



RADIOGRAPHER'S JOB SATISFACTION AND ITS IMPACT ON SERVICE DELIVERY

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ABSTRACT

BACKGROUND: Job satisfaction has become an essential issue for healthcare organizations in recent years because of potential labour shortages and their effect on patient care. Rapid changes in radiology services have placed more interest on radiographers who face increased physical risk in the form of exposure to ionizing radiation which highlights the importance of analysing their working conditions and satisfaction.

OBJECTIVE: To assess radiographers job satisfaction and its impact on service delivery.

MATERIALS AND METHOD: A cross-sectional, prospective survey of 77 Nigerian radiographers was conducted. The data collection instrument was a 31-item questionnaire distributed to the radiographers. Descriptive and inferential statistics was done. Pearson's correlation was used to reveal the relationship between selected demographic characteristics and job satisfaction.

RESULTS: Radiographers got their highest satisfaction from communication with a mean Likert scale of (3.49 ± 1.21) . Radiographers were somewhat satisfied with other areas such as interpersonal relationship, nature of work, opportunities, job security, supervision, operating procedures, method/change/innovation, conflict resolution, utilization of skills, flexibility and independence, organizational structure and quality of service with points ranging from (2.65 ± 2.00) to (3.38 ± 1.47) . The least satisfaction point (2.16 ± 1.39) was observed on the subject of pay, followed by working conditions (2.48 ± 1.28) and participation in decision making (2.48 ± 1.65) . Based on overall job satisfaction, it was observed that radiographers under study were somewhat satisfied with their job with a mean scale of (2.95 ± 0.37) . Majority of the radiographers affirmed that their job satisfaction affected their performance, working hours and daily attendance to work respectively. Half the number of respondents said that they would prefer another job apart from their current job if given a choice. Results also showed that there exists no significant correlation between gender, age, educational qualification, rank, work experience with general job satisfaction.

CONCLUSION: Nigerian radiographers within the study location are somewhat satisfied with their job and half of them would prefer another job if given a choice.

KEYWORDS: Job satisfaction, Radiographers, working conditions, Nigeria

INTRODUCTION

Job satisfaction is an important integral part of man as well as an establishment. People around the world aspire to be gainfully employed and be happy or satisfied with what they are doing.

Job satisfaction is an essential value composed of satisfaction with various subjects, objects and phenomena of the job and this value is ever-changing (Useckiene, 2005). Job satisfaction has been defined in various contexts by authors.

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It can be looked at in terms of an individual matching his personal needs with the perceived potentials of the occupation for satisfying his or her needs and where there was a discrepancy between an individual's need and what the job offers, there will be dissatisfaction (Kuhlen and Diboye, 1959). However, job satisfaction can also be seen as multi-dimensional in the sense that, one may be more or less satisfied with some aspects of his or her job which may include the supervisor, pay, condition of workplace and so on (Smith and Hulin, 1967). Job satisfaction can also be defined as "the extent to which people like (satisfaction) or dislike (Dissatisfaction) their jobs" (Spector *et al.*, 2006).

Employee's job satisfaction is essential for ensuring an enterprise's productivity, the quality of its service delivery, the effectiveness of its activity as well as for retaining loyal specialists (Viningiene, 2014). When job satisfaction is poor, it may lead to weak cooperation and communication links, poor quality of service delivery, hostility, poor health and high staff turnover (Ozeraitiene *et al.*, 2014). Any dissatisfied health worker is a potential risk factor for health care related accident and may affect the workers mental health as well as performance (Khuwaja *et al.*, 2004). According to various researchers, employees who are satisfied with their job are more readily immersed in it, work more effectively and productively and have a lower risk of the burnout syndrome. There are various factors by which job satisfaction depends upon. These factors include; the nature of the work, workload, relationships with coworkers, the operating procedures, pay, supervision and promotion opportunities (Hutton *et al.*, 2014; Aziri, 2011).

