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By Universitas Muhammadiyah Sidoarjo

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Unlocking Nurse Satisfaction Global Imperatives for Retention and Wellbeing

Mengungkap Kepuasan Perawat Imperatif Global untuk Retensi dan Kesejahteraan

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Abstract

This study explores job satisfaction among nurses through a descriptive cross-sectional analysis conducted from January to April 2024, using a purposive sample of 400 participants. The findings reveal that while 85.9% of nurses are moderately satisfied with their jobs, satisfaction varies significantly between internal job elements (77.5% satisfaction) and external job factors (62.2% satisfaction). The study recommends the implementation of career development programs, recognition initiatives, and work-life balance strategies, alongside stress management and resilience training, to enhance overall job satisfaction and prevent burnout. These measures are crucial for improving healthcare outcomes and reducing staff turnover.

Highlights:

- Moderate Satisfaction: Most nurses are moderately satisfied, highlighting areas for improvement.
- Satisfaction Disparity: There's a significant gap between satisfaction with internal and external job elements.
- Strategic Interventions: Career development and stress management programs are recommended to boost satisfaction and retention.

Keywords: Nurse Satisfaction, Job Factors, Healthcare Management, Stress Prevention, Workforce Stability

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Introduction

Nurses' job satisfaction rate reflects how satisfied they are with their jobs, which is highly subjective, which is why it is an extremely complex and multifaceted phenomenon. The Two Factor Theory of Frederick Herzberg explains job satisfaction by stating that two types of factors influence it. Job security, salary, fringe benefits, and working conditions are some of the external or maintenance factors related to hygiene. The motivational factors on the other hand are the high qualifications required for the job, recognition for better performance, responsibility, autonomy, meaning, participation in decision making, and commitment to the organization. As a result, nurses' job satisfaction is affected by a combination of intrinsic and extrinsic factors [1].

Stress is very common among employees, as it can harm both their physical and mental well-being, leading to job burnout. Employees should avoid job burnout so that they can maintain proper job satisfaction. Employees cannot be satisfied if they are subjected to high levels of stress, which is the organization's responsibility [2].

A nurse's job satisfaction plays a crucial role in recruiting and retaining nurses in hospitals, as well as contributing to nurse retention and well-being. It is employee satisfaction that results in committed and motivated employees. A nurse's job satisfaction is an important factor in creating a positive working environment in clinical settings and in providing quality care to patients. Employee satisfaction motivates them to perform their best, and usually leads to a higher level of loyalty and commitment to the organization. When employees feel satisfied at work, they are more likely to perform their work effectively without feeling compelled, since they want to improve the performance of their organization [3].

Methods

A. Design

A quantitative research approach has been used for this study. Design of the study A descriptive cross-sectional design was used in this study.

B. Objective

The goal of this study was to assessment Job Satisfaction among Nurses Working at Teaching Hospitals in Diwaniyah City.

C. The Study Population

The study population is a subset of the overall target population from which the sample is drawn. Its scope extends beyond the idea of the sample frame. The study target population was nurses in AL- diwaniyah.

D. Sampling Size

The study sample was collected from nurses working in teaching hospitals in the city of Diwaniyah (Maternity and children teaching hospital and AL-Diwaniyah Teaching Hospital). According to the statistics from the AL-Diwaniyah Health Directorate, the number of nurses working in these hospitals reached 2200 nurses at 2024. 400 nurses agreed to participate in this study. 40 questionnaires were neglected due to incomplete filling by the respondents, and 20 questionnaires were not returned by the respondents and 20 were excluded for other reasons. A total of 320 nurses were included in the data analysis. The minimum sample size in present study was 320 nurses, according to calculating of minimum sample size based on the confidence level of 95% and the margin of error 5% [4].

E. Sample Type

A non-probability (purposive) sampling method was used. This method involves researchers using their own judgment to select individuals from the population to participate in their surveys [5].

F. Instrument of the Study

Minnesota Satisfaction Questionnaire was developed in 1967 by Weiss et al. A short and long form of the MSQ is available. According to Herzberg and colleagues' Two-Factor Theory, the short form scale measures both intrinsic as well as extrinsic satisfaction (Weiss, Dawis and England, 1967). It consists of 20 items, divided into intrinsic and extrinsic subscales. Confirmatory factor analysis was used to assess the construct validity of the questionnaire, with 10 items per subscale. This statistical procedure confirmed the validity of the questionnaire. To assess the reliability of the questionnaire, the Cronbach's alpha coefficient was also used. The Cronbach's alpha for overall,

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intrinsic, and extrinsic satisfaction was 0.91, 0.86, and 0.88, respectively [6].

