



Predictors of the quality of work life and job satisfaction among serving military healthcare personnel in the Nigerian armed forces

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Abstract

Introduction Quality of work life and perception affects the productivity of healthcare professionals. The study aimed to determine the quality of work life (QWL) and job satisfaction (JS) of military healthcare professionals in Nigeria.

Methods A cross-sectional study was conducted at three military hospitals, one each for the Army, Navy, and Air Force. The 35-item QWL and five-item JS Index questionnaires were used to record responses from consenting professionals between January–March 2022. Appropriate descriptive and inferential statistical analyses were conducted, with $p < 0.05$ considered significant.

Results The overall average QWL score for the population was 86.88 ± 23.04 , while overall JS had a mean score of 23.2 ± 7.102 . Years of experience ($\beta = -0.292$, $p = 0.018$), and previous posting to war areas ($\beta = -0.285$, $p = 0.022$) were significant predictors of QWL, just as years of experience ($\beta = -0.281$, $p = 0.024$) and age ($\beta = 0.235$, $p = 0.097$) were for JS.

Conclusion Healthcare professionals serving in the Nigerian Armed Forces have a fair perception of their QWL and JS.

Keywords Armed forces · Job satisfaction · Quality of work life · Healthcare professionals · Military personnel

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Introduction

According to the World Health Organization (WHO), the health workforce in Africa is overburdened with a density of 14.1 in a 10,000 population, making it the 2nd largest continent with a deficit of health workers (WHO 2007). It was also reported in 2019 that the Nigerian health system is such that one physician serves 5000 people in an estimated 180 million population in contrast to the one to 300 people recommended by the WHO (Adebayo and Akinyemi 2022). These unfortunate records have not overridden the requirement for health workers to achieve Universal Health Coverage and fulfil health and wellbeing for all. It is of little wonder then that Cometto and Campbell (2016) reiterated the need for an ensured investment in the health sector. These investments, ranging from quality education, working conditions, and remuneration for labour, should consequently improve the work life of health workers and create the feeling of fulfilment in rendering their services.

The Nigerian military healthcare system was primarily instituted to cater to the health needs of the men of the armed forces and their families, although, over time, its services have evolved to include the civilian population of the nation (Adebayo and Hussain 2010). More importantly, the Nigerian military medical corps is tasked with providing medical coverage for the military during its operations/exercises both internationally and locally (Maksha et al. 2017). To date, the military has had notable representations in several medical missions across Africa (Congo, Lebanon, South Sudan, Sudan, Mali, Sierra Leone, Ivory Coast, and Liberia) and has been critical in the fights against the insurgency in different parts of the country, notably north-east, north-west, and south-east. This echoes the fact that military healthcare professionals are as essential as their non-military counterparts in serving national healthcare interests (Adebayo and Hussain 2010).

However, the Nigerian military medical corps has not been without its share of the national socio-economic crises. There were two recent strike actions by the health workers in 2014 and 2018 for reasons ranging from unpaid salaries to a call for a restructuring of the medical corps and hospitals, respectively (Obinna 2018). While the quality of work life (QWL) in solely profit-based businesses is important to increase the competitiveness of their human resources through increased job satisfaction, the effect of QWL in healthcare organizations cannot be underestimated (Akinwale and George 2020). With the average healthcare budget in Nigeria at \$6 per person compared to the \$10,000 per person budget in the United States (Abang 2019), the majority (over 80%) of Nigerian physicians are opting for work opportunities outside the country. The reason for this geometrically increasing brain drain in the health sector is linked to factors ranging from poor remuneration to diminished job satisfaction (Akinyemi et al. 2021; Raufu 2002).

QWL is the relationship between an employee and their work environment with the focus being the desire to improve employee wellbeing and to boost the organization's performance: it is the link between an employee and their motivation to work (Ogbuabor and Okoronkwo 2019). While the quality of work life and job satisfaction are sometimes used interchangeably, job satisfaction refers to the overall orientation of an employee to their work (Jahanbani et al. 2018). According to Akinwale and George (2020), the climate of a work environment is an important consideration in the health industry. Awosusi (2010), having assessed the QWL of nurses in tertiary hospitals in Southwestern Nigeria, reported that only 4.2% of the nurses were *very satisfied* with their work. The study by Akinwale and George (2020) reported a level of dissatisfaction among the sampled health professionals. These findings raise serious concerns because arguments have supported the claim that QWL influences the job satisfaction of health workers and is consequential

to the productivity and quality of healthcare service deliverables (Akinwale and George 2020; Jahanbani et al. 2018; Saygili et al. 2020).