According to research data, older employees frequently are more satisfied with their jobs than their younger colleagues are (Tamuliene *et al.*, 2016). Better job satisfaction is also frequently associated with better education. Researchers have stated that people who are better educated have more interesting jobs, a greater autonomy, and better possibilities to satisfy their needs (Al Maqbali, 2015; Curtis and Glacken, 2014).

It is true that radiographers across the world remain indispensable and highly vital as far as health care institutions and patient care is concerned. Consequently, the overall condition of the radiographer is paramount to the promotion of excellent wellbeing of the sick patient. To that end, it is evident that health workers who are dissatisfied with

their job have compromised efficiency and a direct or indirect negative impact on the wellbeing of the patient (Lehman *et al.*, 2015). In view of this fact, several studies have been carried out by diverse intellectuals to evaluate and assess job satisfaction among medical practitioners and other allied health professionals across the world (Faye *et al.*, 2013). Locally, it was reported that radiographers in southeast Nigeria are not satisfied with their jobs and would prefer another job if the opportunity present itself (Okaro *et al.*, 2010). These findings were also observed in Northern Nigeria that radiographers in that location were clearly dissatisfied with their salaries (David, 2010). Now, what are the main causes of strikes among radiographers and other allied health professionals? Has the welfare of radiographers in Nigeria improved over the years? If not, what then is the way forward? These are some of the questions that merit urgent answers.

This study was centered on the collated views of medical radiographers in some hospitals and diagnostic centers in South-South Nigeria using job assessment scales and analyzed them in order to ascertain job satisfaction and its impact on service delivery.

MATERIALS AND METHOD

A cross-sectional, descriptive survey was conducted between July and August, 2023. The survey was focused on Nigerian radiographers who were working in the South-South region of Nigeria during the period of the study. The data collection instrument was a 31-item questionnaire designed in line with the objectives of the study.

The questionnaire was divided into two sections-1 and 2. Section 1 (items 1-8) assessed the socio-demographic information of the respondents and some general questions on job satisfaction. While section 2 (items 9-31) was made up of a multidimensional instrument to assess job satisfaction.

A four-point Likert scale questions to rate different aspects of job satisfaction was used. Satisfied was assigned the value of 4, somewhat satisfied 3, somewhat dissatisfied 2, and dissatisfied 1. A total of 85 questionnaires were distributed, of which 77 were duly filled and returned, giving a response rate of 91%.

Data Analysis

Data collected was analyzed using Statistical Package for Social Sciences (SPSS Version 19.0). Descriptive statistics was done using simple percentages and charts. P-value was set at $P \leq 0.05$ and considered significant.

RESULTS

TABLE 1: Socio-demographic characteristics of respondents

Socio-demographic characteristics		Frequency	Percentage (%)
Gender	Male	50	64.9
	Female	27	35.1
	Total	77	100
Age	20-29	17	22.1
	30-39	51	66.2
	40-49	6	7.8
	50-59	3	3.9
	60 and above	0	0
	Total	77	100
Marital status	Single	24	31.2
	Married	53	68.8
	Divorced	0	0
	Widowed	0	0
	Total	77	100
Educational Qualification	B.Sc	70	90.9
	M.Sc	5	6.5
	Ph.D	2	2.6
	Others	0	0
	Total	77	100
Rank	Radiographer II	31	40.2
	Senior Radiographer	15	19.5
	Principal Radiographer	11	14.3
	Chief Radiographer	14	18.2
	Assistant Director	3	3.9
	Deputy Director	3	3.9
	Director	0	0
	Total	77	100
Work Experience	0-5	34	44.2
	6-10	30	38.9
	11-15	7	9.1
	16-20	3	3.9
	21+	3	3.9