G. Rating and Scoring

A 5-point Likert scale is used to measure job satisfaction in the Minnesota Satisfaction Questionnaire (MSQ). Intermediate points on the scale represent varying degrees of satisfaction or dissatisfaction. They range from 1 (very dissatisfied with this aspect of my job) to 5. Overall satisfaction is measured by calculating the sum of the scores on the intrinsic and extrinsic satisfaction subscales. Total score ranges from 20 to 100, with low scores falling between 20 and 47, moderate scores falling between 48 and 76, and high scores falling between 77 and 100.

H. Questionnaire Reliability

The reliability of nursing research refers to how a research instrument, like a questionnaire or interview, produces the same results if used in the same situation again and again [7]. In order to produce valid results, a reliable instrument must measure what it intends to measure [8]. In the current study, internal consistency reliability was determined, which measures how consistent the items in the instrument are. According to Edwin, this test measures the consistency of the instrument and how well the items measure a particular characteristic. A test's reliability coefficient is estimated by correlating single items within it [9]. The internal consistency between items was determined by using Cronbach's alpha coefficient which was calculated through application of Statistical Package for Social Science Program (IBM SPSS) version 26.0 as referred in (Table: 1) on a sample of (32) nurses selected by convenience as per Table 2. A good Cronbach's alpha (0.740) indicates that the questionnaires have sufficient internal consistency and equivalence measurement. alpha coefficients indicate strong internal consistency for both the work satisfaction scale (0.740) and the psychological burnout measures (0.758). These results suggest that the questionnaires demonstrate a satisfactory level of reliability and consistency in measuring the intended constructs.

Scales	No. of Items		Evaluation Consistency	of	Internal
Job satisfaction	20	0.740	Good		

Table 1. Reliability Analysis of the Instruments (N=32)

I. Limitation

An essential limitation of this study is that it only includes nurses who work specifically in the two specified institutions. Several nurses declined to participate in the study. Lack of access to nationwide research on the correlation between job satisfaction and burnout among nurses employed at academic medical centers. Several nurses in the study sample are fatigued and fail to engage in the study.

J. Statistical Data Analysis

The researcher utilized the Statistical Package for the Social Sciences (SPSS) version 26 software to effectively organize and analyze the data collected in the study. Both descriptive and inferential analysis will be conducted on the sample data.

Results and Discussion

A. Results

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List	Characteristics		F	%
		20 – less than 30	177	55.3
		30 – less than 40	51	15.8
1	Age (year)	40 – less than 50	68	21.3
	M±SD= 32.5 ± 9.5	50 – less than 60	20	6.3
		60 and more	4	1.3
		Total	320	100
		Male	186	58.1
2	Sex	Female	134	41.9
		Total	320	100
		Secondary school	80	25
		Diploma	150	46.9
3	Qualification in nursing	Bachelor	67	20.9
		Postgraduate	23	7.2
		Total	320	100
		Unmarried	114	35.6
		Married	203	63.5
4	Marital status	Divorced	2	.6
		Widowed/er	1	.3
		Total	320	100
		Urban	266	83.1
5	Residency	Rural	54	16.9
		Total	320	100

f: Frequency, %: Percentage, M: Mean, SD: Standard deviation

Figure~1.~~Distribution of Nurses According to their Socio-demographic Characteristics

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List	Characteristics		F	%
		Less than 2	51	15.9
1	Years of services in hospital	2 – less than 6	110	34.4
		6 and more	159	49.7
		Total	320	100
		No	182	56.9
2	Having extra job	Unrelated to nursing	65	20.3
-	That mig can be job	Related to nursing	73	22.8
		Total	320	100
		Administration	10	3.1
	3 Department .	Surgical wards	51	15.9
		Critical care units	31	9.7
3		Emergency	74	23.1
		Neurology centers	47	14.7
		Medical wards	56	17.5
		Others	51	15.9
		Total	320	100
		Sufficient	60	18.8
4	Monthly income	Barely sufficient	120	37.5
-		Insufficient	140	43.7
		Total	320	100
		Excellent	21	6.6
5	Perceived work	Satisfied	190	59.4
	environment	Dissatisfied	109	34
		Total	320	100

f: Frequency, %: Percentage, M: Mean, SD: Standard deviation

Figure 2. Distribution of Nurses According to their Professional Characteristics

Satisfaction	F	%	M	SD	Ass.
Low	18	5.6	59.98	9.231	Moderate
Moderate	275	85.9			satisfaction
High	27	8.4			
Total	320	100			

Table 2. Overall Assessment of Job Satisfaction (General Satisfaction) among Nurses

M: Mean for total score, SD: Standard Deviation for total score, Ass: Assessment

Low= 20 - 46.66, Moderate= 46.67 - 73.33, High= 73.34 - 100

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This table indicates that nurses are moderately satisfied for their job as reported among 85.9% of them (M±SD= 59.98 ± 9.231).

