TEXTO & CONTEXTO ENFERMAGEM

TEXT & CONTEXT NURSING TEXTO & CONTEXTO ENFERMERÍA

QUALITY OF WORK LIFE AMONG NURSING WORKERS WHO WORK IN HOSPITALS

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ABSTRACT

Objectives: to verify the social, work and health factors that may affect the quality of work life of nursing professionals who work in hospital environments.

Method: this is a cross-sectional study, carried out at a public hospital in Cuiabá-MT. The sample included 486 nursing workers, 103 nurses and 383 nursing technicians and assistants. The sociodemographic, professional and health and the Total Quality of Work Life (TQWL-42) questionnaires were used. Descriptive and inferential statistical analysis was carried out.

Results: in the general classification of quality of work life, 33% of nurses and 29.2% of high school-level workers were dissatisfied. A higher quality of work life was associated with aspects of physical and mental disposition, ability to work, care from health/social assistance services, rest time and aspects of freedom of expression, interpersonal relationships, autonomy and leisure time. The lowest means were related to nursing professionals who work 40 hours per week.

Conclusion: the results revealed that several factors are linked to a reduced perceived quality of work life among nursing professionals. Among these factors, the nature of occupational responsibilities, the weekly working hours and the remuneration received stand out. These elements were identified as significant influences on the quality of work life of these professionals.

DESCRIPTORS: Quality of life. Work. Nursing team. Occupational health. Nursing staff hospital. Working conditions.

QUALIDADE DE VIDA NO TRABALHO ENTRE TRABALHADORES DA ENFERMAGEM NO ESPAÇO DO HOSPITAL

RESUMO

Objetivos: verificar os fatores sociais, laborais e de saúde que possam afetar a qualidade de vida no trabalho dos profissionais de enfermagem que atuam no ambiente hospitalar.
Método: estudo transversal, realizado em um hospital público de Cuiabá-MT. A amostra contou com 486 trabalhadores de enfermagem, 103 enfermeiros e 383 técnicos e auxiliares de enfermagem. Foram utilizados os questionários: sociodemográfico, profissional e de saúde; e o *Total Quality of Work Life – TQWL-42*. Procedeu-se à análise estatística descritiva e inferencial.
Resultados: na classificação geral de Qualidade de Vida no Trabalho, 33%, dos enfermeiros e 29,2%, dos trabalhadores de nível médio se mostraram insatisfeitos. Uma maior Qualidade de Vida no Trabalho esteve associada aos aspectos de disposição física e mental, capacidade para o trabalho, assistência de serviços de saúde/assistência social, tempo de repouso e os aspectos de liberdade de expressão, relações interpessoais, autonomia e tempo de lazer. As menores médias estiveram relacionadas aos profissionais da enfermagem que cumprem jornada semanal de trabalho de 40 horas.
Conclusão: os resultados revelaram que diversos fatores estão vinculados a uma percepção reduzida da Qualidade de Vida no Trabalho dos profissionais da enfermagem. Entre esses fatores, destacam-se a natureza das responsabilidades ocupacionais, a carga horaria semanal de trabalho e a remuneração recebida. Estes elementos foram identificados como influências significativas na Qualidade de Vida no Trabalho desses profissionais.

DESCRITORES: Qualidade de vida. Trabalho. Equipe de enfermagem. Saúde do trabalhador. Recursos humanos de enfermagem no hospital. Condições de trabalho.

CALIDAD DE VIDA EN EL TRABAJO ENTRE TRABAJADORES DE ENFERMERÍA QUE TRABAJAN EN HOSPITALES

RESUMEN

Objetivos: verificar los factores sociales, laborales y de salud que pueden afectar la calidad de vida en el trabajo de los profesionales de enfermería que actúan en el ambiente hospitalario.
Métodos: estudio transversal, realizado en un hospital público de Cuiabá-MT. La muestra estuvo compuesta por 486 trabajadores de enfermería, 103 enfermeros y 383 técnicos y auxiliares de enfermería. Se utilizaron los cuestionarios sociodemográficos, profesionales y de salud y el Total Quality of Work Life (TQWL-42). Se realizó análisis estadístico descriptivo e inferencial.
Resultados: en la clasificación general de Calidad de Vida en el Trabajo, el 33% de las enfermeras y el 29,2% de los trabajadores de nivel medio se mostraron insatisfechos. Una mayor Calidad de Vida en el Trabajo se asoció con aspectos de disposición física y mental, capacidad para trabajar, asistencia de los servicios de asistencia sanitaria/social, tiempo de descanso y aspectos de libertad de expresión, relaciones interpersonales, autonomía y tiempo libre. Los promedios más bajos estuvieron relacionados con los profesionales de enfermería que trabajan 40 horas semanales.
Conclusión: Los resultados revelaron que varios factores están relacionados con una percepción reducida de la Calidad de Vida en el Trabajo entre los profesionales de enfermería. Entre estos factores destacan la naturaleza de las responsabilidades laborales, la jornada semanal de trabajo y la remuneración recibida. Estos elementos fueron identificados como influencias significativas en la Calidad de Vida en el Trabajo de estos profesionales.

DESCRIPTORES: Calidad de vida. Trabajo. Grupo de enfermería. Salud laboral. Personal de enfermería en hospital. Condiciones de trabajo.

INTRODUCTION

Professional occupation plays a central role in the human trajectory and, therefore, should be a source of well-being, prestige and social recognition, considering that, through it, human beings ensure their material conditions of existence and interact in productive society. On the other hand, it is often observed that work can also be a source of distress, illness and even death, as a result of the different forms of exploitation to which workers are subjected[1].

In this study, nursing work is highlighted, which was modernized, organized in hospital environments and institutionalized as part of health work, becoming fully present in health institutions, occupying a central place in the care process. This process is developed by nurses, who are responsible for structuring, preparing the plan and assessing nursing care, including the management of more complex care[2].

