

Job Turnover Intention and Associated Factors among Physicians in a Tertiary Hospital in Southwest Nigeria

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Abstract

Background: Job turnover intention is the last element in the turnover process. Recently, there has been a mass exodus of health workers away from Nigeria especially the physicians. This warrants a study of the turnover intentions of these individuals. This study was therefore, conducted to assess the level of turnover intentions and associated factors among physicians at the University College Hospital (UCH), Ibadan, Nigeria.

Materials and Methods: Between August and October, 2021, the cross-sectional survey recruited 215 physicians who had worked for at least one year in UCH using a stratified random sampling method. The questionnaire contained questions assessing the sociodemographic characteristics, overall job satisfaction, job turnover intention, and mental health status of the participants. A logistic regression model of turnover intention was developed which identified predictors ($p \leq 0.05$)

Results: The mean age of respondents was 35.8 ± 5.2 years. Over half of the physicians had turnover intention (121: 56.3%) and a higher percentage had intention to travel abroad (101: 83.5%). Only 85 (39.5%) physicians showed that they were satisfied and 142 (66.0%) physicians had poor mental health status. The bivariate analysis revealed that job satisfaction ($p = 0.000$), mental health status ($p = 0.003$), and the number of dependants ($p = 0.014$) were associated with turnover intention. However, the binary logistic regression identified only job satisfaction and the number of dependants as predictors of turnover intention.

Conclusion: More than half of the physicians surveyed had turnover intentions which was predicted by the level of job satisfaction and the number of dependants.

Keywords: Physicians, Job Satisfaction, Personnel Turnover, Nigeria.

Introduction

Job turnover is a measure of employees’ retention in a workplace and is typically assessed by the rate at which employees leave an organization [1]. A closely related construct is the turnover intention which describes employees’ plan to leave an organization to seek for alternative opportunities elsewhere [2]. Intuitively, turnover intention precedes and it is an indicator of job turnover [3, 4]. Employees remain on a particular job as long as they are comfortable with the work environment

and conditions, but the length of time spent in a particular job varies from one person to another. Turnover may be voluntary in which case it is initiated by the employee, or it could be organization-driven [5]. The most important asset of any organization is the workforce whose effectiveness directly impacts the success of that organization [6]. An organization may invest huge resources into its core operations and activities, but may not achieve the set objectives if the organization’s workforce is not highly effective and motivated [7].

Employees quit their job after weighing the advantages and disadvantages of staying and leaving. High job turnover affects both organizations and employees either positively or negatively. The most common organizational impact of job turnover is the loss of experienced employees which can cost the organization a substantial amount of capital in recruiting as well as training new employees [8]. However, employees, both stayers and leavers, tend to adjust attitudes and behavioural characters when an employee leaves an organization. An organization with a high job turnover rate faces greater risks of failed performances, especially if skilled workers are often leaving and the workforce is packed with novices [1, 9].

The health workforce is in a turnover crisis globally, particularly in developing countries such as the sub-Saharan Africa [10], where human resources for healthcare is already suboptimal. The performance of the health care system is influenced by health workers' attrition and brain drain. Studies have reported varying degrees of job turnover and turnover intentions across countries [11-17]. Factors such as psychosocial job stressors, high levels of distress, frequent sleep problems, heavy workloads, job dissatisfaction, and poor workplace relationships have been reported to be associated with a high rate of job turnover among physicians [16].