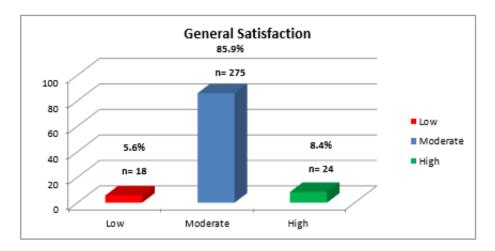


Figure 3. Levels of General Job Satisfaction among Nurses (N=320)

This figure shows that 85.9% of nurses are associated with moderate general job satisfaction.

Satisfaction	f	%	M	SD	Ass.
Low	13	4.1	38.87	5.812	Moderate
Moderate	248	77.5			
High	59	18.4			
Total	320	100			

Table 3.

This table reveals that nurses show moderate internal job satisfaction as reported among 77.5% of them $(M\pm SD=38.87\pm5.812)$.

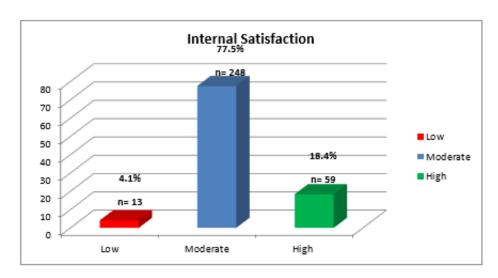


Figure 4. Assessment of Internal Job Satisfaction among Nurses

This figure shows that 77.5% of nurses are associated with moderate internal job satisfaction.

Satisfaction	f	%	М	SD	Ass.
Low	100	31.3	21.12	5.095	Moderate
Moderate	199	62.2			
High	21	6.6			

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Total 320	100			
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Table 4. Assessment of External Job Satisfaction among Nurses

f: Frequency, %: Percentage

M: Mean for total score, SD: Standard Deviation for total score, Ass: Assessment

Low= 8 - 18.66, Moderate= 18.67 - 29.33, High= 29.34 - 40

This table exhibits that nurses show moderate external job satisfaction as reported among 62.2% of them (M±SD= 21.12 ± 5.095).

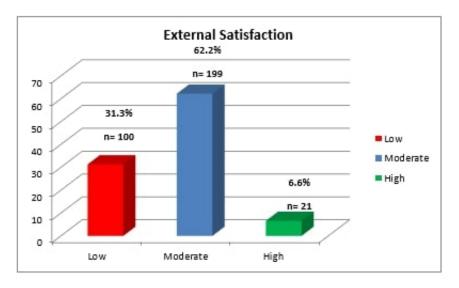


Figure 5. Levels of External Job Satisfaction among Nurses (N=320)

This figure shows that 62.2 % of nurses are associated with moderate external job satisfaction.

B. Discussion

As shown in table 3-1, nurses are an average of 32.5 years old, with 55.3% of them being under 30 years old. Those findings indicate nurses are young and relatively new to the nursing profession, demonstrating the increasing need for college-educated nurses. Studies by Tan and Chin indicate that there are generational differences among nurses when it comes to work values and attitudes, with younger nurses focusing more on work-life balance and seeking recognition and respect [10] study found supportive evidence that nurses working in hospitals are young and married [11]. More than half of the nurses in the study had a male gender. As a result of this, the hard work environment in hospitals requires a male sex workforce, found that the majority of participants were male [12].

A search results show that 46.9% of nurses have a diploma and 20.9% have a bachelor's degree. A majority of registered nurses enter the workforce with a baccalaureate degree from a four-year university or college, or an associate degree from a community college, according to the search results. The nursing students of 2022 will have a higher level of education than their predecessors when they earn a baccalaureate or higher degree. Nearly 1,300 diploma programs were active nationwide in the 1950s and 1960s, according to the search results [13].

The marital status for nurses refers to 63.5% of them being married, while 35.6% of them are still unmarried. Researchers have found that marital status can contribute to nursing burnout, with unmarried nurses showing higher levels of emotional exhaustion. It is evident from these findings that marital status is an important factor in determining nurse satisfaction and well-being [14]. According to these findings, more nurses in the study are married [15]. According to the residency data, 83.1% of nurses reside in urban areas while only 16.9% reside in rural areas. Due to higher populations and a higher number of job opportunities, including in the healthcare sector, cities tend to be more urbanized. However, rural areas often face a number of challenges, including limited resources, fewer employment opportunities, and lower wages, which may explain the high concentration of nurses in urban areas. Researchers found that more nurses reside in urban areas [16]. It was reported in table (2) that the most number of nurses had served in hospitals for at least six years. This suggests that nurses with fewer years of service may be less likely to remain in hospital settings, as they may face more challenges in their work. The study also found that nurses with fewer years of service are older. This is correlated with their young age [17].