Despite the different technical and legal competencies, all nursing work agents are subject to the same working conditions, whose effects can be differentiated considering the nature of the actions that each agent must undertake. In this regard, the influence of working conditions directly affects all workers' health. Moreover, there is lack of nursing professionals in work environments, requiring a greater pace and workload than is commonly practiced, thus resulting in increased physical and mental exhaustion[2–3].

The nursing area requires additional precautions, especially due to its work in a work scenario that is likely to significantly impact professionals' quality of life (QoL), whether in the short, medium or long term. Understanding QoL encompasses several concepts related to individuals' subjective perception of their life and satisfaction, decision-making power, personal relationships and social environment[4].

According to the World Health Organization (WHO), QoL can be defined as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns"[5:1405–6]. It involves spiritual, physical, mental, psychological and emotional well-being, in addition to social relationships, such as family and friends, and also health, education, housing, basic sanitation and others[5].

It was during the 1950s, in England, that the quality of work life (QWL) issue began to stand out in the literature. On that occasion, an approach was developed that sought to understand both the social aspects and the technical aspects of work configuration, based on reorganization of activities, with the aim of reducing distress in employees' lives and trying to provide improvements in working conditions[6].

QWL is closely linked to the occupations performed by individuals at work, influencing their health, professional performance, behavior, satisfaction and standard of living in society, experienced by these subjects[7]. Furthermore, QWL impacts organizational results because low professional performance leads to losses in expected work results.

Brazilian nursing has faced challenges due to inadequate working conditions, resulting in professional illness; however, this illness does not receive much prominence or centrality in debates due to the lack of social visibility of corresponding statistics. These working circumstances are shaped by the capitalist social and economic policies present in our country[1].

Knowing the aspects that can promote nursing professionals' well-being in their workplace and avoid or reduce the consequences of low QWL become important in the current scenario. From this perspective, the present study aimed to verify the social, work and health factors that may affect QWL among nursing professionals who work in hospital environments, based on the following question: what factors can influence or are related to nursing workers' QWL in the hospital space?

METHOD

The present study is an excerpt from the matrix research project entitled "*Qualidade de Vida no Trabalho em enfermagem: análise da precariedade do trabalho*". This is an analytical study, with a cross-sectional design. The study was carried out at a public hospital, supported by the Brazilian Health System (*Sistema Único de Saúde*) in the city of Cuiabá – MT/Brazil, with 212 beds, arranged between adult and pediatric ICUs, medical clinic, orthopedics and traumatology, general surgery, neurology, pediatrics, pulmonology and ophthalmology. The population consisted of nurses, nursing technicians and assistants, which during the data collection period brought together 588 individuals, 119 nurses, 352 nursing technicians and 117 nursing assistants.

All nursing professionals (nurses, nursing technicians and assistants) were eligible, regardless of their role (care or management). Workers who were on vacation, maternity leave, sick leave or sick leave during the data collection period and who had worked at the study site for less than two months were excluded. Thus, the study covered a convenience sample of 486 professionals, of which 103 were nurses, 304 were nursing technicians and 79 were nursing assistants.

Data collection took place in July and August 2020. Data were collected through individual interviews carried out by the researcher herself and other members of the research group. Two structured questionnaires were used to collect data, namely: (1) sociodemographic and professional profile questionnaire; and (2) Total Quality of Work Life (TQWL-42).

A sociodemographic and professional profile questionnaire was applied through interviews. Furthermore, this questionnaire was prepared by 5 nursing professionals with expertise in the area and validated in terms of its content and face, consisting of 15 questions and divided into three chunks, such as personal identification, level of training and professional variables[8].

The TQWL-42 was developed and validated by Pedroso[9] in 2014, and assessed as to its psychometric properties in 2019[10]. The author's objective was to build an instrument that assessed QWL globally – without prioritizing a specific aspect. It is a self-administered instrument composed of 47 questions, the first 5 of which are aimed at understanding the sample and the other 42 corresponding to 5 spheres, which are:

1. Biological/physiological sphere (assesses physical and mental disposition, ability to perform work, health and social care services available and rest time taken); 2. Psychological/behavioral sphere (assesses self-esteem, task significance, feedback and individuals' personal and professional development); 3. Sociological/relational sphere (assesses freedom of expression, interpersonal relationships at work, role autonomy, and leisure time); 4. Economic/political sphere (assesses financial resources, extra benefits provided, working hours worked, and the security of staying in a job); 5. Environmental/organizational sphere (assesses working conditions, the opportunity for growth within the company, the variety and identity of the task performed).

The instrument's response scale is of the Likert type, and varies from 1 to 5 (1 – very bad and 5 – very good, or, depending on the question, 1 – never to 5 – always). The instrument has inverted scale questions, however, during processing and analysis, they must be properly converted for calculation purposes[9–10].

The collected data were coded and double entered into the Excel Program. To type the TQWL-42, the tool provided by the author was used to classify the score[9–10]. To analyze the QWL Classification, initially, the spheres' general score was analyzed and converted according to the QWL scale, recommended by the author[10]. On this scale, the rating ranges from 0 to 100, where 0 to 25 corresponds to total dissatisfaction, 25 to 50, dissatisfaction, 50 to 75, satisfaction, and 75 to 100, total satisfaction[9].

To carry out the inferential analyses, data relating to the sociodemographic and professional profile and individual scores of QWL spheres were exported to Stata version 14. In the sociodemographic and professional profile construction, a chi-square test was performed to compare absolute (n) and relative (%) frequencies by professional category. In the general QWL classification variable, numerical variables were described using descriptive statistics, in which mean and standard deviation (SD) were calculated. The general assessment of QWL with data from independent variables was presented according to worker dissatisfaction.

To analyze the spheres' means according to weekly working hours, Student's t test was used, with variables presented as means and SD. Subsequently, the results of QWL Classification were subjected to the chi-square test to associate frequencies with the study's independent variables. Throughout analysis, a statistical significance level of $p < 0.05$ was considered.

