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Job dissatisfaction and intention to leave among primary healthcare workers in Kaduna metropolis, Nigeria

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Abstract

Healthcare worker retention remains a major challenge affecting health system performance, particularly in low- and middle-income countries where workforce shortages threaten sustainable healthcare delivery. This study assessed the prevalence of intention to leave current employment and examined the association between job dissatisfaction and intention to leave among primary healthcare workers in Kaduna metropolis, Nigeria. A cross-sectional study was conducted among 211 primary healthcare workers between February and July 2025. Data were collected using a structured questionnaire and analysed using descriptive statistics, chi-square tests, and binary logistic regression. Among the respondents, 91 (43.1%) reported an intention to leave their current organisation. Intention to leave was significantly higher among dissatisfied healthcare workers compared with satisfied workers (70.1% versus 20.2%, $p<0.001$). In multivariable analysis, job dissatisfaction remained independently associated with intention to leave (AOR=9.77; 95% CI: 4.93-19.38; $p<0.001$). Job dissatisfaction is a strong predictor of intention to leave among primary healthcare workers. Improving workplace conditions, organisational support, and professional development opportunities may strengthen workforce retention.

Key words: healthcare workers, intention to leave, job dissatisfaction, workforce retention, primary healthcare, Nigeria.

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Introduction

Healthcare workers constitute the foundation of effective health systems, particularly at the primary healthcare level, where they provide essential preventive, promotive, and basic curative services. The availability, distribution, motivation, and retention of a competent health workforce are critical components of universal health coverage and sustainable health service delivery.[1,2] However, many low- and middle-income countries continue to experience healthcare workforce instability associated with inadequate working conditions, limited career opportunities, workload pressures, and dissatisfaction with employment arrangements.[1,3,4]

Workforce attrition remains a major concern because losing experienced healthcare workers can disrupt continuity of care, increase workload among remaining staff, and weaken institutional capacity.[5] The World Health Organisation has recognised health workforce retention as an important component of health-system strengthening, particularly in countries experiencing shortages and maldistribution of skilled health personnel.[1]

Intention to leave employment is widely recognised as an important precursor or correlate of actual turnover behaviour. Although intention does not inevitably result in resignation, it is an established workforce indicator that can help organisations identify potential turnover risks and consider preventive retention strategies.[5,6]

Job satisfaction represents an important determinant of healthcare worker retention. Employees who are dissatisfied with their work environment, recognition, professional growth opportunities, remuneration, and organisational support may develop weaker attachment to their workplace and a greater intention to seek alternative employment.[3,4,7-9] Evidence from Ghana and Ethiopia, for example, has demonstrated associations between job satisfaction and turnover intention among health workers.[4,8,9] The relationship can also be interpreted through Herzberg's motivation-hygiene theory, which distinguishes dissatisfaction associated with job-context factors from motivation associated with factors such as achievement, recognition, and advancement.[10] More broadly, health-worker motivation is shaped by individual, organisational, and health-system factors, including management, recognition, career development, and resource availability.[11,12]

In Nigeria, primary healthcare workers operate within a complex environment characterised by service demands, resource constraints, and workforce challenges.[7,13,14] Previous Nigerian studies have examined job satisfaction and retention among primary healthcare and other health workers, but evidence specifically addressing the relationship between job dissatisfaction and intention to leave among frontline primary healthcare workers in Kaduna metropolis remains limited.[7,13,14]

This study therefore aimed to determine the prevalence of intention to leave current employment and assess the association

between job dissatisfaction and intention to leave among primary healthcare workers in Kaduna metropolis, Nigeria.

Materials and Methods

Study design and setting

A cross-sectional, analytic study was conducted among primary healthcare workers in Kaduna metropolis, Kaduna State, Nigeria.[15] The study was conducted between February 2025 and July 2025. Kaduna State is in north-western Nigeria, and Kaduna metropolis is an important urban centre in the state.[16] Primary healthcare facilities in Nigeria provide community-based services, including health promotion, preventive care, maternal and child health services, immunisation, disease surveillance, and management of common health conditions.[17]

Primary healthcare workers constitute the frontline workforce responsible for delivering these services. Their retention is important for maintaining continuity of care and supporting effective implementation of primary healthcare programmes.[1,18]

Study population

The study population comprised healthcare workers employed in selected primary healthcare facilities within the Kaduna metropolis. Eligible participants included healthcare workers involved in primary healthcare service delivery, namely: Community Health Extension Workers (CHEWs), Community Health Officers (CHOs), nurses and midwives, medical officers, laboratory personnel, environmental health officers, nutritionists, and other health-related cadres working within participating facilities. Participants were eligible if they had worked in the selected facilities for six months, could provide information about their employment experiences, and were available during the study period. The study excluded healthcare workers who declined to participate or were unavailable during data collection.

