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RESEARCH ARTICLE

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Measurement of Job Satisfaction and Quality Work Life Scale of Nurses in Niger State During Covid-19 Pandemic

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ABSTRACT

The global shortage of nurses and the rapid turnover of nurses especially during the pandemic of Covid-19 remain crucial issues and areas of concern that call for immediate attention. Job satisfaction is a recognised determinant of nurses' decision to stay in their current workplace. The purpose of this research was to identify the overall job satisfaction and whether it is related to the degree of absenteeism, intention to turnover, and perceived level of productivity among the employees. This study was conducted in four hospitals in Niger state to measure job satisfaction and quality work life scale of nurses during Covid-19 pandemic. Descriptive cross-sectional design with the questionnaire was the main data gathering tools employed. Weighted mean were utilized to treat the data. The results indicated that the total mean \pm SD of quality of nurses work life scale during Covid-19 pandemic under work environment was 3.52 ± 0.79 , quality of nurses work life scale under work condition was 2.74 ± 0.63 , quality of nurses work life scale under job satisfaction was 3.23 ± 0.80 ; quality of nurses work life scale under relationship with managers was 2.97 ± 0.72 ; quality of nurses work life scale under supportive services was 2.69 ± 0.81 . Based on the findings, there was a moderate job satisfaction for hospital staff and nurses along quality of nurses work life scale under work environment was 3.52 and job satisfaction was 3.23; and a significant stressor for hospital staff and nurses along work condition was 2.74, relationship with managers was 2.97; and under supportive services was 2.69. As conclusion, there need for the management to employ more staff, further study be conducted on wide spectrum and more effort be intensify to remedy the grey area found by the study to curtail against subsequent pandemic of any nature.

Keywords: COVID-19 pandemic; job satisfaction; healthcare workers

INTRODUCTION

Job satisfaction is a feeling of fulfillment, happiness or contentment at work. Being engaged in meaningful work plays a large role in the importance of job satisfaction. This type of work creates a purpose and meaning that can impact both to employees and employer. Many benefits to meaningful work, include improving employee engagement, motivation, fulfillment, individual performance and career development. Job satisfaction varies by area of specialisation, while Quality work life (QWL) establishes a clear objective that high performance can be achieved with high job satisfaction. Job satisfaction and quality work life are synonymous hence Quality of work life (QWL) refers to how staff think about their profession, to what extents they are satisfied, and how they consider their job comparable with their goals. It is commonly believed that improvement of the QWL is vital for attracting and keeping the staff. Quality of work life for nurses is not an exception; however, low quality of their work life has been confirmed by many studies.⁽¹⁾

Quality of life at work is an important and widely discussed concept in the literature. Unclear targets and objectives and poor communications can contribute to dissatisfaction and eventually lead to poor work performance. It is commonly believed that improvement of the QWL can lead to Job satisfaction and it is vital for attracting and keeping the staff hence Quality of work life and Job satisfaction for nurses is not an exception; however, low quality of their work life has been confirmed by many studies.⁽²⁾ The Stamps and Piedmonte Index of Work Satisfaction (IWS) is widely used to measure nurse job satisfaction. Ideal use of the IWS is to identify priority areas for change by translating staff satisfaction or dissatisfaction into discrete areas amenable to correction.⁽³⁾

A study on the "Global Nursing Shortage" (McGill Nursing Collaborative for Education and Innovation in Patient and Family-Centered Care, 2019) showed that healthcare and social services workers (HSSW) experienced an unprecedented shortage of skilled professionals. While ²stated that the COVID-19 pandemic has exacerbated this situation and put continuous pressure on HSSW, leading to increased burnout, stress, mental

health deterioration, and job-family conciliation dilemmas in addition to the risk of COVID-19 exposure, which has exacerbated the health labour shortage.⁽⁴⁾

A study entitled relationships between nurse managers' work activities, nurses' job satisfaction, patient satisfaction, and medication errors at the unit level; in a correlational study revealed that there were inter-hospital differences in terms of nurses' perceptions of working environment ($p = 0.002$) (e.g. appropriate work facilities, work unit is safe and secure). Accordingly, nurses from hospital 1 scored this factor of job satisfaction higher than nurses from hospital 2, while nurses from hospital 3 gave this factor the lowest score. A small number of nurses ($n < 40$) per nurse manager was negatively related to nurses' perceptions of the working environment.⁽⁵⁾

In other words, nurses working in small units were less satisfied with their working environment than nurses working in larger units. Furthermore, increased commitment towards safety work environment for nurses is essential. When rating the Working environment aspect of job satisfaction, nurses evaluate whether they work in facilities that are safe and secure. Over one-third of nurses thought that they work with unsafe equipment and did not feel adequately supported, while nearly half of nurses felt unsafe in the workplace. However, additional research found that nurses believe that nurse managers are can change the work systems and equipment to promote nurse safety.⁽⁵⁾

In the current study, item that has been shown to negatively interfere in the nurses work environment refers to the lack of diagnostic tests for professionals and patients. The accomplishment of tests to identify individuals infected with SARS-CoV-2 is essential to help control the pandemic. In some countries as presented by ⁴large-scale testing has been at the heart of successful strategies to halt the spread of the virus. In others, due to the limited availability of tests, because of the scarcity of financial resources or logistic difficulties in transportation, priority is given to individuals in risk groups.