The military healthcare service is a solely government-controlled health economy through the Ministry of Defence that is operated to serve the health needs of the armed forces while providing useful assistance to the civilian healthcare systems (Bricknell and Cain 2020). It is important to identify the factors that influence the quality of the work environment/conditions and the satiety desirable from the job. With the risk and challenges of working in the health sector, the additional military status can be a challenge to a professional.

This study aimed to determine the QWL and job satisfaction of military healthcare professionals in Nigeria and the relationship between QWL and job satisfaction. The findings of this study would inform and educate all stakeholders of the health system inclusive of the government, administrators, medical professionals, trade unions, and researchers on the QWL of the military medical corps.

Methods

Design

This study adopted a cross-sectional questionnaire-based design.

Study settings, study population and sampling technique

The study was conducted among healthcare professionals who are serving in the Nigerian Armed Forces. The Nigerian Armed Forces comprise the triad of Army, Navy, and Air Force. The three arms have medical corps that serve in their hospitals which are either specialized referral centres in the cities or mobile facilities that attend to troops in military operations. Healthcare professionals that serve in the Nigerian Armed Forces include physicians, pharmacists, nurses, laboratory scientists and other support staff. An Army, a Naval and an Air Force hospital were purposively selected in the country: the criterion was that the selected hospital was the largest in terms of bed size.

Because of the job of the respondents and the restrictions to communicate with researchers, a time-based data collection was conducted between January and April 2022.

Study tool

The 35-item (eight dimensions) Quality of Work Life questionnaire by Walton and the five-item Job Satisfaction Index questionnaire adopted by House were used for

this study. A section was added to document the sociodemographic characteristics of the respondents.

Study procedure

The two questionnaires were transformed into a google document and its link was shared with respondents who consented to participate in the study. Eligible respondents (military healthcare professionals in Nigeria) were approached and invited to participate in the study. The link was then sent to those that consented to participate in the study. Reminder messages were sent to the respondents after every 2 weeks until the third month with an explanation that the forms should not be completed more than once by a respondent. At the end of the pre-determined data collection period, the response submission was deactivated on the google link.

Data management and analysis

The responses were downloaded into Microsoft Excel (2019) and checked for correctness. Only the data of those who completed the sociodemographic section of the instrument in addition to the other two sections were deemed eligible for use in the data analysis. The cleaned data was exported into IBM SPSS version 25 for statistical data analysis. Frequencies and percentages were used to summarize the findings. The mean scores of the items in the QWL questionnaire were obtained as the scores of the respective dimensions. An Independent t-test (based on the test of normality) was used to compare the QWL between those who had been at the war front in the past 5 years and others. A correlation test was used to compare the association between the QWL and the job satisfaction of the respondents. The sociodemographic predictors of the respondents' QWL and job satisfaction were determined using regression analysis. In both cases, all the variables were loaded into the regression model so that recommendations on factors to be used in improving the QWL or job satisfaction would be identified. For all analyses, *p-values* less than 0.05 were considered to be statistically significant.

Ethics approval

Ethical approval was obtained from the Health Research Ethics Committee of the University of Nigeria Teaching Hospital, Ituku-Ozalla, Enugu State, Nigeria. The approval number is NHREC/05/01/2008B-FWA0000245 8-1RB0002323. Permission was obtained from the authorities of the selected hospitals.

Table 1 Sociodemographic characteristics of the military healthcare professionals, *N* = 84

Characteristics	Frequency	Percentage
Age (years)		
20 and younger	1	1.2
21–25	8	9.5
26–34	54	64.3
35 and above	21	25.0
Gender		
Female	24	28.6
Male	60	71.4
Marital status		
Divorced	1	1.2
Engaged	2	2.4
Married	38	45.2
Single	43	51.2
Military service branch		
Airforce	16	19.0
Army	32	38.1
Navy	36	42.9
Health profession		
Physician	17	20.2
Pharmacist	26	31.0
Nurse	8	9.5
Technician	22	26.2
Others	11	13.1
Previous post to battle area		
No	60	71.4
Yes	24	28.6

Consent to participate

All respondents gave written informed consent to participate in the study. No identifier information was requested from the respondents. All information obtained from the respondents was treated with utmost confidentiality throughout the study.