Sample size and sampling technique

The minimum sample size was calculated using the Cochran formula for cross-sectional studies: $n=Z^2pq/d^2$, where n is the minimum required sample size, Z is the standard normal deviate at 95% confidence (1.96), p is the anticipated proportion with the outcome of interest, q=1-p, and d is the margin of error (0.05). In the absence of a prior estimate specific to intention to leave among primary healthcare workers, the proportion of primary healthcare workers reporting intention to leave (85.5%) from a comparable Nigerian study was used as the anticipated proportion (p).[7] Substituting these values gave $n=(1.96)^2\times0.855\times0.145/(0.05)^2=190.4$, yielding a minimum sample size of 190. To allow for an anticipated non-response rate of 10%, this was adjusted using n/(1-0.1), giving 190/0.9=211.1, rounded up to 211. A total of 211 primary healthcare workers participated in the study and were included in the final analysis. The study used a multistage sampling technique to select participants, explicitly comprising four stages.

Stage 1

Two LGAs, Kaduna North and Igabi, were selected by simple random sampling (balloting) from the four LGAs constituting the Kaduna metropolis (Kaduna North, Kaduna South, Chikun, and Igabi) to represent the study population.

Stage 2

All primary healthcare facilities within the two selected LGAs were listed and enumerated to form the sampling frame, comprising 12 Primary Healthcare Centres (PHCs) in Kaduna North and 12 PHCs in Igabi (24 facilities in total). The primary healthcare workforce strength in these facilities was 247 in Kaduna North and 168 in Igabi, giving a total eligible population of 415 healthcare workers across the two LGAs.

Stage 3

The calculated sample size of 211 was allocated proportionally to each LGA according to its workforce strength, yielding 126 participants from Kaduna North (247/415×211) and 85 from Igabi (168/415×211). Within each LGA, this allocation was further distributed proportionally across the 12 PHCs based on the number of health workers in each facility.

Stage 4

Within each facility, eligible healthcare workers were selected by simple random sampling until the facility-specific quota was reached; where a facility's staff strength was less than or equal to its allocated quota, all eligible workers were recruited through total enumeration. This approach ensured representation of the different healthcare cadres involved in primary healthcare delivery across the two LGAs.

Data collection instrument

Data were collected using a structured self-administered questionnaire adapted from established job-satisfaction assessment instruments, including components derived from the Minnesota Satisfaction Questionnaire (MSQ) and Job Descriptive Index (JDI).[19,20] The MSQ measures employee job satisfaction, including intrinsic and extrinsic aspects of work, while the JDI measures satisfaction with specific job facets.[19,20] The questionnaire also included sections assessing socio-demographic and occupational characteristics. Job satisfaction was assessed using multiple Likert-scale items covering workers' overall perceptions of their employment experience. Responses were scored using a five-point Likert scale ranging from very dissatisfied to very satisfied. The total satisfaction score was calculated by summing individual item responses. The overall satisfaction score was classified using the established study cut-off: a score above the mean value indicated satisfied, while a score below the mean value indicated dissatisfied. This mean-based classification was a study-specific analytical decision and should not be interpreted as a validated diagnostic threshold for job satisfaction.

The primary outcome variable for this manuscript was intention to leave the current organisation. Respondents were asked whether they intended to leave their current workplace. Responses were coded as: 0= no intention and 1= intention to leave. The prevalence of intention to leave was calculated as the proportion of respondents who reported plans to leave their current organisation.

The primary explanatory variable was job satisfaction status, coded as satisfied or dissatisfied. This analysis assessed whether dissatisfaction was associated with the intention to leave. Potential confounding variables included age, sex, marital status, professional cadre, years of professional practice, and duration in the current workplace. These variables were included because demographic and occupational characteristics may influence job satisfaction and retention decisions.[4,8,9]

Data analysis

Data analysis was conducted using the IBM Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics summarised respondents' characteristics and study variables. Categorical variables were presented as frequencies and percentages. The prevalence of intention to leave was calculated. The association between job satisfaction status and intention to leave was assessed using the chi-square test. Binary logistic regression analysis was performed to identify factors independently associated with intention to leave. Job satisfaction status and all pre-specified socio-demographic and occupational variables (age, sex, marital status, professional cadre, years of professional practice, and duration in current workplace) were entered simultaneously into the multivariable model *a priori*, based on their theoretical relevance to intention to leave, rather than being selected only on the basis of statistical significance at bivariate analysis; this approach reduces the risk of residual confounding from variables that may be significant in combination despite weak bivariate associations. Results were presented as Adjusted Odds Ratios (AORs) with 95% confidence intervals. Statistical significance was determined at $p<0.05$.