Quality of nurses work life scale under work environment is very essential as it's determine organisational goals. For instance, study entitled Relationships between nurse managers' work activities, nurses' job satisfaction, patient satisfaction, and medication errors at the unit level; in a correlational study. In that study there were inter-hospital differences in terms of nurses' perceptions of working environment ($p = 0.002$) (e.g. appropriate work facilities, work unit is safe and secure). Accordingly, nurses from hospital 1 scored this factor of job satisfaction higher than nurses from hospital 2, while nurses from hospital 3 gave this factor the lowest score.⁽⁵⁾

A small number of nurses ($n < 40$) per nurse manager was negatively related to nurses' perceptions of the working environment. In other words, nurses working in small units were less satisfied with their working environment than nurses working in larger units. Furthermore, increased commitment towards safety work environment for nurses is essential. When rating the working environment aspect of job satisfaction, nurses evaluate whether they work in facilities that are safe and secure.⁽⁵⁾

Over one-third of nurses thought that they work with unsafe equipment and did not feel adequately supported, while nearly half of nurses felt unsafe in the workplace.⁽⁵⁾ However, additional research found that nurses believe that nurse managers are able to change the work systems and equipment to promote nurse safety.⁽⁶⁾ In some countries, large-scale testing has been at the heart of successful strategies to halt the spread of the virus.

Consequently, nurses from units with less staff will be more satisfied with their managers' leadership behaviour than nurses from units with more staff. This was observe in the current study. On the other hand, units with less nurses were characterized by lower ratings of the work environment in comparison to units with larger pools of nursing staff. The nursing practice environment has been found to impact staff perceptions of staffing and resource adequacy. However, staffing is not the sole reason for dissatisfaction among nurses. For example, dissatisfaction can also be the result of poor leadership and management, lack of lifelong learning opportunities, poor nurse empowerment, an insecure work environment, and strained nurse-physician relationships.

As far as it is known, this is the first study on the work environment of hospital nurses during the COVID-19 pandemic in Niger state, Nigeria. Although they received training on the use of PPE, the distress of the professionals is related to the unavailability or low quality of these materials. Therefore the fear of being infected and the little participation in decisions about the care flow stood out, as well as the lack of tests by the support services to diagnose the disease among professionals and patients can affect work environment negatively.

Quality of nurses work life scale under work condition is another variable that can have a negative effect in achievement of organizational goals if not properly integrated. If the work condition is unfavourable, it will affect the productivity of the staff lead to poor clients' care. These unprecedented working conditions have expanded the sources of emotional suffering experienced by the professionals, since they place them in situations of ethical and moral dilemma. By providing care to the patient without appropriate precautions according to⁵, they put at risk not only their lives, but that of the other patients under their care, as well as that of their co-workers and loved ones; while refusing to provide care, they run the risk of becoming criminally responsible for this action, despite being backed by class councils.⁽⁷⁾

In another development, finding of study on the association between workload, job satisfaction and quality of work life of nurses taking care of patients with COVID-19, reported that the highest contribution to the job satisfaction and QWL was the development of human capabilities, career opportunities, and job security, but the lowest was fair compensations.^(8,9) There was a significant relationship between the monthly income level, job satisfaction and the QWL. The QWL increased with higher total compensation. Job satisfaction can be increased

if a resilient workplace is a cooperative environment. This means a place with respect for diverse ideas and opinions, honest and constructive feedback, mentoring opportunities, and freedom from harassment.⁽⁸⁻¹⁰⁾

However, a positive climate, with appropriate leaders' support and adequate monitoring of workplace factors, may lead to a better job satisfaction under work condition with less distress and overwhelming circumstances for employees in nursing. Nursing managers can reduce nursing employees' intention to leave the job by providing safe, comfortable, accessible, and appropriate working conditions, positive change supporting employees in nursing, mastering interpersonal engagement skills, and creating trust. Understanding the influencing factors of work-life quality is also important for nursing management to improve nursing employee retention strategies.

On the quality of nurses' work life and job Perception/satisfaction, high-income nurses will consistently demonstrate better QWL compared to their low-income counterparts. Studies have highlighted the significance of compensation, including salary and financial incentives, in relation to nurses' dissatisfaction with their quality of work life (QWL). The salaries earned by nurses may be influenced by the type of hospital they work in. Accordingly, studies have shown that wages, financial benefits, and pay equality are crucial factors for nurses.