Results

The total number of people that participated in the survey was 84. The demography showed that most of the respondents were within the age range of 26–34 years, 54 (64.3%), and the majority of the respondents identified as men, 60 (71.4%). Out of the 84 participants, 43 (51.2%) had *single* marital status, while most of the respondents, 36 (42.9%), served with the Navy division of the Nigerian military. Pharmacists represented the highest proportion 26 (31%) of health professionals that participated in the survey with nurses being the least. Overall, the majority of the health

workers, 60 (71.4%), had never been posted to a battle area before (Table 1).

On the quality of work life, 12 (14.3%) and 25 (29.8%) were *very dissatisfied* and *dissatisfied*, with their remuneration (2.80 ± 0.183). Regarding the space the work occupies in the respondents' life, 38 (45.2%) were *dissatisfied* with the influence of their job on their families (2.52 ± 0.114) while 33 (39.3%) were *dissatisfied* with the situation and frequency at which other personnel resigns from work (2.79 ± 0.102). Strikingly, 44 (52.4%) were *satisfied* with the pride that emanates from the social relevance and importance of being military personnel (3.26 ± 0.132). For job satisfaction, the overall mean satisfaction with the military job combined with being a health professional was 6.17 ± 0.1952 , minimum–maximum of 1.0–10.0 (Tables 2 and 3).

The overall average QWL score for the population was 86.88 ± 23.04 , which was at a moderate level. The findings revealed that 36 (42.9%) of the respondents in the study had a moderate level of QWL score, 15 (17.9%) had a low level and 33 (39.3%) rated high in their QWL. With dimension analysis, the QWL presented in Table 4 showed that the respondents had a mean of <2.5 in all the dimensions, with social relevance having the highest average score of 2.19 ± 0.814 (Table 4). The result in Table 5 shows that overall job satisfaction had a mean score of 23.2 ± 7.102 . It also indicated that only 4 (4.8%) were highly satisfied with their jobs. In addition, 29 (34.5%) and 51 (60.7%) of the respondents were poorly and moderately satisfied with their jobs, respectively. While the military health personnel that had been to war in the past 5 years had a mean QWL of 79.96 ± 22.38 , it was not significantly lower than that of their colleagues that had not gone to the battlefield in the past 5 years (89.65 ± 22.90); $p = 0.082$, $F = 0.012$. Similarly, there was no statistically significant difference in the mean job satisfaction between those that had gone to the battlefield in the past 5 years (21.88 ± 7.95) and those who had not (23.77 ± 6.73), $p = 0.273$, $F = 0.910$.

The distribution of data in Table 6 of QWL and job satisfaction from the Kolmogorov Smirnov test (KS) was normal ($p = 0.067$). Hence, a significant relationship exists between QWL and job satisfaction ($p \leq 0.001$, $r = 0.394$) as indicated by the Pearson correlation coefficient results. A positive significant correlation was seen between all the components of QWL and job satisfaction ($p \leq 0.001$) except in the constitutionalism component ($r = 0.135$). The component with the highest positive correlation was space occupation ($r = 0.416$), while social integration had the least ($r = 0.252$). The result of multivariate analysis between components of job satisfaction and QWL indicated that none of the independent variables could significantly predict job satisfaction variance. The multiple regression analysis in Table 7 shows that some components of socio-demographic data were able to predict QWL and JS. Years of experience ($\beta = -0.292$,

$p = 0.018$) and previous posting to war areas ($\beta = -0.285$, $p = 0.022$) were significant predictors of QWL. Similarly, years of experience ($\beta = -0.281$, $p = 0.024$), age ($\beta = 0.235$, $p = 0.097$), and previous posting to war area ($\beta = -0.238$, $p = 0.055$) are aspects of sociodemographic factors that can significantly predict job satisfaction.

Discussion

This research study evaluated the quality of work life and the job satisfaction of military healthcare professionals serving in the Nigerian Armed Forces. The personnel serving in the three arms of the Force, namely the Army, Navy, and Air Force were invited to participate in the study. The study sample consisted majorly of a young population, with many of them indicating that they identified with the male gender. Generally, men constitute a higher proportion of people that are recruited into the military globally. More than half of the military personnel that participated in this survey were men which is consistent with similar studies conducted among military personnel (Lopes et al. 2015; Sultan and Rashid 2015). The entry requirements for joining the military as a health professional are less stringent compared to the conditions stipulated for other individuals. In the United Kingdom, health professionals that want to serve in the military do not have to be athletically fit to join the Army reserve and have different ports of entry elucidated for them (Sultan and Rashid 2015). This is similar to the Direct Service Short Course programme that is conducted annually by the Nigerian Military to recruit persons from different walks of life.