Previous studies investigating factors associated with job turnover intentions have focused on work-related constructs such as co-worker relationships, job demand, autonomy, supervision and job satisfaction [18]. Among physicians in China with 42% turnover intention rate, factors such as location, age, job title, physicians' position, work pressure, and job satisfaction were associated with turnover intentions [17]. Similarly, a multicenter study among Iraqi physicians reported that about 55% of the population sampled were actively seeking employment elsewhere and turnover was associated with low job satisfaction [11]. In Nigeria, turnover intentions appear to be more prevalent with as much as 80% of trainee physicians indicating intentions to travel abroad within the next two years and highlighting preferred destinations including the United Kingdom, Canada, Australia, and the United States [19]. Recently, there has been a massive exodus of professional employees including physicians from Nigeria to key destinations such as the UK [20]. Nigeria has been unable to retain most of the physicians trained, with the scarce public resources compounding the critical human resources for health. This may be due to decline in job satisfaction and increasing psychological distress which have been reported in recent times among physicians practicing in Nigeria [21, 22]. A low level of job satisfaction precedes job turnover intention and ultimately, job turnover. It is thus, prudent to suspect an increasing job turnover intention among physicians in

Nigeria because of the declining job satisfaction levels. This study therefore, aimed to assess the level of turnover intentions and associated factors among physicians working in a tertiary hospital in southwest Nigeria.

Materials and Methods

This was a cross-sectional study conducted among physicians in the University College Hospital (UCH), Ibadan, Nigeria. It was established by an August 1952 Act of Parliament in response to the need for the training of medical personnel and other healthcare professionals for the country as well as the West African Sub-Region. It is a referral centre to other hospitals, both public and private in Oyo state and Nigeria at large. Currently, UCH has up to 1,000-bed spaces, 200 examination couches, and 65 service plus clinical departments that run 96 consultative out-patient clinics a week in 50 specialty and sub-specialty disciplines. It is a tertiary teaching hospital responsible for training of physicians and other medical cadre. About 2000 physicians are employed in the hospital, working in the various clinical departments and specialties. They include all doctor cadres including resident physicians (in residency training), medical officer (physicians in public service who were not specialist), and consultants physicians (specialist physicians).

Data collection was carried out between August and October, 2021. Permission was obtained from the Chairman Medical Advisory Committee (CMAC) and signed informed consent was obtained from each participant prior to data collection. Physicians who were employed in the hospital as at the time of the survey, were invited to participate in the study using a stratified random sampling method. A minimum of one year employment was used as the inclusion criteria. Physicians were stratified according to their area of specialty. Specialities were used as strata and the sample size was distributed proportionate to the stratum size. In each stratum, a sample frame of eligible physicians who had worked for at least one year, was developed and systematic random sampling was employed to select the number of physicians allocated to the stratum.

A minimum sample size of 195 was estimated for a single proportion of turnover intention, using a p of 85% turnover intention from a previous study among primary healthcare workers in Lagos, Nigeria [23], and a 5% allowable error margin. The data collection instrument was a structured self-administered questionnaire containing questions that assessed the sociodemographic characteristics, overall job satisfaction, job turnover intention, and mental health status of the physicians. The questionnaire was distributed to eligible participants who were given 24

hours after which research assistants went back to retrieve filled questionnaire.

The questionnaire had three sections. Section A consisted of 10 questions that assessed the socio-demography characteristics (such as age, sex, marital status, cadre, work experience and workload etc.) and one question that assessed the level of overall job satisfaction of the participants. The level of overall job satisfaction was measured with a five-point scoring scale; 1 (very dissatisfied), 2 (dissatisfied), 3 (neither satisfied nor dissatisfied), 4 (satisfied), 5 (very satisfied). To estimate the level of job satisfaction, the scores 5 (very satisfied) and 4 (satisfied) were classified as being satisfied with work, while the scores 3 (neither satisfied nor dissatisfied), 2 (dissatisfied), and 1 (very dissatisfied) were classified as not satisfied with work. Section B consisted of two sub-sections: intention to leave work also known as turnover intention and intention to leave the country. The intention to leave work has a 3-item job turnover intention survey developed by Nadler et al. [24]. It consists of three structured job turnover intention items related to the employee's certainty of leaving the job, with a seven-point scoring scale ranging from 7 (strongly agree) to 1 (strongly disagree) according to the level of agreement [24]. The mean score was obtained by adding scores across the three job turnover questions (lowest of 1 point and highest of 7 points per question) in the scale divided by the number of the items which was 3. The higher the score, the greater the intention to leave the present job. To estimate the level of job turnover intention among the physicians, the mean scores above 3.5 were classified as an indication for turnover intention [25]. Intention to leave country consist of one item, with a yes or no option, assessing the participant's intention to relocate to a different country.