For example, a study reported that both salary and non-financial incentives, together with self-rated health and perceived respect from patients, are significantly positively associated with nurses' job satisfaction.⁽¹¹⁾ A study concerning nurses' job satisfaction, requiring factors of work was negatively related to the nurse managers' focus on development of nursing and to patient satisfaction regarding cognition of physical needs, while this aspect of job satisfaction was positively linked to patient views of outcomes variables.⁽⁵⁾ Similarly, finding on professional quality of life in nurses on the frontline during COVID-19 revealed that 73.6% of nurses were satisfied with their job salary and 72.5% were satisfied with their current job.⁽¹²⁾

Nurses who were satisfied with their salary experienced less burn out (BO), and those with high job satisfaction had higher levels of compassion satisfaction (CS) and less compassion fatigue (CF). Also narrated that salary is a crucial component of compensation for nurses and plays a significant role in their overall well-being, happiness, and subsequent impact on healthcare quality and organizational productivity.⁽¹³⁾

A potential explanation is that a nurse manager's decision to allocate resources to nursing processes, along with the education and orientation of staff, would reduce the resources for bedside nursing, and therefore, may influence nurse staffing. The structural equation model confirmed hypothesis that nurses' job satisfaction, intentions to leave nursing, and quality of care are all associated with resilience. Resilience directly affected the ratings of job satisfaction and requiring factors of the work,^(14,15) in accordance to previous studies that resilience promotes nurses' intention to remain in nursing profession and is an important factor for safe and quality care. Similarly, this study found that resilience had a positive effect on perceived quality of care, which had a positive effect on nurses' overall job satisfaction.⁽¹⁶⁾

Good interpersonal relationship with staff and managers can boost the moral of staff positively, this will subsequently result in standard patients' care delivery. Findings of study on relationships between leadership behaviour of nurse managers and nurses' levels of job satisfaction and compassion fatigue during the COVID-19 pandemic, revealed that Nurses mostly stated that their managers are employee-oriented and change-oriented leaders. Nurses' intrinsic and overall satisfaction was high, extrinsic satisfaction was low and their compassion fatigue was at a critical level during the pandemic. According to nurses' personal and professional characteristics, there were significant differences in job satisfaction, compassion fatigue and change-oriented leadership scores.⁽¹⁷⁾

Similarly, a study was conducted on the factors that nurses believe motivate them to perform better, with a systematic review undertaken, correlating these factors to leadership behaviours/styles, and The PRISMA guidelines were followed to identify relevant articles. After applying the selection criteria, 11 articles were included in the final analysis. Overall, 51 elements that influence nurses' motivation to perform better were found and categorized into 6 categories, including autonomy, competencies, relatedness, individual nursing characteristics, relationships and support, and leadership styles/practices. It was discovered that both direct and indirect nursing leadership behaviours affect nurses' performance.⁽¹⁸⁾

A better understanding of the factors that motivate nurses to perform well and facilitating them in the work environment through leadership behaviours/styles can improve nurses' performance. Again, when nurse managers exhibit employee-oriented leadership behaviour, nurses' compassion fatigue decreases and job satisfaction increases. Hence there is a need to increase research on nurse leadership and nurses' performance in the current innovative and technologically integrated work environment to identify new factors of influence.

Regarding quality of nurses work life scale under supportive services, it should be noted that job satisfaction and work-life quality is associated with the availability of necessary equipment, adequate information, safe work, good leadership support and above all, good teamwork. All these variables has positive effect on job satisfaction and quality work-life quality of employees. For instance, study on the importance of monitoring the work-life Quality during the COVID-19, restrictions for sustainable management in Nursing, revealed that work-life quality is associated with the availability of equipment for safe work, adequate information, leaders' support, teamwork, and exposure to stress.⁽¹⁹⁾

Nurses must receive adequate support to overcome workplace stressors,⁽⁹⁾ job stress and low resilience are threatening factors in nurses during the care of Covid-19 patients.⁽²⁰⁾ Study on work environment of nurses during

the COVID-19 pandemic in Brazil with 104 nurses, with a mean age of 38.9 (± 8.8) years old and a mean professional experience of 13.69 (± 8.99) years shows that there was a significant relationship in the work environment variable between sector, training, work shift, experience of working or coming to work in the care of suspected or infected COVID-19 patients, and perception of the support from nursing management during the pandemic.⁽²¹⁾

It is important to note that lack of social support from family, management, and colleagues is a significant predictor of psychosomatic pressure and has an additional impact on the development of work-related stress among employees. Similarly, other studies have demonstrated that high levels of social support can reduce work-related stress and improve quality of work life (QWL) among healthcare workers whose family are with them than those whose families are far from them reported higher levels of depression and anxiety compared to their counterparts.

Other studies have also found that the presence of nursing families had a positive impact on the quality of life of nurses, possibly due to better social support and work-life balance when living with family members. In addition, the support systems provided by family living arrangements, which are often more prevalent among married nurses, may contribute to increased job satisfaction.

