

# Job satisfaction, feelings of belonging and comfort in mobile emergency care service

*Satisfação no trabalho, sentimentos de pertencimento e conforto em serviço de atendimento móvel de urgência*

*Satisfacción en el trabajo, sentimientos de pertenencia y comodidad en el servicio de atención móvil de urgencia*

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## ABSTRACT

**Objective:** to analyze job satisfaction and feelings of belonging and comfort in a mobile emergency care service. **Method:** cross-sectional, quantitative and correlational study, with 95 professionals from a mobile emergency care service. The Job Satisfaction Scales S20/23, belonging and comfort, and a questionnaire with sociodemographic and work variables were used, submitted to descriptive statistical analysis, correlation tests and linear regression. **Results:** there was evidence of significant associations between the dimensions of satisfaction and variables gender, type of team, position/function, employment relationship and work regime; negative associations between intrinsic satisfaction, with the physical environment, total score and monthly shifts; and positive associations between intrinsic satisfaction and working hours per shift. Most professionals evaluated belonging and comfort with values above eight points. **Conclusion:** elements associated with variables related to satisfaction, sociodemographic and work were evidenced, in addition to an environment where professionals feel they belong to and are comfortable with.

**Descriptors:** Prehospital Care; Emergency Medical Services; Personnel Management; Job Satisfaction; Belonging.

## RESUMO

**Objetivo:** analisar a satisfação no trabalho e os sentimentos de pertencimento e conforto em um serviço de atendimento móvel de urgência. **Método:** estudo transversal, quantitativo e correlacional, com 95 profissionais de um serviço de atendimento móvel de urgência. Empregou-se as escalas de Satisfação no trabalho S20/23, de pertencimento e conforto, e questionário com variáveis sociodemográficas e laborais, submetidos a análise estatística descritiva, testes de correlação e regressão linear. **Resultados:** houve evidências de associações significantes entre as dimensões da satisfação e variáveis gênero, tipo de equipe, cargo/função, vínculo e regime de trabalho; associações negativas entre satisfação intrínseca, com o ambiente físico, escore total e plantões mensais; e positiva entre satisfação intrínseca e jornada por plantão. A maioria dos profissionais avaliou pertencimento e conforto com valores acima de oito pontos. **Conclusão:** evidenciam-se elementos associados à satisfação e as variáveis sociodemográficas e laborais, além de um ambiente onde os profissionais sentem-se pertencentes e confortáveis.

**Descritores:** Assistência Pré-Hospitalar; Serviços Médicos de Emergência; Gestão de Recursos Humanos; Satisfação no Emprego; Pertencimento.

## RESUMEN

**Objetivo:** analizar la satisfacción en el trabajo y los sentimientos de pertenencia y comodidad en un servicio de atención móvil de urgencia. **Método:** estudio transversal, cuantitativo y correlacional, con 95 profesionales de un servicio de atención móvil de urgencia. Se emplearon las escalas de Satisfacción en el trabajo S20/23, de pertenencia y comodidad, y un cuestionario con variables sociodemográficas y laborales, sometidos a análisis estadístico descriptivo, pruebas de correlación y regresión lineal. **Resultados:** hubo evidencias de asociaciones significativas entre las dimensiones de la satisfacción y las variables género, tipo de equipo, cargo/función, vínculo y régimen de trabajo; asociaciones negativas entre la satisfacción intrínseca, con el ambiente físico, puntuación total y turnos mensuales; positiva entre la satisfacción intrínseca y la jornada por turno. La mayoría de los profesionales evaluó la pertenencia y la comodidad con valores superiores a ocho puntos. **Conclusión:** se evidencian elementos asociados a la satisfacción y las variables sociodemográficas y laborales, además de un entorno donde los profesionales se sienten pertenecientes y cómodos.

**Descriptores:** Atención Prehospitalaria; Servicios Médicos de Urgencia; Administración de Personal; Satisfacción en el Trabajo; Pertenencia.

## INTRODUCTION

Admittedly, in Brazil, the last three decades have been marked by advances in the organization and structuring of public health services, with the aim of providing care that responds to the needs and expectations of individuals, and that produces effective results, regardless of the context of care<sup>1</sup>.

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In this sense, the Mobile Emergency Care Service (SAMU), implemented in 2003, corresponds to the strategic health team designed to reorganize emergency care, with a view to assisting individuals in acute situations with a risk of intense suffering, sequelae or death and providing qualified transport to a health facility<sup>2</sup>.

From a structural perspective, SAMU is made up of emergency regulation centers (ERC), with a work team made up of doctors, nurses, medical regulation professional, nurse assistants, nurse technicians and radio operators, and mobile emergency units where basic life support (BLS) assistance teams work, made up of nursing assistants/technicians and rescue drivers, and advanced life support (ALS), made up of doctors, nurses and rescue drivers; it is worth noting that these professionals respond to a variety of incidents in the community, including clinical, traumatic, obstetric and psychiatric emergencies<sup>2</sup>.

Regarding management, the coordinators, including the administrator and the medical and nursing technical managers, are responsible for carrying out activities aimed at planning, team management, logistical support, and integrating the service with other components of the emergency care network (ECN), as well as monitoring quality indicators, promoting training with the emergency education center, and evaluating the service from the perspective of workers and users<sup>2,3</sup>.

It is well known that SAMU has become an essential service for the population, with specific and complex characteristics that impose challenges related to the dynamics and management of the service itself, involving components such as establishing bonds between professionals, teamwork, and job satisfaction, aiming to better achieve qualified and safe care<sup>3</sup>.