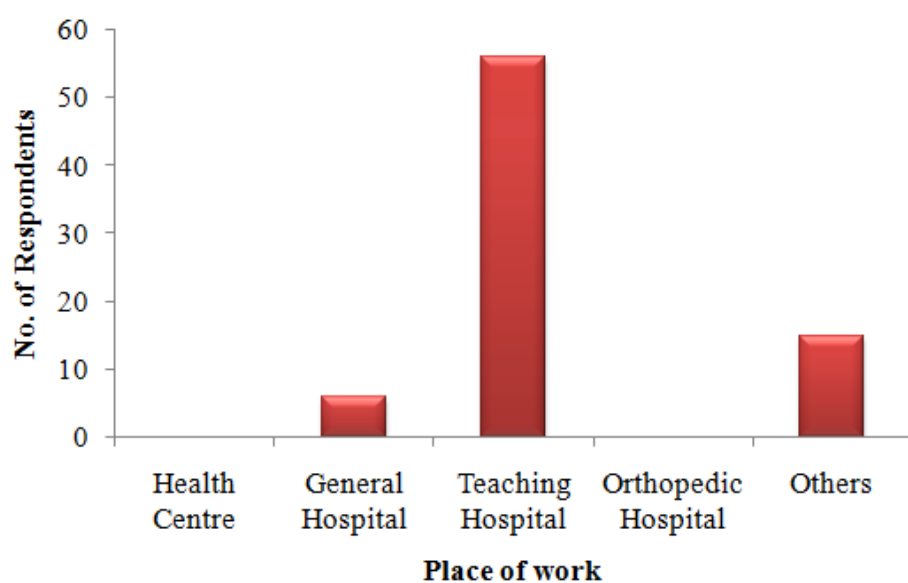


FIG. 1: Respondents' place of work

TABLE 2: Respondents' satisfaction ratings

S/N	Job satisfaction indices	Rating (Mean \pm SD)	Interpretation
1.	Communication	3.49 \pm 1.21	Satisfied
2.	Interpersonal relationship	3.34 \pm 1.35	Somewhat satisfied
3.	Nature of work	3.12 \pm 1.72	Somewhat satisfied
4.	Opportunities	2.73 \pm 2.00	Somewhat satisfied
5.	Job security	3.16 \pm 1.37	Somewhat satisfied
6.	Supervision	3.04 \pm 1.53	Somewhat satisfied
7.	Operating procedure	3.36 \pm 1.42	Somewhat satisfied
8.	Method/change/innovation	2.87 \pm 1.36	Somewhat satisfied
9.	Conflict resolution	2.87 \pm 1.28	Somewhat Satisfied
10.	Participation in decision making	2.48 \pm 1.65	somewhat dissatisfied
11.	Utilization of skills	2.78 \pm 1.34	Somewhat satisfied
12.	Flexibility and independence	3.38 \pm 1.47	Somewhat satisfied
13.	Working condition	2.48 \pm 1.28	Somewhat dissatisfied
14.	Pay	2.16 \pm 1.39	Somewhat dissatisfied
15.	Organizational structure	2.65 \pm 2.00	Somewhat satisfied
16.	Quality of service	3.04 \pm 1.49	Somewhat satisfied
	Overall Job satisfaction	2.95 \pm 0.37	Somewhat Satisfied

TABLE 3: Perception of respondents on general job satisfaction

QUESTION	Yes (%)	No (%)
Does your level of job satisfaction affect your performances?	60 (77.9%)	17 (22.1%)
Does your level of job satisfaction affect your daily attendance to work?	46(59.7%)	31(40.3)
Does the amount of your working hours affect your job satisfaction?	42(54.5%)	35(45.5%)
Do you have another job in addition to this one?	9 (11.7%)	68 (88.3%)
If given a choice, would you have preferred another job?	40 (51.9%)	37 (48.1%)

TABLE 4: Pearson's Correlation between selected demographic characteristics and job satisfaction

Demographic characteristics	Pearson's value	p-value	Interpretation
Gender	-0.01	0.35	Insignificant

Demographic characteristics	Pearson's value	p-value	Interpretation
Age	0.18	0.13	Insignificant

Demographic characteristics	Pearson's value	p-value	Interpretation
Education qualification	0.17	0.14	Insignificant

Demographic characteristics	Pearson's value	p-value	Interpretation
Rank	0.57	0.62	Insignificant

Demographic characteristics	Pearson's value	p-value	Interpretation
Work experience	0.15	0.20	Insignificant

DISCUSSION

From the study, it was observed that majority of the respondents were male. This result was similar with another researcher who reported male dominance (68.8%) in the radiography profession under study than females (31.2%) (Okaro *et al.*, 2010). However, based on marital status, the present study sampled more married radiographers to single radiographers. This result contrasts with another study who reported more unmarried radiographers (93.8%) than married ones (6.2%) (Okaro *et al.*, 2010).