Therefore, support for nurses should focus on both individual and organisational aspects. It is also important that nurse leaders share organisational goals to encourage staff, offer suggestions, and receive feedback on innovative practices for achieving goals in a cooperative and supportive work culture. Studies have revealed or suggested that leadership plays a crucial role in influencing nurses' performance in various areas, such as innovation, decision-making, and work engagement.

A study on impact of nurse leaders behaviours on nursing staff performance revealed that it is important that nurse leaders share organisational goals to encourage staff, offer suggestions, and receive feedback on innovative practices for achieving goals in a cooperative and supportive work culture. Furthermore, new approaches to leadership, such as entrepreneurial leadership and transformational leadership practices, can positively impact nurses' performance and support the achievement of organisational goals such as sustainability.⁽¹⁸⁾ Therefore, it is important for nurse managers to continuously develop their leadership skills and create a positive work environment that supports nurses' ability to perform well. By such doing, nurse managers can help to create practice environments that promote nurses' ability to perform their roles effectively, thus enhancing overall nursing performance.

In this study, need-fulfillment theory and social reference-group theory were adapted to examine job satisfaction among the participants. Under the need- fulfillment theory it is believed that a person is satisfied if he gets what he wants and the more he wants something, or the more important it is to him, the more satisfied he is when he gets it and the more dissatisfied he is when he does not get it.

The social reference-group theory is similar to need-fulfillment theory except that it takes into account not the desires, needs and interests of the individual, but rather the point of view and opinions of the group to whom the individual looks for guidance. Such groups are defined as the "reference-group" for the individual in that they define the way in which he should look at the world and evaluate various phenomena in the environment (including himself).

It would be predicted, according to this theory, that if a job meets the interests, desires and requirements of a person's reference group, he will like it and if it does not, he will not like it. A good example of this theory has been given by Hulin. He measured the effects of community characteristics on job satisfaction of female clerical workers employed in 300 different catalogue order offices.

He found that with job conditions held constant job satisfaction was less among women living in a well- to-do neighbourhood than among those whose neighbourhood was poor. Hulin thus provides strong evidence that such frames of reference for evaluation may be provided by one's social groups and general social environment. However, it is obvious that this theory gives an incomplete explanation since while some people may go along with group opinions and group evaluation of organisational phenomena many people are independent of these pressures.

Job satisfaction is a function of or is positively related to the degree to which one's personal needs are fulfilled in the job situation; and or is positively related to the degree to which the characteristics of the job meet with approval and the desires of the group to which the individual looks for guidance in evaluating the world and defining social reality. If the participants' personal needs are fulfilled in the job situation and the job meet with approval as well as the desires of the group to which the individual looks for guidance in evaluating the world and defining social reality, they will fill fulfilled. But if revised is the case, the participants will experience depersonalised and unaccomplished in their life endeavour.

One of the main roles of human resources (HR) departments in every organisation is to ensure that employees are sufficiently satisfied with their jobs. Typically research has shown that satisfied employees or corporations are thought to be more productive. On the other hand, if workers are dissatisfied with their jobs, they are thought to be less productive and more prone to absenteeism and turnover. So HR departments need to measure employee job satisfaction and examine the correlations between these three variables (productivity, absenteeism, and turnover) with regard to possible extraneous variables.

The study was conducted to measure job satisfaction and quality work life scale of nurses in Niger state during covid-19 pandemic. The survey, which was administered to the entire nurses' population, quantifies job satisfaction and employee. That way, the general job satisfaction feedback will help HR in identifying the percentage of satisfied employees and the percentage satisfied in the areas of compensation, benefits, training, and supervisor relations. The

purpose of this research was to identify the overall job satisfaction and whether it is related to the degree of absenteeism, intention to turnover, and perceived level of productivity among the employees.

METHODS

Descriptive cross-sectional design was employed for the study. This design describe a variable in a study and are purely used to characterise and measure job satisfaction and quality work life scale of nurses’ population in Niger state. Typically, this study design was used to measure job satisfaction and quality work life scale of nurses in Niger state during covid-19 pandemic.

In this study, researcher examine a group of participants and depict what already exists in the population without manipulating any variables or interfering with the environment. Cross-sectional studies are also unique because researchers are able to look at numerous characteristics at once. The data that had been collected is numerical, so it was analyzed using descriptive statistical methods in the form of mean scores and standard deviations for each variable. The results of this analysis were presented in a table so that it is easy to interpret.

This research was carried out by applying the principles of health research ethics, including respect for respondent autonomy, fairness to respondents, providing benefits to respondents and avoiding things that are detrimental and endangering respondents.

RESULTS

The results of the analysis of demographic variables show that age was dominated by 31-35 years, namely 24%; gender was dominated by female, namely 67.6%; marital status was dominated by married, namely 77.8%; age was dominated by 31-35 years, namely 24%; religious affiliation was dominated by moslem, namely 73.8%; educational attainment was dominated by RN, namely 44%; designation/rank was dominated by ACNO, namely 29.8%; years of experience was dominated by 1-5 years, namely 24.9%; monthly salary was dominated by #250,000 and above, namely 44.4% (Table 1).