According to the findings of this study, Nigerian military healthcare professionals have a 'moderate' perception of both their QWL and job satisfaction. The study found that the healthcare workers participating in the study had the highest average score in the QWL dimension's social relevance. However, the mean score of this dimension is at a low level and is similar to other dimensions under the QWL. Previous research that was conducted among employees of Health Centers in Ahvaz Iran (Jahanbani et al. 2018) reported that the perceived QWL was generally moderate, but only low in the subscales 'Adequate and fair compensation', and 'Total life space'. The 'social relevance' component also had the highest mean score in the study. This could mean that generally, health workers have a higher perception of social prestige which impacts the quality of work life irrespective of the aspect of service branch; civil or armed forces.

Results from another study showed that most health workers experienced low levels of QWL and expressed this dissatisfaction in terms of unfair compensation, occupational health, work safety, relationships with managers and work–family balance (Saraji and Dargahi 2006). They,

Table 2 Quality of work life of the military healthcare professionals, $N = 84$

Questions	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Mean \pm SD
a						
<i>Regarding a fair and appropriate salary (compensation)</i>						
How satisfied are you with your salary (remuneration)?	12 (14.3)	25 (29.8)	17 (20.2)	28 (33.3)	2 (2.4)	2.80 \pm 0.183
How satisfied are you with your salary, if you compare it to your colleagues' salary?	12 (14.3)	26 (31.0)	14 (16.7)	29 (34.5)	3 (3.6)	2.82 \pm 0.127
How satisfied are you with the recompenses and the participation in results that you receive from the company?	11 (13.1)	25 (29.8)	20 (23.8)	26 (31.0)	2 (2.4)	2.80 \pm 0.119
How satisfied are you with the extra benefits (alimentation, transport, doctor, dentist, etc.) that your company offers to you?	14 (16.7)	25 (29.8)	14 (16.7)	30 (35.7)	1 (1.2)	2.75 \pm 0.125
<i>Regarding working condition</i>						
How satisfied are you with your weekly work journey (quantity of worked hours)?	6 (7.1)	33 (39.3)	11 (13.1)	29 (34.5)	5 (7.1)	2.93 \pm 0.123
According to your workload (quantity of work), how do you feel?	4 (4.8)	31 (36.9)	19 (22.6)	27 (32.1)	3 (3.6)	2.93 \pm 0.111
According to the use of technology in your tasks, how do you feel?	12 (14.3)	23 (27.4)	21 (25.0)	22 (26.2)	6 (7.1)	2.85 \pm 0.128
How satisfied are you with the salubrity level (work conditions) in your workplace?	6 (7.1)	16 (19.0)	30 (35.7)	29 (34.5)	3 (3.6)	3.08 \pm 0.107
How satisfied are you with the security equipment, individual and collective protection provided by your company?	6 (7.1)	23 (27.4)	22 (26.2)	29 (34.5)	4 (4.8)	3.02 \pm 0.115
Regarding the tiredness that your work causes you, how do you feel?	12 (14.3)	30 (35.7)	25 (29.8)	17 (20.2)	12 (14.3)	2.56 \pm 0.106
<i>Regarding opportunities that you have at your work</i>						
How satisfied are you with your opportunity for professional growth?	17 (20.2)	25 (29.8)	15 (17.9)	26 (31.0)	1 (1.2)	2.63 \pm 0.126
How satisfied are you with the training you participate in?	8 (9.5)	29 (34.5)	14 (16.7)	31 (36.9)	2 (2.4)	2.88 \pm 0.119
Regarding the situations and the frequency that occur with resignation at your work, how do you feel?	4 (4.8)	33 (39.3)	26 (31.0)	19 (22.6)	2 (2.4)	2.79 \pm 0.102
Regarding the incentive that your company gives you to study, how do you feel?	18 (21.4)	23 (27.4)	18 (21.4)	22 (26.2)	3 (3.6)	2.63 \pm 0.130
b						
<i>Regarding social integration at your work:</i>						
Regarding the discrimination (social, racial, religious, sexual, etc.) in your work, how do you feel?	10 (11.9)	29 (34.5)	22 (26.2)	21 (25.0)	2 (2.4)	2.71 \pm 0.114
Regarding your relationship with your colleagues and bosses at work, how do you feel?	7 (8.3)	19 (22.6)	15 (17.9)	40 (47.6)	3 (3.6)	3.15 \pm 0.118
Regarding your team's and colleagues' commitment to work, how do you feel?	11 (13.1)	13 (15.5)	12 (14.3)	43 (51.2)	5 (6.0)	3.21 \pm 0.129
How satisfied are you with the valorization of your ideas and initiative at work?	11 (13.1)	18 (21.4)	17 (20.2)	36 (42.9)	2 (2.4)	3.00 \pm 0.123
<i>Regarding constitutionalism (respect to the laws) at your work?</i>						
How satisfied are you with the company for respecting the workers' rights?	9 (10.7)	27 (32.1)	21 (25.0)	26 (31.0)	1 (1.2)	2.80 \pm 0.113
How satisfied are you with your freedom of expression (opportunity to give opinions) at work?	15 (17.9)	19 (22.6)	22 (26.2)	28 (33.3)	15 (17.9)	2.75 \pm 0.121
How satisfied are you with the norms and rules at your work?	8 (9.5)	19 (22.6)	23 (27.4)	31 (36.9)	3 (3.6)	3.02 \pm 0.116
Regarding respect to your individuality (individual characteristics and particularities) at work, how do you feel?	8 (9.5)	18 (21.4)	24 (28.6)	31 (36.9)	3 (3.6)	3.04 \pm 0.115