The ethical aspects of research with human beings of the Brazilian National Health Council were respected.

RESULTS

The study sample was made up of female workers (85.6%), both nurses (82.5%) and high school-level professionals (86.4%). The highest concentration of respondents was between 25 and 39 years old among nursing professionals (57.2%) and between 40 and 49 years old among high school-level professionals (66%) (Table 1).

According to ABEP's Brazilian Economic Classification[11], nurses and high school-level professionals fell into category B2 (41.75%), and (37.8%), respectively. The table with the sociodemographic profile showed that, among nurses, 60.1% have a health insurance, while 57.4% of high school-level professionals do not. Likewise, 83.1% have children (among high school-level professionals, technicians and nursing assistants, the mean number of offspring was 2 (38.9%), children, while among higher-level professionals the majority were without children (30.1%) or with 1 to 2 children (29.1%)). There was a significant difference in the variables: Age (p<0.001), number of children (p<0.001), economic classification (p<0.001), and health plan (p<0.001), (Table 1).

Of the professional characteristics of the individuals participating in the study, nurses had graduate degree as their highest level of training (83.5%), with length of training in the area ranging from 1 to 9 years (50.4%), and nature of employment relationship as a service provider (53.4%). The mean job tenure was 5 years (48.5%), the majority in the emergency unit (27.7%), and the nature of performed role was care (91.2%) (Table 1).

Most nurses worked 40 hours a week (87.3%), with 12/60-hour night shifts (37.8%). Furthermore, 50.5% of nurses had other employment relationships, with 94.2%, only one, in public institutions (53.9%), and with a 40-hour working week (71.1%).

In relation to high school-level professionals, the highest training degree was graduate degree (33.9%), followed by high school level itself (32.6%). Length of training was 10 to 19 years (55%), with the nature of employment relationship as statutory (62.9%). Job tenure was 5 to 9 years (26.6%), the nature of the role was strictly care, with a 40-hour working week (66.8%), and a 12/60-hour night shift (43.3%). Most of high school-level workers responded that they had another employment relationship (63.2%), with only one other (98.6%), with a 40-hour working week (74.4%).

Among the professional profile variables, there was a statistical difference in the highest degree of training (p<0.001), length of training in the area (p<0.001), nature of relationship (p=0.003), job tenure (p<0.001), capacity unit (p<0.001), nature of function (p<0.001), weekly hours (p<0.001), work shift (p<0.001), other employment relationships (p=0.012) (Table 1).

The QWL classification will be presented according to workers' dissatisfaction and sociodemographic and professional characteristics. Among higher education professionals, 33% were dissatisfied with QWL, the majority of whom were male professionals (33.3%), aged 25 to 39 years (40.6%), single (35.5%), being the head of the family (39.3%), classified economically in category B2 (39.5%) (Table 1).

According to high school-level professionals, 29.2% were dissatisfied with QWL, being female (30%), aged 25 to 39 years old (36.3%), married or in a stable union (32%), with the head of the family being the father or the mother (35%), with economic classification in category D-E (50%). It was found that there was statistical significance in the variables, age for both categories (p= 0.015), and having a health plan among nurses (p= 0.018) (Table 1).

Table 1 – Distribution of the frequency of dissatisfaction and p-value of quality of work life according to the sociodemographic characteristics of higher and high school-level nursing workers in a hospital and emergency room. Cuiabá, MG, Brazil, 2019.

Variables	Nurses			High school level			Total		
	N	%	p- value†	N	%	p- value†	N	%	p- value†
Professional category									
Nurses	34	33.01	*	*	*	*	34	33.0	0.459
High school level	*	*	*	112	29.2	*	112	29.2	
Sex									
Male	6	33.3	0.974	13	25.0	0.469	19	27.1	0.568
Female	28	33.0		99	30.0		127	30.5	
Age (years)									
25 to 39	24	40.6	0.115	32	36.3	0.072	56	38.1	0.015
40-49	8	26.6		43	31.1		51	30.3	
50-59	2	14.2		31	26.7		33	25.4	
60-71	0	0.0		6	14.6		6	14.6	
Place of birth									
North	2	50.0	0.530	0	0.00	0.548	2	22.2	0.954
North East	0	0.00		5	31.2		5	26.3	
Midwest	28	32.9		95	30.1		123	30.7	
Southeast	3	50.0		5	20.8		8	26.7	
South	1	20.0		7	30.4		8	28.5	
Marital status									
Single	16	35.5	0.852	37	28.4	0.249	53	30.2	0.257
Married or stable union	15	32.0		56	33.0		71	32.7	
Widowed or separated	3	27.2		19	23.0		22	23.4	
Children									
Yes	21	29.1	0.206	96	29.0	0.720	177	28.9	0.249
No	13	42.0		16	31.1		29	35.3	

Table 1 – Cont.

Variables	Nurses			High school level			Total		
	N	%	p- value†	N	%	p- value†	N	%	p- value†
Number of children									
Without children	13	42.0	0.442	16	32.6	0.967	29	36.2	0.689
1	10	33.3		21	30.0		31	31.0	
2	9	30.0		43	28.6		52	28.9	
3	2	16.6		25	29.0		27	27.5	
4 or more	0	0.0		7	25.0		7	25.0	
Head of the family									
Husband or partner	7	24.1	0.278	30	29.7	0.882	37	28.4	0.812
Father or mother	1	14.2		7	35.0		8	29.6	
You	26	39.3		75	28.8		101	30.9	
Children	0	0.0		0	0.0		0	0.0	
Others	0	0.0		0	0.0		0	0.0	
Economic classification (ABEP 2018)									
A	2	20.0	0.464	7	41.1	0.634	9	33.3	0.798
B1	5	20.8		9	30.0		14	25.9	
B2	17	39.5		38	26.2		55	29.2	
C1	9	39.1		40	31.0		49	32.2	
C2	1	33.3		15	26.7		16	27.1	
D-E	0	0.0		3	50.0		3	50.0	
Health insurance									
Yes	26	42.0	0.018	49	30.0	0.762	75	33.3	0.142
No	8	19.5		63	28.6		71	27.2	

Note: Frequency was calculated considering the total number of interviewees.
* Not applicable. Furthermore, it was not possible to apply the test due to the lack of a comparison group.
† Pearson's chi-square test (p<0.05).
Economic classification: A (R$ 23,345.11), B1 (R$ 10,386.52), B2 (R$ 5,363.19), C1 (R$ 2,965.69), C2 (R$ 1,691.44)
D-E (R$ 708.19) (R$ – Brazilian currency).