Majority of the radiographers (90.9%) in this study were holders of Bachelor of Science (B.Sc) degree while few (6.5%) and (2.6%) were Masters of Science (M.Sc) and Ph.D degree holders respectively. Meanwhile in a research conducted on job satisfaction among radiographers in South-East Nigeria, although B.Sc holders were dominant in the study, but there were more M.Sc holders (37.5%) when compared to the current study (Okaro *et al.*, 2010).

Results of this study indicate that the highest satisfaction derived from radiographers under study was in the aspect of communication. For other areas like interpersonal relationship, nature of work, opportunity, job security, supervision, operating procedure, method/change/innovation, conflict resolution, utilization of skills, flexibility and independence, organizational structure and quality of service, it was observed that respondents were somewhat satisfied. This result affirms research carried out on radiographers specializing in nuclear medicine which was reported that majority of them were satisfied with their interpersonal relationship (Knight, 2004).

On the grounds of supervision, nature of work and communication, the results of this study was in line with the research conducted on the employees of the Faculty of Radiology in Lithuania and observed that respondents were satisfied with co-workers, supervision, nature of work and communication (Sattelfield, 2015). On the other hand, the current results differ with regards to operating procedure, as respondents in the current study were somewhat satisfied with their operating procedure while those that were conducted on the employees of the Faculty of Radiology in Lithuania were not (Sattelfield, 2015).

On the subject of pay, respondents reported that they were somewhat dissatisfied with their pay. This was in line with the research conducted on job satisfaction among radiographers in North-east Nigeria. It was reported that radiographers under study were clearly dissatisfied with their salaries (David, 2010). Hence this result affirms the assumption that healthcare specialists' salaries are a relevant issue and the most common cause of dissatisfaction with their job.

Regarding overall job satisfaction, it was observed that the radiographers were somewhat satisfied with their job with mean score of (2.95 ± 0.37) .

This result differs with the research conducted on job satisfaction among Nigerian radiographers in South-Eastern Nigeria. They found out that those radiographers were slightly dissatisfied with their job (Okaro *et al.*, 2010).

On the aspect of perception of respondents on general job satisfaction, results of the study indicates that majority of the respondents (60) affirmed that their job satisfaction affects their performance, while 17 did not agree with this. Looking at daily attendance to work, 46 respondents opined that this factor is affected by their job satisfaction, while 31 respondents said it did not. The relationship between working hours and job satisfaction showed that 42 respondents were affected by this factor while 35 were not. Majority of the respondents 68 did not have another job aside their current job while 9 did have. When asked if respondents preferred another job to their current job, 40 said yes, while 37 said no.

Selected demographic characteristics such as gender, age, educational qualification, rank and work experience were correlated with the general job satisfaction and it was observed that there exists a negative non-significant correlation between respondent's gender and job satisfaction. However, other demographic characteristics showed a positive non-significant correlation with general job satisfaction.

Generally, it was observed that there was no significant correlation between respondent's demographic characteristics with job satisfaction. The current results contrast the research that younger radiographers were more satisfied with supervision, relationships with co-workers and other benefits (Aurika *et al.*, 2017). With regards to educational qualification and job satisfaction, research reports that respondents with post-secondary, non-tertiary education were less satisfied with supervision and relationships with co-workers compared to radiographers with higher level of education (Aurika *et al.*, 2017). But the result of the current study contrasts with this statement.

CONCLUSION

From the result of this study, it can be said that radiographers under study were somewhat satisfied with their job and half of them would prefer other jobs from their current job if given the opportunity. This may be due to the fact that they consider their pay as being low, as well as unfavourable working condition and participation in decision making.

CONFLICT OF INTEREST

None declared

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