Table 2 (continued)

Questions	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Mean \pm SD
<i>Regarding the space that the work occupies in your life:</i>						
How satisfied are you with the work's influence on your family life/routine?	12 (14.3)	38 (45.2)	13 (15.5)	20 (23.8)	1 (1.2)	2.52 \pm 0.114
How satisfied are you with the work influence on your possibilities of leisure?	12 (14.3)	35 (41.7)	13 (15.5)	22 (26.2)	2 (2.4)	2.61 \pm 0.120
How satisfied are you with your schedule of work and rest?	10 (11.9)	35 (41.7)	15 (17.9)	22 (26.2)	2 (2.4)	2.65 \pm 0.117
<i>Regarding the social relevance and importance of your work:</i>						
Regarding the pride in performing your work, how do you feel?	10 (11.9)	16 (19.0)	7 (8.3)	44 (52.4)	7 (8.3)	3.26 \pm 0.132
Are you satisfied with the image this company have for society?	11 (13.1)	16 (19.0)	13 (15.5)	35 (41.7)	9 (10.7)	3.18 \pm 0.136
How satisfied are you with the communitarian integration (contribution to society) that the company have?	8 (9.5)	13 (15.5)	14 (16.7)	42 (50.0)	7 (8.3)	3.32 \pm 0.123
How satisfied are you with the services and the quality of products that the company makes?	4 (4.8)	22 (26.2)	15 (17.9)	39 (46.4)	4 (4.8)	3.20 \pm 0.113
How satisfied are you with the human resources politic (the way that the company treats the workers) that the company has?	7 (8.3)	25 (29.8)	18 (21.4)	31 (36.9)	3 (3.6)	2.98 \pm 0.117

Table 3 Job satisfaction of the military healthcare professionals, $N = 84$

Questions	Minimum	Maximum	Mean \pm SEM
Overall, how satisfied would you say you are with your current military job?	1.0	10.0	6.17 \pm 0.1952
Knowing what you know now, if you had to decide all over again whether to serve in your current military job, what would you decide?	1.0	10.0	5.69 \pm 0.2359
In general, how well would you say that your current military job measures up to the sort of job you wanted when you took it?	1.0	10.0	5.59 \pm 0.2103
If a good friend told you that he or she was interested in working in a job like your current military job, what would you tell him or her to do?	1.0	10.0	5.77 \pm 0.2324
How happy or sad do you feel about your current military job?	2.0	10.0	5.91 \pm 0.2079

Table 4 Quality of work life scores of the military healthcare professionals, $N = 84$