The Table below shows that, among dissatisfied nurses, the highest training degree was graduate studies (33.7%), with length of training ranging from 10 to 19 years (37.5%), the nature of employment relationship being statutory (39.5%), with job tenure from 10 to 14 years (100%), and the nature of performed role was care (36.1%) (Table 2).

Dissatisfaction also occurred among nurses who worked a 40-hour week (34.45%), with a night shift of 12x36 hours (60%) and who did not have another employment relationship (33.3%). Among those dissatisfied who had more than one job (33.3%), they worked 40 hours a week (37.8%) (Table 2).

As for higher level professionals, dissatisfaction occurred among workers with higher education, incomplete higher education (36.1%), with length of training in the area ranging from 1 to 9 years (36.5%), nature of relationship as a provider of service (29.5%), job tenure from 10 to 14 years (35.4%), and the nature of role was strictly care (29.2%) (Table 2). Those dissatisfied at the higher level worked a 40-hour week (34.3%), with day shifts and duties (37.5%), and had multiple employment contracts (35.4%). The nature of the second job is in the private sector (36.4%), with a weekly workload of 44 hours (100%) (Table 2).

In the association test, there was a statistically significant difference in length of training for high school level (p= 0.026) and total (p=0.007), capacity unit for nurses (p=0.039), nature of the role for nurses (p=0.027) and total (p=0.047), weekly working hours for high school level (p=0.002) and total (p<0.001), and having a second employment relationship for high school level (p=0.041) (Table 2).

Table 2 – Distribution of the frequency of dissatisfaction and p-value of quality of work life according to professional characteristics of higher and high school-level nursing workers in a hospital and emergency room. Cuiabá, MG, Brazil, 2019.

Variables	Nurses			High school level			Total		
	n	%	p-value	n	%	p-value	n	%	p-value [1]
Higher degree									
High school	0	0.0	0.765	41	32.8	0.353	41	32.8	0.566
Incomplete higher education	0	0.0		17	36.1		17	35.4	
Complete higher education	5	31.2		20	24.6		25	25.7	
Graduate degree	29	33.7		34	26.1		63	29.1	
Length of training in the area (years)									
1 to 9	18	34.6	0.339	15	36.5	0.026	33	35.4	0.007
10 to 19	15	37.5		71	33.6		86	34.2	
20 to 29	1	11.1		21	21.6		22	20.7	
30 or more	0	0.0		5	14.7		5	13.9	
Nature of relationship									
Statutory	19	39.5	0.185	70	29.0	0.912	89	30.8	0.660
Service provider	15	27.2		42	29.5		57	28.9	
Job tenure (years)									
<5	15	30.0	0.184	30	33.3	0.251	45	32.1	0.102
5 to 9	12	37.5		33	32.3		45	33.5	
10 to 14	4	44.4		22	35.4		26	36.6	
15 to 19	2	100		7	29.1		9	34.6	
20 to 24	1	11.1		9	20.0		10	18.5	
25 to 29	0	0.0		6	20.0		6	20.7	
>30	0	0.0		5	16.1		5	15.6	
Capacity unit									
Emergency	5	18.0	0.039	19	27.1	0.790	24	24.4	0.421
Infectology (isolation)	4	66.6		4	30.7		8	45.1	
Blood bank or materials and sterilization center	3	50.0		9	25.7		12	29.2	
Burn treatment center	‡	‡		2	16.6		2	16.6	
Medical clinic	5	38.4		18	35.2		23	35.9	
Adult Intensive Care Unit	6	37.5		30	34.8		36	35	
Surgical center	4	80.0		5	18.5		9	28.1	
Pediatrics	3	50.0		5	22.7		8	28.5	
Pediatric Intensive Care Unit	1	20.0		7	29.1		8	27.5	
Surgical clinic and orthopedic clinic	3	33.3		13	30.2		16	30.7	
Nursing management and coordination	0	0.0		†	†		0	0.0	
Nature of the function									
Care	34	36.1	0.027	112	29.2	‡	146	30.6	0.047

<div align="center">**Table 2** – Cont.</div>

Variables	Nurses			High school level			Total		
	n	%	p-value	n	%	p-value	n	%	p-value [1]
Management or coordination	0	0.0		‡	‡		0	0.0	
Weekly working hours (hours)									
30	3	23.0	0.415	24	19.0	0.002	27	19.2	<0.001
40	31	34.4		88	34.3		119	34.3	
Work shift									
Morning and duties	1	7.6	0.066	18	37.5	0.242	19	31.1	0.343
Afternoons and duties	5	27.7		13	28.2		18	28.1	
Day 12/60	4	44.4		11	18.6		15	22.0	
Day 12/36	7	54.0		12	23.0		19	29.2	
Night 12/60	14	35.9		54	32.5		68	33.1	
Night 12/36	3	60.0		4	33.3		7	41.1	
Full time/8 hours	0	0.0		0	0.0		0	0.0	
Has other employment relationships									
Yes	17	32.6	0.945	50	35.4	0.041	67	34.7	0.068
No	17	33.3		62	25.6		79	26.9	
Number of other jobs -									
1	16	32.6	0.981	49	35.2	0.665	65	34.5	0.801
2	1	33.3		1	50.0		2	40.0	
Nature of the 2nd relationship institution – a									
Public	9	32.1	0.927	23	34.3	0.789	32	33.6	0.767
Private	8	33.3		27	36.4		35	35.7	
Working hours in the 2nd job (hours) – a									
<20	0	0.0	0.626	2	50.0	0.399	2	40.0	0.407
20	0	0.0		0	0.0		0	0.0	
30	2	25.0		9	47.3		11	40.7	
36	1	33.3		5	45.4		6	42.8	
40	14	37.8		33	31.4		47	33.1	
44	0	0.0		1	100		1	100	
Nature of the 3rd relationship institution – b									
Public	1	100	0.083	0	0.0		1	100	0.171
Private	0	0.0		1	50.0		1	100	
Working hours in the 3rd job (hours) – b									
<20	0	0.0	0.223	0	0.0	0.157	0	0.0	0.287
20	0	0.0		0	0.0		0	0.0	
30	1	100		0	0.0		1	100	
36	0	0.0		0	0.0		0	0.0	
40	0	0.0		1	100		1	100	