Table 1. The distribution of demographic variables of respondents

Variable	Category	Frequency	Percentage
Age (years)	25-30	47	20.9
	31-35	54	24.0
	36-40	36	16.0
	41-45	41	18.2
	46 and above	47	20.9
Gender	Male	73	32.4
	Female	152	67.6
Marital status	Single	45	20.0
	Married	175	77.8
	Separated	4	1.8
	Divorce	1	0.4
Religious affiliation	Christian	58	25.8
	Moslem	166	73.8
	Other	1	4
Educational attainment	RN	99	44.0
	RN/M	78	34.6
	BSc	46	20.4
	MSc	2	0.8
Designation/rank:	Staff nurse II	37	16.4
	Staff nurse I	42	18.7
	SNO	22	9.8
	PNO	57	25.3
	ACNO	67	29.
Years of experience	1-5	56	24.9
	6-10	40	17.8
	11-15	45	20.0
	16-20	39	7.3
	21 and above	45	20.0
Monthly salary:	#80,000-#90,000	36	16.0
	#100,000-#140,000	22	9.8
	#150,000-#180,000	17	7.6
	#190,000-#200,000	50	22.2
	#250,000 and above	100	44.4

Based on the result of the findings, it can be noted from the tables that there are five indicators on the measurement of job satisfaction and quality work life scale of nurses in Niger state during covid-19 pandemic. Quality of nurses work life scale during Covid-19 pandemic under work environment and job

perception/satisfaction has the highest indicators with 3.52 and 3.23 respectively. Those under relationship with managers has 2.97, followed by work condition with 2.74, while supportive services have the least with 2.69.

Table 2. Summary of quality of nurses work life scale during Covid-19 pandemic (work environment)

Items/variables	Mean ± SD
Society has positive opinion about nurses	3.53 ± 1.33
Institution provides opportunities for professional growth	3.69 ± 1.20
I communicate well with other team members like physiotherapist and respiration therapist etc.	3.65 ± 1.10
I receive support for in-service training and constant continue education	3.15 ± 1.44
Nursing policies and procedures facilitates my job	3.82 ± 1.21
Observing safety precaution in the work place, provides a safe working environment	3.91 ± 1.29
I feel safe protected against damage (physical, moral, verbal)	3.28 ± 1.24
I believe my job is safe	3.42 ± 1.31
Respect of nurses by managers	3.27 ± 1.24
Mean	3.52 ± 0.79

Table 3. Summary of quality of nurses work life scale during Covid-19 pandemic (work condition)

Items/variables	Mean ± SD
I am overworked especially during this covid-19 pandemic	3.52 ± 1.39
I can manage a good balance between work and family inspite of the pandemic	3.30 ± 1.28
I do a lot of work irrelevant to nursing	2.97 ± 1.36
I have energy outside of work	2.84 ± 1.31
My daily affairs are frequently disrupted	3.18 ± 1.35
I have enough time for work	3.48 ± 1.27
The number of nurses is adequate in my unit	2.48 ± 1.43
Shift work negatively affects my life	2.85 ± 1.34
My salary is adequate for my job	2.51 ± 1.38
Institutional policy is suitable for saving time for family	3.00 ± 1.23
Mean	2.74 ± 0.63

Table 4. Summary of quality of nurses work life scale during Covid-19 pandemic (job perception/satisfaction)

Items/variables	Mean ± SD
I enjoy covid-19 welfare package hence I'm contented with my work	2.40 ± 1.44%
I have autonomy in deciding patient care	2.97 ± 1.27%
Team work is present in my unit	3.61 ± 1.09%
I feel attached to work because I'm paid hazard allowance	2.85 ± 1.44
I feel approved by doctors at work	3.36 ± 1.20
I can communicate with doctors at the work environment	3.68 ± 1.17
My job is effective for patients and their family life	3.74 ± 1.14
Mean	3.23 ± 0.80

Table 5. Summary of quality of nurses work life scale during Covid-19 pandemic (relationship with managers)

Items/variables	Mean ± SD
I have good communication with my manager/supervisor nurse	3.78 ± 1.16
Manager/supervisor nurse provides adequate supervision/inspection	3.62 ± 1.12
Manager/supervisor provides feedback about performance	3.50 ± 1.03
Manager/supervisor ask our opinions	3.31 ± 1.18
My achievements are recognized by manager/supervisor	3.31 ± 1.20
Mean	2.97 ± 0.72

Table 6. Summary of quality of nurses work life scale during Covid-19 pandemic (supportive services)

Items/variables	Mean ± SD
I receive adequate support from support service staff (meal, cleaning and care staff)	2.60 ± 1.38
I have adequate materials and equipment for patient care	1.84 ± .77
I give good quality patient care	3.73 ± 1.23
I receive qualified support from support services staff (meal, cleaning and care staff)	2.60 ± 1.34
Mean	2.69 ± 0.81