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According to the survey, only 20.3% of nurses work in jobs unrelated to nursing, whereas 22.8% work in nursing-related jobs. Nursing may therefore take on extra jobs or side gigs as a means of making extra money. However, the search results do not provide specifics on the types of extra jobs nurses can take on outside of nursing duties. Nursing contracts may limit nurses' ability to take on additional work, and working additional jobs may exacerbate the stress and burnout that nurses are already experiencing [18].

A study from the department indicates that nurses work in various hospital departments and 23.1% of them work in emergency rooms. As a result of this study, nurses are now qualified to work in a variety of hospital departments, including emergency rooms, because of their specific skills, knowledge, and certifications necessary to provide lifesaving, immediate care to patients in critical condition [19].

In relation to monthly income, nurses perceived a lack of it. The search results provide evidence that many nurses perceive their monthly income as insufficient, which can lead to dissatisfaction at work and intentions to quit. It has been found that nurses are dissatisfied with unfair wages and benefits, and that low salaries and benefits have led to mental and physical problems [20]. 59.4% of nurses perceive their work environment as satisfactory, while 34% perceive their work environment to be unsatisfactory. According to the search results, nurses' satisfaction with their work environment is a complex and multifaceted issue [21]. The perception of nursing work environment and job satisfaction of nurses depends on a number of factors, including the nursing work environment, job stress and anxiety, relationships with colleagues, collaboration and communication, job motivation, and a safe practice environment [22].

As a result of table 3, it has been found that nurses are moderately satisfied with their jobs, i.e. general job satisfaction. According to the search results, nurses are moderately satisfied with their jobs overall. According to a study conducted among nursing officers in a tertiary care hospital, the majority of nurses are moderately or highly satisfied [23]. Similarly, a national sample survey of registered nurses in the United States found that most are moderately or extremely satisfied with their primary nursing position. Some factors, however, were found to contribute to nurses' dissatisfaction in the study, such as working in stressful areas of hospitals such as intensive care and emergency rooms, and nurses with higher qualifications were more dissatisfied compared to their peers [24].

Overall, the evidence suggests that nurses have moderate overall job satisfaction, but several factors can influence their job satisfaction. In addition to job stress and anxiety, relationships with colleagues, collaboration and communication, job motivation, and a safe practice environment [25].

Conclusion

The study's findings indicate a moderate level of job satisfaction among nurses, with specific variations in satisfaction related to internal and external job factors. While a majority of nurses report moderate to high satisfaction with internal job elements, satisfaction with external factors is notably lower. These results underscore the complexity of job satisfaction and the varying influences of internal and external job characteristics. The implication of this study suggests that health care institutions should prioritize holistic strategies focusing on career development, recognition, and work-life balance to enhance job satisfaction. Additionally, implementing stress management and resilience training can further support nurses in managing job-related pressures effectively. Further research should explore the causal relationships between specific job characteristics and satisfaction levels, potentially guiding more tailored interventions to improve both nurse well-being and healthcare outcomes.

References

- 1. J. Abate, T. Schaefer, and T. Pavone, "Understanding Generational Identity, Job Burnout, Job Satisfaction, Job Tenure and Turnover Intention," Journal of Organizational Culture, Communications and Conflict, vol. 22, no. 1, pp. 1-12, 2018.
- 2. H. Abbas and Q. Mohammed, "The Relationships between Use of Interpersonal Communication Skills and Job Satisfaction among Nurses Working in Psychiatric Wards at Teaching Hospitals in Baghdad City," Kufa Journal for Nursing Sciences, vol. 12, no. 1, 2022.
- 3. S. Al-Fayyadh et al., "Health Literacy-Related Knowledge and Experience among Nurses Practicing in Medical-Surgical Wards," 2022.
- 4. M. B. A. Al-Jubouri et al., "Recitation of Quran and Music to Reduce Chemotherapy-Induced Anxiety among Adult Patients with Cancer: A Clinical Trial," Nursing Open, vol. 8, no. 4, pp. 1606–1614, 2021.
- 5. S. N. Dolan, "The Relationship between Burnout and Job Satisfaction in Nurses," Journal of Advanced Nursing, vol. 12, no. 1, pp. 3-12, 1987.
- K. Edwin, "Reliability and Validity of Research Instruments," in Proceedings of the NMK Conference, pp. 1-9, 2019.
- 7. G. A. la Fuente et al., "Gender, Marital Status, and Children as Risk Factors for Burnout in Nurses: A Meta-Analytic Study," International Journal of Environmental Research and Public Health, vol. 15, no. 10, p. 2102,