Notes: * No professionals were found who wanted to participate in the study in that sector. † Not applicable. High school-level professionals are excluded from these functions as well as from the assessment on this. ‡ It was not possible to apply the test due to the lack of a comparison group. a: includes only those who answered yes for second or third employment, subsequently information about the second employment. b: corresponds to those who responded that they had a third employment relationship, subsequently information about the third employment relationship.1 Pearson's chi-square test (p<0.05).

The analysis of QWL spheres demonstrated that in general professionals were satisfied with their QWL with a tendency towards dissatisfaction according to the assessment score (mean=55.3, SD=10.3). The lowest mean perception occurred in the economic and political sphere for both professional categories (nurses, mean=45.7, SD=14.5; high school level, mean=45.6, SD=14.2, total mean=45.6, SD=14.2). Professionals were also dissatisfied with the economic and political aspects. The highest mean occurred in the psychological and behavioral sphere for both categories, demonstrating greater satisfaction with this aspect (nurses, mean=63.1, SD= 12.7, high school level, mean=64.1, SD= 12.8, total mean= 63.9, SD=12.8). (Table 3).

Through the statistical test to compare the spheres' means, it was identified that the biological and physiological sphere (p=0.007) and the sociological and relational sphere (p=0.005) were statistically significant. (Table 3).

Table 3 – Mean, standard deviation and p-value of quality of work life spheres according to higher and high school-level nursing workers in a hospital and emergency room. Cuiabá, MG, Brazil, 2019. (n=486).

Spheres	Nurses (n=103) Mean (*)	High school level (n=383) Mean (*)	Total (n=486) Mean (*)	p- value[1]
Biological and physiological	54.4 (13.1)	58.1 (11.8)	57.3 (12.1)	0.007
Psychological and behavioral	63.1 (12.7)	64.1 (12.8)	63.9 (12.8)	0.461
Sociological and relational	58.0 (12.3)	54.0 (13.1)	54.8 (13.0)	0.005
Economic and political	45.7 (14.5)	45.6 (14.2)	45.6 (14.2)	0.929
Environmental and organizational	53.5 (13.9)	55.1 (13.8)	54.8 (13.8)	0.289
General	54.8 (10.7)	55.4 (10.3)	55.3 (10.3)	0.574

Note: * = Standard deviation.
[1]Pearson's chi-square test (p<0.05).

In the analysis of QWL spheres according to weekly working hours, it was found that dissatisfaction with QWL was related to the economic and political sphere for the 40-hour work week, both for nurses and high school-level professionals (mean= 45.0, SD=13.6, mean= 43.2 SD=14.2, respectively). On the other hand, the highest mean QWL was related to the psychological and behavioral sphere, for the workload of 30 hours per week, both for nurses and for high school-level nurses (mean= 65.3, SD=11.5, mean= 64.8, SD= 12.5, respectively) (Table 4).

It was found that there was a statistically significant difference for the mean level in sociological and relational (p=0.039), economic and political (p<0.001) spheres, and in the general classification (p=0.006). Furthermore, there was significance in the total parameter in the economic and political sphere (p<0.001) and in the general total (p=0.004).

Table 4 – Mean, standard deviation and p-value of quality of work life spheres according to weekly working hours of higher and high school-level nursing professionals in a hospital and emergency room. Cuiabá, MG, Brazil, 2019. (n=486).

Spheres	Weekly work day	Nurses Mean (*)	Nurses p- value	High school level Mean (*)	High school level p- value	Total Mean (*)	Total p- value
Biological and physiological	30h	58.4 (11.3)	0.250	58.9 (11.0)	0.357	58.8 (11.0)	0.081
	40h	53.9 (13.3)		57.7 (12.1)		56.7 (12.1)	

Table 4 – Cont.

Spheres	Weekly work day	Nurses		High school level		Total	
		Mean (*)	p- value	Mean (*)	p- value	Mean (*)	p- value
Psychological and behavioral	30h	65.3 (11.5)	0.492	64.8 (12.5)	0.449	64.9 (12.3)	0.285
	40h	62.7 (12.8)		63.8 (13.0)		63.5 (12.9)	
Sociological and relational	30h	58.1 (13.7)	0.967	55.9 (11.8)	0.039	56.1 (12.0)	0.158
	40h	58.0 (12.2)		53.0 (13.6)		54.8 (13.4)	
Economic and political	30h	50.7 (20.0)	0.190	50.2 (12.9)	<0.001	50.3 (13.6)	<0.001
	40h	45.0 (13.6)		43.2 (14.2)		43.7 (14.1)	
Environmental and organizational	30h	53.6 (18.1)	0.987	56.8 (13.6)	0.098	56.5 (14.0)	0.084
	40h	53.5 (13.3)		54.3 (13.8)		54.1(13.7)	
General	30h	56.9 (12.8)	0.449	57.5 (8.7)	0.006	57.4 (9.1)	0.004
	40h	54.5 (10.4)		54.4 (10.8)		54.5 (10.7)	

Note: * = Standard deviation.