DISCUSSION

Quality of Nurses Work Life Scale During Covid-19 Pandemic (Work Environment)

This finding is in consonant with the findings of a study entitled Relationships between nurse managers' work activities, nurses' job satisfaction, patient satisfaction, and medication errors at the unit level; in a

correlational study. In that study there were inter-hospital differences in terms of nurses' perceptions of Working environment ($p = 0.002$) (e.g. appropriate work facilities, work unit is safe and secure). Accordingly, nurses from hospital 1 scored this factor of job satisfaction higher than nurses from hospital 2, while nurses from hospital 3 gave this factor the lowest score.⁽⁵⁾

A small number of nurses per nurse manager was negatively related to nurses' perceptions of the working environment. In other words, nurses working in small units were less satisfied with their working environment than nurses working in larger units. Furthermore, increased commitment towards safety work environment for nurses is essential. When rating the Working environment aspect of job satisfaction, nurses evaluate whether they work in facilities that are safe and secure. Over one-third of nurses thought that they work with unsafe equipment and did not feel adequately supported, while nearly half of nurses felt unsafe in the workplace. However, additional research found that nurses believe that nurse managers are able to change the work systems and equipment to promote nurse safety.⁽⁵⁾

In the current study, another item that has been shown to negatively interfere in the nurses work environment refers to the lack of diagnostic tests for professionals and patients. The accomplishment of tests to identify individuals infected with SARS-CoV-2 is essential to help control the pandemic. In some countries, large-scale testing has been at the heart of successful strategies to halt the spread of the virus. In others, due to the limited availability of tests, because of the scarcity of financial resources or logistic difficulties in transportation, priority is given to individuals in risk groups.⁽⁶⁾

Consequently, nurses from units with less staff were more satisfied with their managers' leadership behaviour than nurses from units with more staff. This was observed in the current study. On the other hand, units with less nurses were characterized by lower ratings of the work environment in comparison to units with larger pools of nursing staff. The nursing practice environment has been found to impact staff perceptions of staffing and resource adequacy. However, staffing is not the sole reason for dissatisfaction among nurses. For example, dissatisfaction can also be the result of poor leadership and management, lack of lifelong learning opportunities, poor nurse empowerment, an insecure work environment, and strained nurse-physician relationships.

As far as it is known, this is the first study on the work environment of hospital nurses during the COVID-19 pandemic in Niger state, Nigeria. Although they received training on the use of PPE, the distress of the professionals is related to the unavailability or low quality of these materials. Therefore the fear of being infected and the little participation in decisions about the care flow stood out, as well as the lack of tests by the support services to diagnose the disease among professionals and patients.

Quality of Nurses Work Life Scale During Covid-19 Pandemic (Work Condition)

Finding of the current study is indicative that though the quality of nurses work life scale during Covid-19 pandemic under work condition was not perfect, neither was it threatening. The Opportunity to use and develop human capabilities and safety in health working conditions has the most significant contribution. It also provides adequate and fair compensations to workers, living space with maximum contribution to the organisation.

Consistent with this finding, reported that the highest contribution to the QWL was the development of human capabilities, career opportunities, and job security, but the lowest was fair compensations.^(8,9) A study reported that there was a significant relationship between the monthly income level and the QWL. The QWL increased with higher total compensation.⁽⁸⁻¹⁰⁾

Helping to achieve good work-life quality in hospitals at all levels can promote nursing employee recognition, which might emerge as a valuable resource and health policy tool. A positive climate, with appropriate leaders' support and adequate monitoring of workplace factors, may lead to a better work-life quality with less distress and overwhelming circumstances for employees in nursing. Nursing managers can reduce nursing employees' intention to leave the job by providing safe, comfortable, accessible, and appropriate working conditions, positive change supporting employees in nursing, mastering interpersonal engagement skills, and creating trust. Understanding the influencing factors of work-life quality is also important for nursing management to improve nursing employee retention strategies.

These unprecedented working conditions have expanded the sources of emotional suffering experienced by the professionals, since they place them in situations of ethical and moral dilemma. By providing care to the patient without appropriate precautions according to prior study,⁽⁷⁾ they put at risk not only their lives, but that of the other patients under their care, as well as that of their co-workers and loved ones; while refusing to provide care, they run the risk of becoming criminally responsible for this action, despite being backed by class councils

Quality of Nurses Work Life Scale During Covid-19 Pandemic (Job Perception/Satisfaction)

It is important to acknowledge that the quality of work life of nurses is a crucial aspect to consider. Nurses in regular positions frequently encounter death, conflicts with colleagues, patient and family issues, and some professional discrimination. Nurses must make a concerted effort to adapt to all relevant factors in order to maintain the quality of service provided to patients. Nurses commonly face challenges that can reduce their quality of work life and ultimately impact their job performance.