Ethical approval and consent

Ethical approval for this study was obtained from the Health Research Ethics Committee (HREC), Barau Dikko Teaching Hospital (NHREC/30/11/21A). Permission to conduct the study was obtained from the Kaduna State Primary Health Care Board (KSPHCB). Data collection was conducted between February 2025 and July 2025. Participation was voluntary, and written informed consent was obtained from all participants before questionnaire administration. Respondents were informed of the study's purpose, their right to decline participation, and the confidentiality of the information provided. No personal identifiers were collected, and all data were handled confidentially throughout the study.

Results

The analysis included 211 primary healthcare workers. Of these, 91 (43.1%) reported an intention to leave their current organisation. Most respondents were female (158, 74.9%), married (148, 70.1%), in the younger age category (155, 73.5%), and had fewer years of professional practice (145, 68.7%) (Table 1). Among the 211 healthcare workers, 91 (43.1%) indicated that they intended to leave their current organisation (Table 2).

The association between job satisfaction status and intention to leave was statistically significant.

Among dissatisfied healthcare workers, 68 (70.1%) reported intention to leave ($\chi2=51.25$, df=1, $p<0.001$) (Table 3). Binary logistic regression was performed to determine the factors independently associated with intention to leave. Job dissatisfaction remained the strongest independent factor associated with intention to leave among demographic and occupational characteristics. Dissatisfied healthcare workers had almost ten times higher odds of intending to leave their current organisation compared with satisfied workers: AOR=9.77, 95% CI:4.93-19.38, $p<0.001$. Other variables included in the adjusted model were not statistically significant (Table 4).

Table 1. Showing the socio-demographic and occupational characteristics of respondents by intention to leave status.

Characteristics	No intention to leave n (%)	Intention to leave n (%)	Total n (%)
Sex			
Male	23 (43.4)	30 (56.6)	53 (25.1)
Female	97 (61.4)	61 (38.6)	158 (74.9)
Marital status			
Single/other	35 (55.6)	28 (44.4)	63 (29.9)
Married	85 (57.4)	63 (42.6)	148 (70.1)
Age category			
Younger age group	79 (51.0)	76 (49.0)	155 (73.5)
Older age group	41 (73.2)	15 (26.8)	56 (26.5)
Professional cadre			
Main cadre group	76 (52.1)	70 (47.9)	146 (69.2)
Other cadres	44 (67.7)	21 (32.3)	65 (30.8)
Years of professional practice			
Fewer years of practice	72 (49.7)	73 (50.3)	145 (68.7)
More years of practice	48 (72.7)	18 (27.3)	66 (31.3)
Duration of current job			
Shorter duration	113 (56.5)	87 (43.5)	200 (94.8)
Longer duration	7 (63.6)	4 (36.4)	11 (5.2)

Table 2. Showing the distribution of intention to leave among primary healthcare workers.

Intention to leave current organisation	Frequency	Percentage (%)
No	120	56.9
Yes	91	43.1
Total	211	100

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Discussion

This study assessed intention to leave current employment among primary healthcare workers in Kaduna metropolis and examined the relationship between job dissatisfaction and potential workforce loss. The findings show that intention to leave was a substantial concern, with 43.1% of respondents indicating they planned to leave their current organisation. More importantly, job dissatisfaction was strongly associated with intention to leave, and dissatisfied healthcare workers had nearly ten-fold higher odds of intending to leave compared with satisfied workers after adjustment for demographic and occupational factors. The finding that 43.1% of respondents intended to leave their current organisation indicates a substantial retention concern. This finding is broadly consistent with evidence from other low- and middle-income settings, where healthcare workers have reported turnover intentions linked to employment conditions, job satisfaction, workload, organisational support, and opportunities for professional development.[3,4,8,9] In Nigeria, Adeniran *et al*. reported high intention to leave among primary healthcare workers in Lagos and identified job satisfaction and working conditions as important workforce concerns.[7] However, compare prevalence estimates cautiously because studies differ in outcome definition, setting, population, and measurement instruments.