DISCUSSION

The results of the sociodemographic profile demonstrated a female prevalence among individuals, corroborating with other studies the predominance of women in nursing practice, which historically has always represented the limited opportunities available to women, beyond the domestic sphere. Equivalent results are present, both in national and international studies. A study carried out with 85 Iranian hospitals showed that 70.4% of nurses assessed were female. Furthermore, a study carried out in a unit in Minas Gerais also showed that 75.9% of nursing workers were female[12–13].

In relation to ABEP's consumption power[11], most individuals were positioned at level B2, which is equivalent to a mean family income of up to R$5,363.19. A study carried out with nursing workers present in a surgical center shows that the general economic classification of its audience was less than or equal to 2 minimum wages and that these professionals had greater repercussions in the psychological, professional domains and total score of the QWL questionnaire used[14].

According to their professional profile, individuals declared postgraduate studies as their highest degree. It is inferred that these professionals are looking for greater qualifications, this raises the possibility of better professional choices, influencing their insertion in the work environment. However, given the nature of the link, it is observed that the search for higher education, including postgraduate studies, did not result in social mobility via new insertion into the world of work. In agreement, a study carried out with nursing professionals from a prison system in Paraíba shows that 41% of these have completed postgraduate studies[15–16].

In relation to job tenure, the majority of individuals with secondary education have spent more time in the institutions. The longer the working time in the same institution, the more prone the professional will be to a certain stressor. This factor interferes with their performance and consequently their QWL, especially for those who perform their role in sectors with high physical and psychological demand[16].

With regard to weekly working hours, the 40-hour day prevailed, with 12 hours of night work and 60 hours of rest. The regulation of the 30-hour working day strengthens nursing work, which requires specific conditions for its execution, ensuring safe practice for both the professional and the clients assisted[17]. A study on the QWL of nurses working at night showed that the factors associated with choosing night work are related to the financial factor, due to the fact that it is possible to combine more than one job, thus increasing the monthly income received. On the other hand, carrying out activities

at night can have a negative impact on workers' health, triggering psychological and physiological problems, which can affect their performance at work[4].

Regarding the general assessment of satisfaction with QWL, it can be observed that 30% of these were dissatisfied. Among nurses, dissatisfaction was greater compared to high school-level individuals. Therefore, variables such as age, training time, work unit, nature of performed role, weekly working hours and existence of a second employment relationship were shown to be correlated with dissatisfaction with QWL.

National and international research corroborates the findings of this investigation. The study demonstrated similar results, in which 38.6% of nursing professionals were dissatisfied with QWL, with nurses (55%) showing greater dissatisfaction compared to nursing technicians and assistants (30%). Factors such as being female, being a nurse, having insufficient support at work, high demands or active work and a prolonged period of experience in the position were associated with a decrease in QWL[1].

A higher incidence of unsatisfactory QWL was observed among nurses, nursing technicians and nursing assistants who perform functions in sectors dedicated to direct patient care. Nurses working in the surgical center sector and high school-level professionals working in the medical clinic were more dissatisfied with the QWL compared to those working in other sectors. The study shows that sectors that care for critical or high-demand patients, as evidenced above, were more frequently associated with a worse perception of QWL, as these are areas that require a fast pace of work, with greater agility and physical effort exerted[18].

Regarding the weekly working hours, those who work 40 hours were more dissatisfied. The demand performed by nursing professionals during work is considered to be high, since assistance is provided fully and directly to patients, and this factor can intensify in relation to care for patients in critical condition and with high demand. According to the literature, nursing professionals working long and night shifts face greater risks of suffering physical health problems, contributing to psychological exhaustion, which can affect the perception of QWL among these workers[18].

The results regarding the QWL demonstrated that the lowest means were related to the economic and political sphere for both professional categories. Fair and adequate compensation and the security of remaining employed, related to the stability that the organization can offer its employees, are essential factors for maintaining QWL. Study shows that stressors experienced by nurses in their work activity are related to low pay and lack of recognition, causing the desire to change professions[19].

The results presented in a national study reinforce the findings of this research, carried out with the same population and using the same QWL questionnaire, the lowest assessments were in the economic and political sphere (mean=50), and in the environmental/organizational sphere. On the other hand, the best assessments were in the psychological and behavioral sphere (mean=68). There was a positive correlation in economic/political (p-value<0.001), environmental/organizational (p-value <0.001) and sociological/relational (p<0.05) spheres[15].

Regarding the biological/physiological sphere, nursing is recognized for its great physical and mental exhaustion and being able to work with quality care is a challenge, as these professionals are exposed to strenuous working hours, accumulation of tasks and sleep deprivation. The latter is mainly related to night shift workers and those working double shifts. The ability to work and willingness become essential to stop suffering and frustration in these professionals' daily work[16,20].

In relation to the sociological and relational sphere, the sphere's general mean was classified as satisfactory, with a tendency towards unsatisfactory. Social relationships can be affected among professionals who tend to feel exhausted or professionally dissatisfied. Leisure time in nursing can

be compromised according to the work rhythm that professionals carry out on-call and the existence of multiple employment relationships. Many professionals use their free time between shifts to solve personal problems, with leisure being left in the background or non-existent. Limiting rest results in both physical and emotional overload, having a negative impact on QWL[16,21].

Analysis of QWL according to weekly working hours showed a significant statistical correlation with the economic/political sphere, the general sphere and the sociological/relational sphere among high school-level individuals. The lowest means in all spheres were related to the weekly working hours of 40 hours. The regulation and approval of working hours at a maximum of 30 hours per week and six hours per day, as proposed in Bill 2295/2000, would strengthen nursing work, recognizing that its professionals require special working conditions, in perspective, including safe care practice. The aforementioned bill has been in the Brazilian National Congress since 2000, and awaits its consideration[17,22].

An international study carried out in Puducherry, India, with nursing professionals, found similar results, in which more than thirty percent of the research participants indicated that they do not feel willing after the end of work activities (33.3%) and are unable to reconcile work with family needs (35.2%). The majority expressed having a high workload (72%), with many interruptions during the work routine (73.2%). Within the world of work dimension, more than half (53.2%) reported that the remuneration received does not meet their needs[23].