The last section of the questionnaire contained the 12-Item General Health Questionnaire (GHQ-12) to screen for psychiatric morbidity over the past few weeks using a 4-point Likert-type scale ranging from 3 (much more than usual) to 0 (less than usual) [26]. The GHQ-12 has two types of scoring systems. In the first system called the bimodale scale (0-0-1-1), a score of zero (0) is assigned to the first two response options and a score of one (1) is assigned to the last two responses for each of the items. In the second scoring system called the Likert-scale (0-1-2-3), a score of 0, 1, 2, and 3 are assigned to each of the four response options, respectively [27-29]. Thus, on the bimodal scale, a respondent could obtain a total score ranging from 0 to 12. A higher score on the GHQ-12 would be undesirable. The positively-worded items on the GHQ-12 were scored from 0 (much more than usual) to 1 (less than usual) while the negatively-worded items were scored from 1 (much more than usual) to 0 (less than usual) [26]. A probable psychiatric case was identified by a threshold cut-off of ≥ 3 , which has been used in

previous studies [27-29]. High scores would indicate worse mental health. The reliability of the GHQ-12 scale has been reported in other studies with a Cronbach's α of 0.70 [29], 0.76 [26], and 0.93 [30].

The data gathered were analyzed using IBM SPSS version 20.0 (IBM Corporation, Armonk, NY, USA). Descriptive statistics including the frequencies, percentages, and means were presented, while bivariate comparisons were done using Chi-square to test the associations between job turnover intention among physicians and levels of job satisfaction, mental health status, and sociodemographic characteristics. Covariates were screened at bivariate levels using the Chi-square test where those that were significantly associated with job turnover intention at $p\text{-value} \leq 5\%$ were included in a binary logistic regression model of job turnover intention. The logistic regression model was used to identify factors that were independently associated with physicians' turnover intention. Statistical significance was determined at $p \leq 0.05$.

Results

A total of 220 questionnaire were distributed and 215 were returned, giving a response rate of 98%. The demographic characteristics of the participants are presented in Table 1. The mean age of the respondents was 35.8 ± 5.2 years. The majority of the respondent 146 (67.9%) were within the age range of 30 to 39. Of the 215 physicians who responded, 147 (69.3%) were resident physicians, 54 (25.1%) were medical officers, and 12 (5.6%) were specialist consultants. Over half of the physicians were male 148 (68.8%). A total of 159 (74.0%) of the physicians were married. The mean year of total work experience of the physicians was 8.97 ± 3.9 and nearly half of the physicians 94 (43.7%) had worked for 6 to 10 years since their qualification as a medical physician. One hundred and thirty-one (60.9%) physicians had worked in UCH between 1 to 5 years with a mean of 4.27 ± 3.2 years. The physicians worked a mean of 63.6 ± 27.3 hours per week with a greater percentage of the physicians 149 (69.3%) working 50 hours or more every week. One hundred and fifty-two (70.7%) physicians had less than 5 dependants. The majority of the participants 180 (83.7%) agreed that their work was the primary source of income to cater for their needs and that of their dependants.

Out of 215 physicians, 121 (56.3%) of them had the intention to leave their current work. A greater percentage of these physicians (101: 83.5%) expressed their intention to relocate to another country, while 20 (16.5%) physicians wanted to leave for other organizations in Nigeria. The mean score of the overall job satisfaction score was 3.1 ± 1.0 . Only 85 (39.5%) respondents indicated that they were satisfied (74; 34.4%) or very satisfied (11; 5.1%) with their job. Other responses included neither satisfied nor dissatisfied (72;

33.5%), dissatisfied (40; 18.6%), and very dissatisfied (18; 8.4%). The mean score of the GHQ-12 using the Bimodal scoring method was 3.9 ± 2.9 . About two-

thirds physicians 142 (66.0%) met the threshold cut-off of ≥ 3 and were considered to have probable psychiatric morbidity.