Vol 9 No 2 (2024): December DOI: 10.21070/acopen.9.2024.9106 . Article type: (Medicine)

2018

- 8. M. Garooci and M. Moslemi, "The Relationship between Burnout with Prevention Advice Nurses," QJ Psychol Stud, vol. 1, nos. 4-5, pp. 5-19, 2005.
- 9. J. R. Gold et al., "The NSF ADVANCE Network of Organizations," ADVANCE Journal, vol. 3, no. 1, 2022.
- 10. E. F. Iwanicki and R. L. Schwab, "A Cross Validation Study of the Maslach Burnout Inventory," Educational and Psychological Measurement, vol. 41, no. 4, pp. 1167–1174, 1981.
- 11. M. T. Jabar and A. H. Jasim, "Job Stress among Nurses at Critical Care Units in Medical City Complex Hospitals in Baghdad City," Annals of the Romanian Society for Cell Biology, vol. 25, no. 6, pp. 4132–4138, 2021.
- 12. A.-G. Khalida et al., "Satisfaction of Patients, Coronary Arteries in Related to Nursing and Medical Care," Iraqi National Journal of Nursing Specialties, vol. 27, no. 2, pp. 74-83, 2014.
- 13. E. Maala et al., "Body Satisfaction and Depression Symptoms among Children with Precocious Puberty in Baghdad City," Iraqi National Journal of Nursing Specialties, vol. 32, no. 1, pp. 39-46, 2019.
- 14. L. A. Mansoor and T. R. Muhammad, "Impact of Nurse's Job Satisfaction Upon Quality of Nursing Care for Patients Undergoing Hemodialysis," Journal of Contemporary Medical Sciences, vol. 9, no. 6, 2023.
- 15. H. Martins and T. Proença, "Minnesota Satisfaction Questionnaire--Psychometric Properties and Validation in a Population of Portuguese Hospital Workers," FEP Journal--Economics & Management: Working Paper, no. 471, pp. 1-23, 2012.
- 16. C. Maslach, S. E. Jackson, and M. P. Leiter, Maslach Burnout Inventory, Scarecrow Education, 1997.
- 17. E. H. Mohamed and A. K. K. Al-Juboori, "Job Satisfaction among Nurses in Baghdad Psychiatric Hospitals," Journal of the College of Basic Education, vol. 16, no. 64, pp. 201–206, 2010.
- 18. L. H. Nicoll and S. C. Beyea, "Selecting Research Instruments to Measure the Reliability and Validity of Nursing Research Studies," AORN Journal, vol. 66, no. 5, pp. 927-929, 1997.
- 19. R. M. Nieswiadomy and C. Bailey, Foundations of Nursing Research, Pearson Sydney, 2012.
- 20. C. L. Odahowski et al., "Rural-Urban Differences in Educational Attainment among Registered Nurses: Implications for Achieving an 80% BSN Workforce," Journal of Professional Nursing, vol. 37, no. 2, pp. 404-410, 2021.
- 21. A. M. de Oliveira et al., "The Relationship between Job Satisfaction, Burnout Syndrome and Depressive Symptoms: An Analysis of Professionals in a Teaching Hospital in Brazil," Medicine, vol. 97, no. 49, e13364, 2018.
- 22. Z. Ren et al., "Associations of Job Satisfaction and Burnout with Psychological Distress among Chinese Nurses," Current Psychology, vol. 42, no. 33, pp. 29161–29171, 2023.
- 23. C. C. Serdar et al., "Sample Size, Power and Effect Size Revisited: Simplified and Practical Approaches in Pre-Clinical, Clinical and Laboratory Studies," Biochemia Medica, vol. 31, no. 1, pp. 27–53, 2021.
- 24. M. K. Turfi and M. Al-Jubouri, "Professional Quality Work Life among Nurses in Intensive Care Units," Kufa Journal for Nursing Sciences, vol. 12, no. 1, 2022.
- D. J. Weiss, R. V Dawis, and G. W England, "Manual for the Minnesota Satisfaction Questionnaire," Minnesota Studies in Vocational Rehabilitation, 1967.
- 26. T. YassenTaha et al., "Evaluation of Clients' Satisfaction towards Primary Health Care Centers Services at Baghdad City," Iraqi National Journal of Nursing Specialties, vol. 30, no. 2, 2017.