The findings highlight the relevance of remuneration as an important element for the feeling of satisfaction of nursing professionals in relation to their QWL, the high weekly workload due to hospital shifts, shift changes and multiple jobs, associated with low wages, has an impact on significant way in these professionals' QWL. Research shows that nursing workers consider their activities exhausting, identifying physical and mental exhaustion at the end of the working day, with excessive working hours as one of the triggering factors[24,26].

The results also demonstrate that high school-level professionals obtained the lowest means in all spheres according to the workload performed when compared to professional nurses. This result was also observed in Barbosa's study, which used the same QWL analysis questionnaire, and showed that individuals with incomplete higher education and postgraduate studies demonstrated a higher QWL when compared to those who only had secondary education[15].

This finding may also be related to the fact that high school-level professionals are exposed to a strictly mechanical and technical work activity, as established by the profession's regulations[25], with a predominance of physical effort when compared to nurses. Added to this, lower mean salaries are found among high school-level individuals, imposing a greater need for double shifts.

In this context, better working conditions for nursing have been widely debated through demands such as reduced working hours, special retirement, decent rest and compatible minimum wages. The nursing category has always been marked by low political organization around the common interests of its practitioners and, consequently, by low participation in the formulation of public policies, which delays all valid and interesting demands[26–27].

Among the limitations of this study is the impossibility of analyzing all variables of the construct, due to limitations and difficulties during the statistical analysis process. Also noteworthy is the study design, which, due to its methodological characteristics, does not allow for more robust analyzes of cause-and-effect associations between the studied phenomenon and also the fact that it was carried out at just one health institution.

CONCLUSION

The present study revealed that nursing workers' QWL was generally classified as satisfactory with a tendency towards neutrality/dissatisfaction. The predominance of dissatisfaction was related to age, length of training, work unit, nature of performed role, weekly working hours and existence of a second employment relationship.

The assessment of QWL spheres demonstrated that a better QWL is directly related to physical and mental disposition, the ability to perform work, the health and social care services available and the rest time taken as well as freedom of expression, interpersonal relationships at work, role autonomy, and leisure time exercised. In general, the worst scores were associated with the professional category of nursing assistants and technicians.

The results of this study become important indicators for assessing the efficiency of public policies, health programs and work policies that aim to provide the best conditions and performance for nursing workers.

REFERENCES

1. Teixeira GS, Silveira RC da P, Mininel VA, Moraes JT, Ribeiro IK da S. Quality of life at work and occupational stress of nursing in an emergency care unit. Texto Contexto Enferm [Internet]. 2019 [cited 2022 Apr 10];28:e20180298. Available from: https://doi.org/10.1590/1980-265X-TCE-2018-0298

2. Ribeiro AC, Silva KJMM, Ribeiro LS, Andrade RKI, Rocha RPS, Lima YN. Dimensionamento de pessoal de enfermagem para terapia intensiva: contradições entre o regulamentado e o feito. Ciênc Cuid Saúde [Internet]. 2017 [cited 2022 Apr 10];16(4). Available from: https://doi.org/10.4025/ciencuidsaude.v16i4.37880

3. Conselho Federal de Enfermagem. Resolução COFEN n° 564/2017, de 6 de novembro de 2017. Dispõe sobre a aprovação do novo Código de Ética dos Profissionais de Enfermagem [Internet]. 2017 [cited 2023 Oct 10]. Available from: https://www.cofen.gov.br/resolucao-cofen-no-5642017/

4. Silva JMB, Oliveira LMRS, Mamede JAN, Wanderley TPSP, Silva SMM, Barros JM. Nível de satisfação: fator gerador de qualidade de vida no trabalho. Rev Pesq Cuid Fundam [Internet]. 2018 [cited 2022 Apr 10];10(2):343-50. Available from: https://seer.unirio.br/cuidadofundamental/article/view/6036

5. The World Health Organization Quality of Life (WHOQOL) Group. Position paper from the World Health Organization. Soc Sci Med. 1995;41(10):1403-9.

6. Dal Forno C, Finger IR. Qualidade de vida no trabalho: conceito, histórico e relevância para a gestão de pessoas. Rev Bras Qual Vida. 2015;7(2):103-12.

7. Nazareth JCF, de Almeida Neto OP, da Silva MR, Rodrigues LR, Pedrosa LAK. Quality of life related work of nursing professionals in sterilization material center. Biosci J [Internet]. 2018 [cited 2022 Apr 10];34(4):1083-92. Available from: https://pesquisa.bvsalud.org/portal/resource/pt/biblio-967283

8. Fernandes TP, Ribeiro AC, Bortolini J, Rocha RPS, Vendramini ACMG, Santos Neto AMD. Qualidade de vida relacionada à saúde de enfermeiros na terceira idade. Rev Enferm Cent O Min [Internet]. 2021 [cited 2023 Oct 12];11. Available from: https://doi.org/10.19175/recom.v11i0.4188

9. Pedroso B, Pilatti LA, Gutierrez GL, Picinin CT. Construção e validação do TQWL-42: um instrumento de avaliação da qualidade de vida no trabalho. Rev Salud Pública [Internet]. 2014 [cited 2023 Oct 12];16(6):885-96. Available from: https://pesquisa.bvsalud.org/portal/resource/pt/biblio-962019

10. Pedroso B, Pilatti LA, Gutierrez GL, Picinin CT. Development and psychometric properties of TQWL-42 to measure the quality of work life. Braz Arch Biol Technol [Internet]. 2019 [cited 2023 Oct 12];62(1):e19180372. Available from: https://doi.org/10.1590/1678-4324-2019180372

11. Associação Brasileira de Empresas de Pesquisa. Critério de classificação econômica Brasil [Internet]. Brasil: ABEP; 2016 [cited 2020 Nov 28]. Available from: http://www.abep.org/criterio-brasil