Table 1. Sociodemographic characteristics of respondents (N = 215)

Characteristics		Frequency	Percentage (%)
Age group(yr)	20 – 29	26	12.1
	30 – 39	146	67.9
	≥ 40	43	20.0
Sex	Male	148	68.8
	Female	67	31.2
Marital status	Single	56	26.0
	Married	159	74.0
Cadre	Consultant	12	5.6
	Residents	149	69.3
	Medical officer	54	25.1
Years of work experience in UCH	1 – 5	131	60.9
	> 5	84	39.1
Total years of work experience	1 – 5	44	20.5
	6 – 10	94	43.7
	> 10	77	35.8
Working hours per week(h)	< 50	66	30.7
	≥ 50	149	69.3
Work is the primary source of financial support(h)		180	83.7
Number of dependants*	< 5	152	70.7
	≥ 5	63	29.3

*people who rely on the physician for subsistence

Table 2 describes the test of associations between turnover intention and potential explanatory variables. The participant’s overall job satisfaction ($\chi^2 = 28.533$, $p = 0.000$), number of dependants ($\chi^2 = 5.990$, $p = 0.014$), and mental health status ($\chi^2 = 8.571$, $p = 0.003$) were significantly associated with turnover intention at bivariate analysis. This suggests a significant association between the participants’ job satisfaction, number of dependants, as well as mental health status and turnover intention. There was no sufficient statistical evidence to suggest an association between turnover intention and other sociodemographic factors. The study found that 32 (37.6%) of the physicians were

satisfied with work and had the intention to leave work. Forty-one (56.9%) of the respondents were neither satisfied nor dissatisfied with their work but had a turnover intention, while 48 (82.8%) were dissatisfied with their work and had the intention to leave the job as well. Ninety (63.4%) of physicians who had probable psychiatric morbidity had the intention to leave their current work, while only 31 (42.5%) of the physicians who had good mental health status had also turnover intention. Thus, it appeared that the more satisfied physicians and those with good mental health status had lower turnover intention.

Table 2: Bivariate analysis of turnover intentions and potential predictors

Characteristics		Total	Turnover intention		χ^2	P value
		n (%) 215 (100)	Yes n (%) 121 (56.3)	No n (%) 94 (43.7)		
Age group	20 – 29	26 (12.1)	18 (69.2)	8 (30.8)	2.268	0.322
	30 – 39	146 (67.9)	81 (55.5)	65 (45.5)		
	≥ 40	43 (20.0)	22 (51.2)	21 (48.8)		
Sex	Male	148 (68.8)	86 (58.1)	62 (41.9)	0.646	0.422
	Female	67 (31.2)	35 (52.2)	32 (47.8)		
Marital status	Single	56 (26.0)	33 (58.9)	23 (41.1)	0.216	0.642
	Married	159 (74.0)	88 (55.3)	71 (44.7)		
Cadre	Consultant	12 (5.6)	7 (58.3)	5 (41.7)	1.155	0.561
	Residents	149 (69.3)	87 (58.4)	62 (41.6)		
	Medical officer	54 (25.1)	27 (50.0)	27 (50.0)		
Years of work experience in UCH	1 – 5	131 (60.9)	77 (58.8)	54 (41.2)	0.851	0.356
	> 5	84 (39.1)	44 (52.4)	40 (47.6)		
Total years of work experience	1 – 5	44 (20.5)	29 (65.9)	15 (34.1)	2.117	0.347
	6 – 10	94 (43.7)	50 (53.2)	44 (46.8)		
	> 10	77 (35.8)	42 (54.5)	35 (45.5)		