In the current study, nurses were contented with their work, had autonomy to decide patients' care, there was team work hence had no problem communicating with other health team such as doctors, pharmacist, laboratory scientist, among others and they had quality time for themselves, families and were still able to give quality care the patients. This finding support the study on professional quality of life in nurses on the frontline against COVID-19 which revealed that 73.6% of nurses were satisfied with their job salary and 72.5% were satisfied with their current job.⁽¹²⁾

Nurses who were satisfied with their salary experienced less BO, and those with high job satisfaction had higher levels of Compassion satisfaction (CS) and less compassion fatigue (CF). Finding of the current study is also similar with a study that salary is a crucial component of compensation for nurses and plays a significant role in their overall well-being, happiness, and subsequent impact on healthcare quality and organizational productivity. Therefore high-income nurses consistently demonstrate better QWL compared to their low-income counterparts. Studies have highlighted the significance of compensation, including salary and financial incentives, in relation to nurses' dissatisfaction with their quality of work life (QWL). The salaries earned by nurses may be influenced by the type of hospital they work in. Accordingly, studies have shown that wages, financial benefits, and pay equality are crucial factors for nurses.⁽¹³⁾

Finding of the current study is consistent with findings of previous studies. For example, a study reported that both salary and non-financial incentives, together with self-rated health and perceived respect from patients, are significantly positively associated with nurses' job satisfaction.⁽¹¹⁾

A potential explanation is that a nurse manager's decision to allocate resources to nursing processes, along with the education and orientation of staff, would reduce the resources for bedside nursing, and therefore, may influence nurse staffing. The structural equation model confirmed hypothesis that nurses' job satisfaction, intentions to leave nursing, and quality of care are all associated with resilience. The studies narrated that resilience directly affected the ratings of job satisfaction and requiring factors of the work,^(14,15) in accordance to previous studies that resilience promotes nurses' intention to remain in nursing profession and is an important factor for safe and quality care. Similarly, this study found that resilience had a positive effect on perceived quality of care, which had a positive effect on nurses' overall job satisfaction.⁽¹⁶⁾

Quality of Nurses Work Life Scale During Covid-19 Pandemic (Relationship With Managers)

The quality of nurses work life scale in Niger State during Covid-19 pandemic under relationship with Managers was quite encouraging and favourable as there was good inter and intra communication among all categories of health staff, adequate supervision, provision of feedback mechanism was in place between the nurse managers and the staff as well as recognition of staff impute in the management of patients. This finding is similar with the finding of a study on relationships between leadership behaviour of nurse managers and nurses' levels of job satisfaction and compassion fatigue during the COVID-19 pandemic, where the results revealed that Nurses mostly stated that their managers are employee-oriented and change-oriented leaders.⁽¹⁷⁾

Nurses' intrinsic and overall satisfaction was high, extrinsic satisfaction was low and their compassion fatigue was at a critical level during the pandemic. According to nurses' characteristics, there were significant differences in job satisfaction, compassion fatigue and change-oriented leadership scores. Similarly, a study on the factors that nurses believe motivate them to perform better, where a systematic review was undertaken, correlating these factors to leadership behaviours/styles. The PRISMA guidelines were followed to identify relevant articles. After applying the selection criteria, 11 articles were included in the final analysis. Overall, 51 elements that influence nurses' motivation to perform better were found and categorized into 6 categories, including autonomy, competencies, relatedness, individual nursing characteristics, relationships and support, and leadership styles/practices.⁽¹⁸⁾

It has been discovered that both direct and indirect nursing leadership behaviours affect nurses' performance. A better understanding of the factors that motivate nurses to perform well and facilitating them in the work environment through leadership behaviours/styles can improve nurses' performance. Again, when nurse managers exhibit employee-oriented leadership behaviour, nurses' compassion fatigue decreases and job satisfaction increases. Hence there is a need to increase research on nurse leadership and nurses' performance in the current innovative and technologically integrated work environment to identify new factors of influence.

Quality of Nurses Work Life Scale During Covid-19 Pandemic (Supportive Services)

This shows that either the materials or equipment (PPE) were not available, or was available but was not sufficient for patient care. The results of this study show that nursing QWL is mainly at a moderate level and requires improvement interventions. Finding from the current study is in line with the finding of study on the importance of monitoring the work-life Quality during the COVID-19 restrictions for sustainable management in Nursing, where the finding states that work-life quality is associated with the availability of equipment for safe work, adequate information, leaders' support, teamwork, and exposure to stress.⁽¹⁹⁾

