve the goals. There has been a convergence of interest on the efforts by organizations to examine conditions that foster greater satisfaction with job. The main reason for this interest is the perception that broad even global shifts in the internal structures and employment practices are inducing changes in the ties that bind employees to their job. While the concern for employee satisfaction in Nigeria is high, empirical research on its correlates is insignificant. Studies that compared job satisfaction among doctors and nurses are scanty up until now.

The aim of this study was to assess the level of job satisfaction among doctors and nurses in AKTH, and compare the level of satisfaction between these two groups of professionals with the purpose of making recommendation for improvement of health human resource managers.

Methods

This was a cross-sectional survey of nurses and doctors working at various specialties in AKTH, Kano during 1st January- 30th May, 2012. Informed consent was obtained from all respondents. Questionnaire was used to obtain responses in a 5-point Likert scale: '1' = 'Strongly agree', '2' = 'Agree', '3' = 'Undecided', '4' = 'Disagree' and '5' = 'Strongly disagree'. Lower scores were, therefore, associated with agreement, and higher scores with increasing levels of disagreement. Individual questions were grouped by aspect covered into several composite indices, and the means of the responses for these composite indices were reported. Each question carried equal weight. Documented prevalence of job satisfaction from a previous similar study was 30.3% [4]. The sample size of 375 was calculated for the SD confidence of 95%).

The calculated minimum sample size was 325. Ten percent of the minimum sample size was added to ac-

count for attrition. Therefore, a required sample size of 350 was determined. Letters A and B were written on 350 questionnaires shared consecutively and equally among the groups A and B. Subsets of the study population (groups A and B), each comprising 175 respondents, were doctors and nurses, respectively. The sample size was assessed to be adequate after objective calculation and comparison with the sample size of the previous study [4].

The data obtained were analysed using SPSS software (version 16.0). Absolute numbers and simple percentages were used to describe categorical variables. Similarly, quantitative variables will be described using the measures of central tendency (mean, median) and the measures of dispersion (range, standard deviation) as appropriate. Possible association between job satisfaction and socio-demographic and employment characteristics was tested using Chi-square test and Pearson's coefficient of correlation. Statistical significance was considered when P < 0.05.

Results

Table 1 shows the demographic characteristics of the sample. As seen, most of the nurses (37.1%) were of ages 26-30 years while most of the doctors (40.6%) aged 31-35 years. No statistically significant difference between the mean age of nurses and doctors was detected (P = 0.076). Most of the nurses (28.6%) were Fulani's while most of the doctors (42.3%) were Hausa's. Most of the nurses (70.9%) and doctors (73.7%) were married. Most of the nurses (56.6%) had 4-6 families while most doctors (64%) had 7-9 families. The mean number of families for nurses (5±2) was statistically lower than for doctors (9±3) (P = 0.015).

Table 2 shows that most of the nurses (72%) and doctors (64.2%) worked for 7-9 hours on a daily basis. The average daily duration of work for nurses and doctors was 9±2 hours and 9.4±2.6 hours, respectively, with no significant difference between them (P = 0.075). Doctors (59.4%) had more instances of last promotion less than 1 year prior to the study than nurses (13.1%), while most of the nurses had their last promotion 1-2 years before the study. The mean duration of last promotion for nurses (1.8±1.2 years) was statistically higher than that of doctors $(0.9\pm0.9 \text{ years})$ (P = 0.01). Most of the nurses (46.3%) and doctors (54.3%) have been in the services of AKTH for 1-3 years. The average length of service for nurses (5.4±4.4 years) was significantly higher than for doctors $(3.5\pm2.1\text{years})$ (P = 0.03). Most of the nurses (64.7%) and doctors (45.1%) were at the beginning of their career as nursing officers and registrars, respectively.

Table 1 Distribution of socio-demographic characteristics of the respondents

Parameters	Nurses' frequency (%)	Doctors' frequency (%)	Overall (%)	Significance
Age (years)				
26-30	65 (37.1)	44 (25.1)	31.1	
31-35	46 (26.3)	71 (40.6)	33.5	
36-40	38 (21.7)	44 (25.1)	23.4	
41-45	11 (6.3)	10 (5.7)	6	
46-50	15 (8.6)	6 (3.4)	6	
Mean	34.6±6.6	34.5±5.3	100	0.076
Marital status				
Single	44 (25.1)	46 (26.3)	25.7	
Married	124 (70.9)	129 (73.7)	72.3	
Separated	7 (4)	-	2	
Family number				
None	4 (2.3)	-	1.1	
1-3	19 (10.9)	-	9.5	
4-6	99 (56.6)	4 (2.3)	29.5	
7-9	49 (28)	112 (64)	46	
10-12	4 (2.3)	43 (24.6)	13.5	
13-15	-	4 (2.3)	1.1	
16-18	-	12 (6.9)	3.5	
Mean	5±2	9±3	100	0.015

As shown in Table 3, while only 79.4% of the doctors were very satisfied with their job, 92% of the nurses expressed their high satisfaction with their job with a statistically significant difference (P = 0.001). The proportion of being undecided with respect to job satisfaction was significantly higher (P = 0.01) in the doctors (16.6) as compared with the nurses (8%). Overall, the nurses were more satisfied with their jobs than the doctors.