* = Significant at $p = 0.05$

Binary logistic regression was utilized to examine whether job satisfaction, mental health status, and the number of dependants predicted the likelihood of job turnover intention among physicians. The Hosmer and Lemoshow test indicated that the model had a good fit since $p = 0.988$ ($p > 0.05$). The result of the logistic regression model of job turnover intention has been summarized in Table 3. This showed that only the overall job satisfaction and the number of dependants

significantly predicted the intention to leave current job among physicians. Physicians who were satisfied had 68% reduced of turnover intention compared to dissatisfied physicians ($OR = 0.321$, $p < 0.001$, $95\% CI = 0.174-0.594$). Physicians who had < 5 dependants demonstrated 52% reduction in the odds of turnover intention compared to those who had ≥ 5 dependants or more ($OR = 0.475$, $p = 0.027$, $95\% CI = 0.246-0.918$) (Table 3).

Table 3. Logistic regression model of turnover intention among physicians in Ibadan, Nigeria

Variables		Sig	Odds Ratio	95% CI of OR
Overall job satisfaction	Satisfied	0.000*	0.321	0.174-0.594
	Dissatisfied (Reference)			
Mental health status	psychiatric morbidity	0.094	1.727	0.911-3.272
	Normal (Reference)			
Number of dependants	< 5	0.027*	0.475	0.246-0.918
	≥ 5 (Reference)			

Discussion

This study found that more than half of the physicians had the intention to quit their current work and a greater percentage of the physicians expressed their intention to relocate to another country. Only job satisfaction and the number of dependants predicted turnover intention among the study population. The intention to relocate to another country was the primary driver of turnover, indicating unfavourable working conditions in Nigeria health systems.

The job turnover intention prevalence is similar to the prevalence found in cross-sectional studies among foreign-born physicians in Finland [12] as well as Iraqi physicians [11], being due to a high level of job dissatisfaction and the feeling of insecurity among the physicians. Contrarily, some studies reported a relatively lower job turnover intention rate compared with the findings of this present study. A cross-sectional study among 350 township-level physicians and 90 village-level physicians in 96 community health centers across Chongqing, China, found that 42.3% of the physician had the turnover intention [17], and a study of Uganda health workers reported that 46% of physicians had the intention of leaving their job [13]. Another cross-sectional study of hospital-based physicians in Taiwan and Norway found the prevalence of job turnover intention of 14.5% and 21.0%, respectively [14, 16]. It was reported that this low prevalence was due to the presence of a good remuneration system and moderate working hours among Taiwan and Norway medical physicians compared with the higher prevalence of turnover intention that observed among medical physicians who participated in this study. Interestingly, a cross-sectional study of primary healthcare workers in Alimosho Local Government Area in Lagos, Nigeria found that 22.1% of the health workers had the intention of leaving their present

organization, with 85.5% of the health workers having the intention to leave Nigeria for better opportunities abroad [23], which was consistent with the findings from our study. The lower turnover intention rate observed by Adeniran et al., when compared with our findings, could be attributed to the mixed populationa of health workers whereas our study included only physicians. The investigators also found a strong association between job satisfaction and job turnover intention, which agreed with our findings.

The majority of studies on the factors of turnover intention have identified job satisfaction as the most consistent predictor of turnover intention [2, 11, 13, 23 , 31]. Our study also found that about one-third of the respondents were satisfied with their current work, which was higher compared with physicians in tertiary public hospitals in Shanghai, China [32], eastern India [33], and among physicians in Uganda [13]. On the other hand, the satisfaction level was lower when compared with British physicians [34] and Australian physicians [35], which was credited to the good professional climate that existed in these countries. Previous studies in Nigeria reported similarly low prevalence of job satisfaction among physicians in recent times [27].