Variable	Level of quality of work life						Mean	SD
	Low		Moderate		High			
	N	%	N	%	N	%		
Fair and appropriate salary	38	45.2	23	27.4	23	27.4	1.82	0.838
Working conditions	12	14.3	45	53.6	12	14.3	1.82	0.662
Opportunities	39	46.4	25	29.8	20	23.8	1.77	0.812
Social integration	25	29.8	36	42.9	23	27.4	1.98	0.760
Constitutionalism	31	36.9	30	35.7	23	27.4	1.90	0.801
Space occupation	46	54.8	18	21.4	20	23.8	1.69	0.836
Social relevance	21	25.0	26	31.0	37	44.0	2.19	0.814
Overall QWL	15	17.9	36	42.9	33	39.3	86.88	23.04

however, expressed satisfaction in terms of social relevance. In this study, the employees were dissatisfied with their relatively low salaries and cited it as a component contributing to their low quality of work life, similar to that reported in

another study conducted among nursing staff of Al-Zahra hospital (Dehaghani et al. 2012).

A perceived lack of promotional opportunities at a workplace may increase the intention to seek another job in a

Table 5 Job satisfaction scores of the military healthcare professionals *N* = 84

Variable	Level of job satisfaction						Mean ± SD
	Low		Moderate		High		
	N	%	N	%	N	%	
Current job satisfaction	15	17.9	48	57.1	21	25.0	2.07 ± 0.654
Willingness to serve again	25	29.8	42	50.0	17	20.2	1.90 ± 0.704
Current job rating	19	22.6	51	60.7	14	16.7	1.94 ± 0.628
Current job recommendation	21	25.0	45	53.6	18	21.4	1.96 ± 0.684
Happy or sad about job	18	21.4	47	56.0	19	22.6	2.01 ± 0.667
Overall job satisfaction	29	34.5	51	60.7	4	4.8	23.2 ± 7.102

Table 6 Correlation coefficient and multivariate analysis of the quality of work life and job satisfaction of the military healthcare professionals

Variable	Correlation		Multivariate analysis				
	r	<i>p</i> -value	B	Beta	t Value	<i>p</i>	Tolerance
Fair and appropriate salary	0.376**	<0.001	0.373	0.213	1.494	0.139	0.250
Working conditions	0.412**	<0.001	0.378	0.262	1.519	0.133	0.249
Opportunities component	0.281**	0.010	0.129	0.068	0.476	0.635	0.270
Social integration	0.252*	0.021	-0.486	-0.252	-1.452	0.151	0.334
Constitutionalism	0.135	0.220	-0.364	-0.189	-1.379	0.172	0.264
Space occupation	0.416**	<0.001	0.531	0.225	1.467	0.146	0.362
Social relevance	0.355**	0.001	0.215	0.152	0.883	0.380	0.243
Overall QWL	0.394**	<0.001					

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).
 Predictor; constant, quality of work life; criterion variable, job satisfaction

Table 7 Multivariable regression analysis of sociodemographic factors and quality of work life

	B	Beta	t	<i>p</i> -value	Lower CI	Upper CI
Quality of work life						
Constant	107.859		3.835	0.000	51.827	163.891
Experience years	-1.300	-0.292	-2.412	0.018	-2.373	-.226
Military rank	-0.490	-0.135	-1.117	0.268	-1.366	.385
Service branch	-1.433	-0.047	-0.380	0.705	-8.949	6.083
Age	6.576	0.176	1.265	0.210	-3.781	16.934
Gender	4.924	0.097	0.813	0.419	-7.137	16.985
Marital status	-3.026	-0.080	-0.612	0.542	-12.871	6.820
Health profession	-0.303	-0.036	-0.325	0.746	-2.164	1.557
Previously posted to war area	-14.468	-0.285	-2.345	0.022	-26.757	-2.178
Job satisfaction						
Constant	34.273		3.936	0.000	16.926	51.620
Experience years	-0.385	-0.281	-2.310	0.024	-0.718	-0.053
Military rank	-0.012	-0.011	-0.090	0.929	-0.283	0.259
Service branch	-1.825	-0.194	-1.562	0.122	-4.152	0.502
Age	2.705	0.235	1.680	0.097	-0.502	5.911
Gender	0.602	0.038	0.321	0.749	-3.132	4.335
Marital status	-2.059	-0.177	-1.346	0.182	-5.107	0.989
Health profession	-0.195	-0.075	-0.674	0.502	-0.771	0.381
Previously posted to war area	-3.726	-0.238	-1.951	0.055	-7.531	0.079

different setting (Islam and Alam 2014; Suadicani et al. 2013). The result from the study showed a low mean score for opportunities being made available at the workplace. This could be a result of the relatively stricter measures surrounding military establishments and the unwillingness to allow for flexibility in terms of the pursuit of professional growth outside the establishment. The same is seen in the reported mean score for space occupation. This means that the inability of the health workers in military establishments to have more control over their life/routine and the possibility of leisure and rest more than their work contributes to the low quality of work life in that area.