According to these findings, the results of the current study is supportive because employees in nursing were very satisfied with leaders' support; 90% received adequate information, 99% assessed that they had enough equipment for safety work, 97% felt safe about their work, and 96% had a person who was available for all the

information. Also in line with the finding of the current study,⁽⁹⁾ who suggests that nurses must receive adequate support to overcome workplace stressors. A study showed job stress and low resilience as threatening factors in nurses during the care of COVID-19 patients.⁽²⁰⁾ While study on work environment of hospital nurses during the COVID-19 pandemic in Brazil in which result, had a mean age of 38.9 (± 8.8) years old and a mean professional experience of 13.69 (± 8.99) years shows that there was a significant relationship in the work environment variable between sector, training, work shift, experience of working or coming to work in the care of suspected or infected COVID-19 patients, and perception of the support from nursing management during the pandemic.⁽²¹⁾

It is important to note that lack of social support from family, management, and colleagues is a significant predictor of psychosomatic pressure and has an additional impact on the development of work-related stress among employees. Similarly, other studies have demonstrated that high levels of social support can reduce work-related stress and improve quality of work life (QWL) among healthcare workers whose family are with them than those whose families are far from them reported higher levels of depression and anxiety compared to their counterparts. The study also found that the presence of nursing families had a positive impact on the quality of life of nurses, possibly due to better social support and work-life balance when living with family members. In addition, the support systems provided by family living arrangements, which are often more prevalent among married nurses, may contribute to increased job satisfaction.

Therefore, support for nurses should focus on both individual and organizational aspects. It is important that nurse leaders share organizational goals to encourage staff, offer suggestions, and receive feedback on innovative practices for achieving goals in a cooperative and supportive work culture. The studies reviewed suggest leadership plays a crucial role in influencing nurses' performance in various areas, such as innovation, decision-making, and work engagement. Study on impact of nurse leaders behaviours on nursing staff performance; revealed that it is important that nurse leaders share organizational goals to encourage staff, offer suggestions, and receive feedback on innovative practices for achieving goals in a cooperative and supportive work culture. This study reviewed suggest leadership plays a crucial role in influencing nurses' performance in various areas, such as innovation, decision-making, and work engagement.⁽¹⁸⁾

Furthermore, new approaches to leadership, such as entrepreneurial leadership and transformational leadership practices, can positively impact nurses' performance and support the achievement of organizational goals such as sustainability. Therefore, it is important for nurse managers to continuously develop their leadership skills and create a positive work environment that supports nurses' ability to perform well. By such doing, nurse managers can help to create practice environments that promote nurses' ability to perform their roles effectively, thus enhancing overall nursing performance.

CONCLUSION

In conclusion, though the participants enjoyed a moderate job satisfaction, the high workload was a significant stressor for hospital staff and nurses. The nurses' workload increased, leading to increased stress and this can lead to decreased productivity, ultimately affecting their quality of life. Compared to studies before the outbreak of COVID-19, there was a partial increase in nurses' workload, but there was no noticeable change in the quality of their work life, which remained at a moderate level.

Therefore, acquiring knowledge about the influential factors for positive quality of work life (QWL) development among nurses is crucial to improve their job satisfaction and QWL. Developing QWL in nurses can increase their loyalty to the profession and promote the quality of care and patient satisfaction while decreasing nurses' exhaustion and burnout.

In the current results, teamwork and collaborative practice with health professionals was well evaluated by the nurses. Nursing teamwork is a key instrument in the professional practice, as it is the most appropriate way to obtain satisfactory results; and, in order to sustain it effectively, cooperation of all those involved in the process is highly apprehended.

Implications for Nursing and Nursing Policy

This study, conducted in four Hospitals (General Hospitals Bida, Kontagora, Minna and Suleja) in Niger state, Nigeria presents the nurses' measurement of job satisfaction and quality work life scale of nurses during covid-19 pandemic under their work environment, work condition, job perception/satisfaction, job satisfaction, relationship with managers and supportive Services while taking care of patients during the COVID-19 pandemic. The findings of this study have several implications for nursing research and health policy for improvement of the Nursing working conditions. This findings will support the discussion and planning of improvement opportunities for the continuation of the fight against any subsequent pandemic.

The gaps identified in this study will assist policymakers and hospital managers in developing policies to enhance the support offered to nurses and improve the care provided to patients with COVID-19 in university hospitals. In view of the setting found, it is proposed to return the results to nursing management and to the continuing education service of the hospitals addressed in the study as a way of evaluating the actions developed to deal with not only the COVID-19 pandemic, but to outbreak of other pandemic diseases.

The research findings may support the discussion and planning of improvement opportunities for the continuation of the fight against this pandemic. Moreover, finding of the research will also encourages the development of new studies, mainly in other settings in Nigeria, to analyse how the COVID-19 pandemic has impacted on the work environment of nurses in the hospital context.

Clinical Implications for Nursing Managers and Policymakers

In order to achieve a better quality of work life (QWL), nursing managers can take active steps to improve nurses' work conditions. These steps include reducing nurses' workload, creating a respectful working atmosphere, considering their work experience, work shifts, and age, and ensuring adequate and fair pay. Additionally, effective measures should be taken to recruit a new workforce, balance nurses' workload, and provide suitable facilities and incentives.

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