According to Table 4, while job satisfaction was higher among the doctors aged 41-45 (100%), there was a very weak positive correlation (r = 0.08) between age and job satisfaction. Those who were single were more satisfied with their job but there was also a very weak negative correlation between marital status and job satisfaction (P = -0.11). Job satisfaction was more in those who have worked for at least 7 years with a weak positive coefficient of correlation (r = 0.28). Although those who had no dependents were more job satisfied, the correlation between the number of dependents and job satisfaction was very weak (r = -0.09). The senior registrars were more sat-

isfied with their jobs than the consultants and registrars, while the registrars were the least satisfied of the three positions (r = -0.16). Therefore, duration of service correlates more with job satisfaction than with any other factor among the doctors.

Table 5 shows that job satisfaction increases with age among the nurses, and is highest in those aged 36-40 and 41-45. At 46-50 years, there was a sharp drop in satisfaction. There was a weak positive correlation between job satisfaction and age (r = 0.19). Those who were single were less satisfied with their jobs than those who were married, but the association between marital status and job satisfaction was very weak (r = 0.05). Job satisfaction rose to 100% among those who had served for 4-6 years. This association remained constant (although weak, r = 0.21) until 13-15 years of service. Job satisfaction was better with those who had 0-3 dependents, but the association between job satisfaction and number of dependents was weak (r = -0.13). The middle class officers, namely senior nursing officers (SNOs) and principal nursing officers (PNOs), were more satisfied

Table 2 Distribution of work information and resource dependents

Variables	Nurses (%)	Doctors (%)	Significance
Number of work hour/day			
4-6	4 (2.3)	4 (2.3)	
7-9	126 (72)	113 (64.6)	
10-12	34 (19.4)	43 (24.6)	
13-15	7 (4)	4 (2.3)	
16-18	4 (2.3)	12 (6.9)	
Mean	9±2	9.4±2.6	0.075
Duration of last promotion (years)			
<1	23 (13.1)	104 (59.4)	
1-2	106 (60.6)	53 (30.3)	
3-4	46 (26.3)	18 (10.3)	
Mean	1.8±1.2	0.9±0.9	0.01
Duration in service (years)			
1-3	81 (46.3)	95 (54.3)	
4-6	47 (26.9)	70 (40)	
7-9	4 (2.3)	5 (2.9)	
10-12	30 (17.1)	5 (2.9)	
13-15	13 (7.4)	-	
Mean	5.4±4.4	3.5±2.1	0.03
Position			
NO	118 (67.4)	-	
SNO	25 (14.3)	-	
PNO	14 (8)	-	
ACNO	18 (10.3)	-	
Registrar	-	79 (45.1)	
Senior Registrar	-	71 (40.6)	
Consultant	-	25 (14.3)	

Table 3 Distribution of levels of job satisfaction among nurses and doctors

Level of satisfaction	No. of doctors (%)	No. of nurses (%)	Significance
Dissatisfied	7 (4)	-	
Undecided	29 (16.6)	14 (8)	
Satisfied	139 (79.4)	161 (92)	0.001
Total	175 (100)	175 (100)	

Table 4 Correlation between job satisfaction with socio-demographic and job characteristics among doctors (n=139)

Parameters	Frequency (%)	Coefficient
Age		-0.075
26-30	34 (77.3)	
31-35	56 (78.9)	
36-40	34 (77.3)	
41-45	10 (100)	
46-50	5 (83.3)	
Marital status		0.11
Single	41 (89.1)	
Married	98(76)	
Duration of service		-0.28
1-3	69 (72.6)	
4-6	60 (85.7)	
7-9	5 (100)	
10-12	5 (100)	
13-15	-	
Number of Dependents		-0.09
None	11 (100)	
1-3	19 (62.5)	
4-6	68 (94.7)	
7-9	41 (73.3)	
Position		-0.16
Consultant	20 (80)	
Senior Registrar	57 (87.3)	
Registrar	62 (78.5)	

with their job than the lowest nursing officers (NOs) and the high-ranking officers, namely assistant chief nursing officers (ACNOs); however, this association between job satisfaction and position or grade was weak (r = 0.17).