12. Nogueira da Silva PLN, Pereira IL, Galvão APC, Figueiredo ML, Alves CR, Martins AG. Fatores intervenientes na qualidade de vida de trabalhadores de enfermagem em jornada noturna. Rev Nursing [Internet]. 2021 [cited 2023 Oct 12];24(272):5172-51. Available from: https://doi.org/10.36489/nursing.2021v24i272p5172-5197

13. Raeissi P, Rajabi MR, Ahmadizadeh E, Rajabkhah K, Kakemam E. Quality of work life and factors associated with it among nurses in public hospitals, Iran. J Egypt Public Health Assoc [Internet]. 2019 [cited 2023 Oct 12];94(1):25. Available from: https://jepha.springeropen.com/articles/10.1186/s42506-019-0029-2

14. Carvalho AMB, Cardoso JÁ, Silva FAA, Lira JAC, Carvalho SM. Qualidade de vida no trabalho da equipe de enfermagem do centro cirúrgico. Enferm Foco [Internet]. 2018 [cited 2023 Oct 12];9(3):35-41. Available from: https://doi.org/10.21675/2357-707X.2018.v9.n3.1159

15. Sousa KHJF, Soares ECF, Moraes KG, Batista KC, Gonçalves TS, Zeitoune RCG. Fatores associados ao perfil da equipe de Enfermagem de um hospital psiquiátrico e suas implicações para a saúde do trabalhador. Rev Min Enferm [Internet]. 2018 [cited 2023 Oct 12];22:e-1104. Available from: https://pesquisa.bvsalud.org/portal/resource/pt/biblio-907145

16. Barbosa ML, Costa GMC, Santos SR, Olinda R, Menezes T. Qualidade de vida no trabalho dos profissionais de saúde no sistema prisional. Ciênc Saúde Coletiva [Internet]. 2018 [cited 2023 Oct 12];23(4):1293-302. Available from: https://doi.org/10.1590/1413-81232018234.09292016

17. Bardaquim VA, Dias EG, Dalri RCMB, Robazzi ML do CC. Reflexão sobre as condições de trabalho da enfermagem: subsídio às 30 horas de trabalho. Rev Enf Contemp [Internet]. 2019 [cited 2023 Oct 12];8(2):172-81. Available from: https://doi.org/10.17267/2317-3378rec.v8i2.2466

18. Azevedo BDS, Nery AA, Cardoso JP. Estresse ocupacional e insatisfação com a qualidade de vida no trabalho da enfermagem. Texto Contexto Enferm [Internet]. 2017 [cited 2023 Oct 12];26(1):e3940015. Available from: https://doi.org/10.1590/0104-07072017003940015

19. Medeiros SEG de, Aquino JM de, Arruda GA de, Robazzi ML do CC, Gomes B da MR, Andrade MS, et al. Stress and suffering in hospital nurses: Relationship with personal and work variables and life habits. Texto Contexto Enferm [Internet]. 2023 [cited 2023 Oct 12];32:e20220290. Available from: https://doi.org/10.1590/1980-265X-TCE-2022-0290en

20. Brandão TP, Souza Aragão A de, Alves Querino R, Santos Maganhoto AM dos. A qualidade de vida (do) no trabalho da equipe de profissionais da atenção primária em saúde no Triângulo Mineiro. Rev Recien [Internet]. 2021 [cited 2023 Oct 12];11(36):43-5. Available from: https://www.recien.com.br/index.php/Recien/article/view/490

21. Ribeiro EEKS, Silva LVA, Jatobá W, Andrade LN, Miranda N. Calidad de vida en el trabajo de enfermeros de instituciones hospitalarias de la red pública. Enferm Glob [Internet]. 2021 [cited 2023 Oct 12];20(63):461-501. Available from: https://doi.org/10.6018/eglobal.456911

22. Brasil. Projeto de Lei Nº 2295/2000 Jornada de trabalho dos Enfermeiros, Técnicos e Auxiliares de Enfermagem [Internet]. 2000 [cited 2023 Oct 12]. Available from: https://www.camara.leg.br/proposicoesWeb/prop_mostrarintegra?codteor=2011091

23. Venkataraman S, Anbazhagan S, Anbazhagan S. Quality of nursing work life among staff nurses in a tertiary care hospital in Puducherry. Int J Community Med Public Health [Internet]. 2018 [cited 2023 Oct 12];5(9):3853-9. Available from: https://doi.org/10.18203/2394-6040.ijcmph20183469

24. Ribeiro RP, Martins JT, Marziale MHP, Robazzi ML do CC. O adoecer pelo trabalho na enfermagem: uma revisão integrativa. Rev Esc Enferm USP [Internet]. 2012 [cited 2021 Feb 2];46(2):495-04. Available from: https://doi.org/10.1590/S0080-62342012000200031

25. Brasil. Lei nº 7.498, de 25 de junho de 1986. Regulamentação do exercício da enfermagem [Internet]. Brasília: Presidência da República; 1986 [cited 2021 Feb 2]. Available from: http://www.planalto.gov.br/ccivil_03/leis/l7498.htm

26. Ozanam MAQ, Santos SVM dos, Silva LA da, Dalri R de CMB, Bardaquim VA, Robazzi ML do CC. Satisfação e insatisfação no trabalho dos profissionais de enfermagem. Braz J Develop [Internet]. 2019 [cited 2023 Oct 12];5(6):6156-78. Available from: https://doi.org/10.34117/bjdv5n6-127

27. Gutierres-Ruivo ÉD, Rocha LP, Barlem ELD, Sena-Castanheira J, Cecagno D, Juliano LF. Analysis of fatigue among nurse educators in brazilian public universities during the covid-19 pandemic. Texto Contexto Enferm [Internet]. 2023 [cited 2023 Oct 12];32:e20230013. Available from: https://doi.org/10.1590/1980-265X-TCE-2023-0013en

NOTES

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