The bivariate analysis of the overall job satisfaction and turnover intention found a significant association between job satisfaction and turnover intention, indicating a significant negative relationship with turnover intention. This was in line with the study among health workers in the Veterans Health Administration, USA [36], as well as Lagos, Nigeria [23]. Similar studies on turnover intention among physicians also found an association between physicians' turnover intention and job satisfaction [17, 37]. Over the years, physicians have reportedly worked under poor conditions in Nigeria such as poor facilities,

poor remuneration, especially in the public sector leading to constant unrest in the health sector [38]. This has led low level of job satisfaction and poor motivation, causing constant emigration of physicians in search of greener pastures.

About two-thirds of the physicians were found to have probable psychiatric morbidity. This was far higher when compared with the Italian and Australian physicians [39, 40], which was attributable to the GHQ cut-off ≥ 5 used in both studies. This study employed GHQ cut-off ≥ 3 which had been proven to have the best specificity and sensitivity [29]. Previous studies among physicians in Ilorin, Nigeria showed significantly lower prevalence of psychiatric morbidity [28, 41] compared to this present study. On the other hand, a study among resident physicians in southern Nigeria reported a similarly high prevalence for the GHQ-12 scoring method, which is similar to our findings [27]. Our study found a significant association between mental health status and turnover intention through bivariate analysis, which was not carried over to multivariate analysis. It therefore, showed that the influence of mental health status on turnover intention might have acted as a confounding variable and that job satisfaction might be the more important predictor even though both would be expected to be highly correlated variables as previously documented in several studies [27].

The number of dependants was the only sociodemographic factor found to have an association with the turnover intention of the physicians. This supports the assertion that other influences external to the work conditions may play an important role when employees decide to continue to stay at a particular job. These influences may be exerted through economic pressures, which had significantly worsen in Nigeria in recent years, particularly during and after COVID-19 pandemic.

The GHQ-12 tool used in this study is a screening tool which did not confirm psychiatry morbidity in participants but may be a indicator of potential psychological distress among those found to be positive. The findings in the study should be interpreted in this regard. Similarly, we assessed the job turnover intention which may not necessarily lead to job turnover. Also, more than two-thirds of the participants were resident physicians in training; a population that could be considered to be relatively more mobile because their employment not permanent. This could reflect a high job turnover intention. Thus, the population may not be representative of the typical physicians in permanent employment.

Conclusion

In conclusion, the study demonstrated that over half of

the physicians had the intention of leaving their current work while more than four-fifth had the intention of leaving the country. The majority of the respondents were dissatisfied with their job and two-thirds of the physicians had probable psychiatric morbidity. Job satisfaction and the number of dependants were important factors associated with turnover intention. Physicians who were satisfied at their work had about 70 percent reduced odds of job turnover intentions, while having less than 5 dependants demonstrated about 50 percent reduced odds of job turnover intentions. Policy makers such as the hospital management boards should prioritize strategies and policies directed towards improving the level of job satisfaction among physicians, which would reduce the level of job turnover intention of physicians and by extension, the actual job turnover in the country.

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Conflict of interest

None declared.

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Ethical Considerations

The study was guided by the ethical principles as declared by the World Medical Association declaration of Helsinki ethical principles for medical research involving human participants, as amended by the 75th WMA General Assembly, Helsinki, Finland, October 2024. A signed informed consent was obtained from each participant. The informed consent contained information on the study objectives, risks and benefits. There was minimal risk involving only the time expended in responding to the questionnaire. Participants were informed about their right to refuse to participate and their right to withdraw at any stage of the study. Confidentiality was ensured as the study instrument contained no participant's identifier. Data were securely stored in password-protected computers with restricted access to only the designated investigators.

Code of Ethics

Ethical approval was obtained from the University of Ibadan/University College Hospital (UI/UCH) Ethics Review Committee (UI/EC/21/0345). University College Hospital, Ibadan is a federal teaching hospital affiliated with the University of Ibadan.

Authors' Contributions

Segun Bello: Conceptualized the study, designed the study, Supervision, wrote and approved the final version of the manuscript. Martin Chidubem Nwangwu: Designed the study, Collected and analysed data under, wrote and approved the final version of the manuscript.

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