Discussion

The present study showed that the proportion of doctors satisfied with their jobs in the tertiary health care center under study is 79.4%, which is similar to a previous report among the ophthalmologists who showed 78.5% satisfaction rate at Owo in Ondo state, Nigeria [11]. This is higher than 69.5% [12], 50% [13], 40% [14] and 30% [15] elsewhere. In Pakistan, for instance, 56% of the doctors expressed dissatisfaction with their jobs [16]. Job satis-

faction among the younger doctors was low; however, it increased abruptly until the age of 45 years, which fell again gradually in the fifth and sixth decades of life. This is in keeping with research evidence, which indicates that job satisfaction increases with age [13, 19], but in contrast to another study, where younger doctors expressed more satisfaction with their jobs [12]. This finding needs to be reviewed with regard to the distribution of satisfaction against the years of service put in by these doctors. A very large proportion of the doctors who have been in the service longer expressed satisfaction with their job while those who have been in the service for shorter duration expressed more dissatisfaction. This can affect patient care and reduce quality of care. The mean working hours per day among the doctors in this study was 9.4±2.6, which is similar to 9.7 ± 2.7 hours per day reported in In16

Table 5 Correlation between job satisfaction and socio-demographic and job characteristics among nurses (n=161)

Parameters	Frequency (%)	Correlations
Age		0.19
26-30	56(88.2)	
31-35	41(91.7)	
36-40	38(100)	
41-45	11(100)	
46-50	15(80)	
Marital status		0.05
Single	41(91.7)	
Married	120(94.1)	
Duration of service		0.21
1-3	70(89.5)	
4-6	45(100)	
7-9	5(100)	
10-12	29(100)	
13-15	12(100)	
Number of Dependents		-0.13
None	1(100)	
1-3	5(100)	
4-6	23(88.5)	
7-9	12(92.4)	
Position		0.17
NO	107(90.9)	
SNO	25(100)	
PNO	15(100)	
ACNO	14(80)	

dia with significantly higher levels of job satisfaction [23]. Those in radiology and chemical pathology had the highest job satisfaction in this study.

According to the results of this study, the proportion of nurses satisfied with their jobs in the tertiary health care center under study is 92%, which is higher than in another report where job satisfaction was 63.3% [17]. The report of this study shows that age, position, specialty, and length of service have low correlation with job satisfaction. This is consistent with the reports of previous researches [24,25]. Job satisfaction correlates positively more with the length of service as those nurses who have worked for longer duration with the hospital tended to be more satisfied with their

jobs. More researches are required to understand the relative importance of identified factors of job satisfaction [26]. An earlier work posited that autonomy and task delegation strongly predict job satisfaction [27]. Another study, however, reported that impact of time on job satisfaction was highly dependent on specialism, and nurses were more satisfied with relationship rather than pay [28]. Some nurses were dissatisfied because they felt being devalued [29]. Other studies have shown that nurses felt they were not treated as clinicians or peers by doctors and hospital managers but as assistants, and were at risk of being replaced by less-qualified personnel who cost less to employ [30].

This study reports that nurses were more satisfied with their jobs compared to doctors. It is in contrast to the previous studies showing that doctors tend to be more satisfied with their jobs than nurses in the same hospital [31]. The reason may be related to the length of service. The nurses have spent significantly more years of service than the doctors. Researches have consistently shown that length of service correlates with jobs satisfaction [24]. In the present study, the nurses and doctors worked for comparable duration of time per day, and this report is in keeping with some researches [32.33]. One study reported that doctors worked for more hours than nurses, and this may be a factor in doctors' job dissatisfaction [34].

Study Limitations

The main limitation of this study is that the use of questionnaire means that individual opinion has been assessed, which may not be very objective. This study assessed job satisfaction among the doctors and nurses only in Aminu Kano Teaching Hospital (AKTH), North-west Nigeria. Therefore, a multi-center study is highly required in order to address other regional issues that may affect job satisfaction.

Conclusions

This study showed that nurses are more satisfied with their job than doctors. Improvement of job satisfaction and working conditions could be achieved through effective regulation of working hours and improvement of recognition for medical work regarding the monetary and such as payment and non-monetary factors like positive feedback for good work. Position or grade was more related to job satisfaction for doctors than for nurses. The duration of service correlates with job satisfaction among both nurses and doctors. As doctors and nurses are the mainstay of the Nigerian health service at the district level, it is important that they are supported and motivated to deliver standard services to the community.

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Competing Interest

The authors declare no competing interests.

Authors' Contribution

Ugwa EA conceived and designed the study and contributed

to data collection and analysis. Muhammad LM contributed to the study design, analysis of the results, and drafting the manuscript. Ugwa CC was involved in data collection and statistical analysis of the data.

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