The results of the correlations analysis yielded a statistically significantly positive, but relatively weak, correlation between job satisfaction and the dimensions of QWL. This is corroborated by other studies (Jahanbani et al. 2018; Saraji and Dargahi 2006). The study reveals that space occupation had the highest coefficient of correlation, followed closely by working conditions, fair and appropriate salary, social relevance, opportunities component and distantly by social integration. Space occupation was an important factor affecting job satisfaction. Space occupation refers to creating a suitable working system including working hours and work schedules that will not pose a threat to the possibility of leisure and rest to the employees of the organization. It means that an organization should provide proper leisure and relaxation time to its employees so they can maintain a balance between their personal and professional life (Chmielewska et al. 2020). Hence, they should not be overburdened or pressured with extra work that will affect their work–life balance (Chai et al. 2017; Okeke et al. 2022).

The multiple regression analysis shows that some components of socio-demographic factors were able to predict QWL and job satisfaction variance. Years of experience and previous posting to war area were significant predictors of QWL, while years of experience was the only significant predictor of job satisfaction. This infers that the number of working years and non-exposure to war areas would influence the quality of work life of military health workers. A negative regression coefficient value indicated that there will be a decrease in QWL as years of experience increase. Similarly, this relationship exists between job satisfaction and respondents' years of experience. This trend could be attributed to low budgetary allocations to the Nigerian military personnel, outdated facilities, poor welfare and an increase in banditry and insurgency over the years. A study conducted among military healthcare officers deployed to Iraq showed significant differences in the professional quality of life variables compared to those that were not deployed to a warzone (Leners et al. 2014). Constant exposure to life-demanding dangers by military personnel with less backup from the government is inimical to improving job satisfaction and quality of work life among officers.

This study prides itself as being the first, to the best of the researchers' knowledge, to measure the quality of work life and job satisfaction of military healthcare professionals and compare their relationship with one another. It is noted that the sample size of the study is small, but that is understandable, considering that military personnel are most often under regulation not to provide responses to requests about their work lives. Nonetheless, this study has provided insight into the perception health workers have about their work and the need for stakeholders to implement strategies that would improve the same.

Conclusion

The military healthcare professionals serving in Nigeria's Armed Forces have a fair perception of their quality of work life and job satisfaction. Their best perception of their quality of work life was on its social relevance, while the space occupation dimension had the worst perception. For job satisfaction, the military healthcare personnel scored the willingness to serve again the list value, although they were not that sad with the job. Both quality of work life and job satisfaction were related in the lives of the respondents, while years of experience on the job and being previously in a war zone were negative predictors of both quality of work life and job satisfaction.

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Authors' contributions AI, EED, AAB, MMA and BOU-K devised the study and developed/refined the main conceptual ideas. AI and BOU-K led the study protocol development, ethical application and gaining approvals, with input from the whole team. All authors undertook recruitment and data collection. EED and AAB undertook the main analysis with critical input from AI and BOU-K. BO-UK, AI, MMA and UAE drafted the manuscript. All authors helped refine the manuscript and approved the final version.

Data availability The datasets generated and/or analysed during this study are not publicly available to protect confidentiality, but aggregated data is available from the corresponding author on reasonable request.

Declarations

Ethics approval Ethical approval was obtained from the Health Research Ethics Committee of the University of Nigeria Teaching Hospital, Ituku-Ozalla, Enugu State, Nigeria. The approval number is NHREC/05/01/2008B-FWA0000245 8-1RB0002323. Permission was obtained from the authorities of the selected hospitals.

Consent to participate All respondents gave written informed consent to participate in the study. No identifier information was requested from the respondents. All information obtained from the respondents was treated with utmost confidentiality throughout the study.

Consent for publication Not applicable.

Conflicts of interest None declared.

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