The strongest finding from this study was the relationship between job dissatisfaction and intention to leave. Dissatisfied healthcare workers were significantly more likely to report an intention to leave than satisfied workers. After adjustment for potential confounding factors, dissatisfaction remained the strongest factor independently associated with intention to leave, with dissatisfied workers having approximately ten times greater odds of considering departure from their organisation. This finding is consistent with evidence that job satisfaction is closely related to healthcare worker retention and turnover intention.[3,4,8,9] Healthcare workers who perceive their employment conditions negatively may experience reduced organisational attachment and increased motivation to seek alternative employment.[4,5] In health systems where recruiting and replacing skilled workers requires substantial organisational resources, addressing modifiable sources of dissatisfaction may be preferable to responding only after turnover has occurred.[3,5]

Unlike job satisfaction status, demographic and occupational characteristics were not significantly associated with intention to leave in the adjusted regression model. Although younger workers and those with fewer years of experience demonstrated higher proportions of intention to leave in the descriptive analysis, these differences were not statistically significant after adjustment. Previous health-worker studies have shown that individual and organisational factors may contribute to turnover intention, although their relative importance varies across settings.[4,8,9] The present finding therefore suggests that, within this sample, work-

Table 3. Showing the association between job satisfaction status and intention to leave.

Job satisfaction status	No intention to leave n (%)	Intention to leave n (%)	Chi-square	df	p
Satisfied	91 (79.8)	23 (20.2)			
Dissatisfied	29 (29.9)	68 (70.1)	51.25	1	<0.001*
Total	120 (56.9)	91 (43.1)			

*Significant.

Table 4. Showing factors associated with intention to leave current organisation among primary healthcare workers.

Predictor	Adjusted Odds Ratio	95% Confidence Interval	p
Job satisfaction status			
Satisfied	Reference		
Dissatisfied	9.77	4.93-19.38	<0.001*
Sex			
Female	Reference		
Male	0.63	0.29-1.34	0.230
Marital status			
Single/other	Reference		
Married	1.90	0.90-4.03	0.093
Age category			
Younger age group	Reference		
Older age group	0.55	0.09-3.37	0.515
Professional cadre			
Main cadre group	Reference		
Other cadres	0.56	0.27-1.18	0.129
Years of practice			
Fewer years of practice	Reference		
More years of practice	0.52	0.10-2.86	0.455
Duration of current job			
Shorter duration	Reference		
Longer duration	1.06	0.20-5.52	0.944

*Significant.

place experience and job satisfaction may have been more important correlates of intention to leave than the measured individual characteristics.

The findings have important implications for primary healthcare workforce policy in Nigeria. Retention strategies should move beyond recruitment and include efforts to create supportive work environments, strengthen supportive supervision, improve communication between managers and healthcare workers, provide professional development opportunities, ensure fair recognition systems, and address workplace conditions that contribute to dissatisfaction.[3,4,12,18] Evidence from low- and middle-income settings suggests that management practices, career development, recognition, working conditions, and other organisational interventions can influence health-worker motivation, performance, and retention.[3,12,18] The results also reinforce the importance of considering intention to leave as an early warning indicator within health workforce monitoring systems. Unlike actual turnover, which occurs after a worker exits employment, intention to leave can provide managers with an opportunity to identify retention risks and intervene before workforce loss occurs.[5,6]

Strengths and limitations

This study has several strengths. First, it provides empirical evidence on the intention to leave among primary healthcare workers, a workforce group central to community health service delivery. Second, multivariable logistic regression allowed assessment of the independent association between job dissatisfaction and intention to leave after controlling for relevant demographic and occupational characteristics.

However, some limitations should be considered. The cross-sectional design limits the ability to establish causal relationships between dissatisfaction and intention to leave because exposure and outcome were assessed at the same point in time. Although dissatisfaction was strongly associated with intention to leave, the temporal relationship between the two variables cannot be confirmed. Additionally, intention to leave does not necessarily translate into actual turnover behaviour.[5,6] Future longitudinal studies should examine whether workers who express intention to leave eventually exit their organisations. Finally, the study was conducted among primary healthcare workers in Kaduna metropolis; therefore, findings may not be generalisable to all healthcare workers in Nigeria.

Conclusions

This study demonstrates that intention to leave current employment is a significant concern among primary healthcare workers in the Kaduna metropolis, Nigeria. Nearly half of respondents reported an intention to leave their current organisation, and job dissatisfaction was the strongest independent correlate of intention to leave. The findings suggest that improving retention of primary healthcare workers requires deliberate efforts to enhance employment experiences, strengthen organisational support, and address workplace factors contributing to dissatisfaction. Health workforce retention strategies should incorporate routine monitoring of job satisfaction and intention to leave as part of broader primary healthcare system strengthening efforts.

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