In this line of thought, job satisfaction emerges as a key factor in people management, becoming a cornerstone of professional practice, capable of generating feelings of belonging, well-being, pleasure, and comfort in individuals, reverberating in the quality of care, in systems, and in society. Furthermore, this phenomenon has become the object of investigations in different areas of knowledge such as: human, social and health sciences.

Job satisfaction is understood as the result of the worker's perception of his/her work, meeting his/her work values in line with his/her needs. It is a polysemic, multifaceted, complex construct, which differs among people depending on time and circumstances; it represents an emotional, personal, subjective, dynamic state, which can be constantly modified due to intrinsic and extrinsic conditions, both from work and from the worker<sup>4,5</sup>.

Another fundamental element in the work context is the feeling of belonging, which originates from a social identity, and is described as "the experience of personal involvement in the system, environment or community, connecting individuals to these contexts so that they feel valued and an integral part of it, and inherently encompasses emotional components"<sup>6</sup>. In the work environment, this translates into the degree to which a worker feels safe, accepted, included, valued, respected and integrated into a defined group aligned with his/her personal and collective values<sup>7</sup>. On the other hand, comfort refers to the convenience and well-being of working with other people, generating a sense of security and trust, and consequently, increasing cooperative attitudes among team members<sup>8</sup>.

Authors report that a sense of belonging and comfort are key elements in team effectiveness, given that they are part of the collaborative process, and are related to team satisfaction, reduced turnover, and increased performance and organizational commitment<sup>9</sup>.

In the international literature, research aimed at evaluating satisfaction and different stressors in the work of nurses in Primary Health Care Centers in Saudi Arabia identified that most professionals were satisfied and had high levels of feelings of belonging and loyalty at work. In addition, factors such as imbalance in staffing and workload, instability in employment contracts, and a shortage of essential resources were identified as sources of stress and conflict in the workplace<sup>10</sup>. In the context of mobile pre-hospital care (MPHC), research with paramedics in Australia, aiming to assess the feeling of belonging as part of monitoring well-being in the workplace, observed that the sense of belonging was associated with variables of suffering and unhealthy coping at work<sup>7</sup>.

Although there is evidence of a relationship between the job satisfaction of professionals working in MHC/SAMU and other variables<sup>3,11-14</sup>, there is a lack of knowledge in the national literature, covering the feeling of belonging and comfort of these workers, as well as studies correlating satisfaction with sociodemographic and work characteristics, which are the object of this investigation.

Recognizing the complementarity of these constructs and believing that successful results in MPHIC are achieved through synergy between the individual's satisfaction in their work environment, experiences of healthy interpersonal relationships and the establishment of bonds with the service and professionals, this study was guided by the following questions: What is the perception of professionals working in SAMU regarding job satisfaction, feelings of belonging and comfort in their practice context? Are there relationships between the job satisfaction of professionals working in SAMU and sociodemographic and work variables?

Based on these concepts and considering that these elements are constituents of the practice environment, this study aims to analyze job satisfaction and feelings of belonging and comfort in a mobile emergency care service.

## METHOD

This is a cross-sectional, quantitative and correlational study, developed with professionals working in a SAMU (Mobile Emergency Care Unit) in a city in the Metropolitan Region of São Paulo, SP, Brazil.

Implemented approximately 20 years ago, the SAMU, the setting for this study, had an emergency regulation center (ERC), ten basic life support units (BLS), three advanced life support units (ALS), a rapid intervention vehicle (VIR) and four motorcycle ambulances, distributed in ten decentralized bases in the four regions of the city, ensuring 100% population coverage.

The study population comprised SAMU workers, including doctors, nurses, nursing technicians/auxiliaries, medical regulation assistant technicians, radio operators and rescue drivers. The inclusion criteria were: professionals who worked in the mobile emergency units and/or in the ERC for six months or more and worked in the same team for three months or more. Those with administrative/coordinating/managing roles and professionals on vacation or away from their work activities, of any nature, during the data collection period were excluded.

The non-probabilistic and convenience sample consisted of 185 workers. However, it was observed that: five were on sick leave, eight were on vacation, 13 had worked for less than six months and less than three months in the same team, two worked in the administrative sector and one in coordination. Given the eligibility criteria, 156 workers were invited to participate in the study. However, 34 refused. Thus, 122 instruments were distributed, and 27 professionals did not return them within the stipulated period. Therefore, the sample corresponded to 95 professionals (response rate of 77.8%), belonging to 40 teams from the four regions, composed of two in the regulation center and 38 in the mobile units.

The data were collected between July and September 2021 by the researcher and a nursing undergraduate trained for the activity, using three instruments.

The questionnaire on the professionals' sociodemographic and work variables included the variables age, gender, position/function, types of employment relationship and work regime, time working at SAMU, working hours per shift, work shift, type of team they were part of, time working on the team and other employment relationship.

The Job Satisfaction Scale (EST-S20/23) – Brazilian version, composed of 20 items, grouped into three dimensions, (I) Satisfaction with hierarchical relationships - SHR (11 items), which analyzes how the worker feels in relation to his/her superior, how his/her work is evaluated and judged, including feelings of equality, justice and autonomy; (II) Satisfaction with the physical work environment - SPWE (five items), which refers to satisfaction with the physical environment - hygiene and health, lighting, ventilation and air conditioning of the environment; and (III) Intrinsic job satisfaction - SIT (four items), which is related to satisfaction with the work developed, the opportunities that the job offers to carry out activities in which the individual enjoys and excels, and how the worker feels in relation to the stipulated objectives and goals. The questionnaire was completed using a proposed Likert-type scale, containing five points: 1 – completely dissatisfied, 2 – partially dissatisfied, 3 – indifferent, 4 – partially satisfied and 5 – completely satisfied<sup>4</sup>.

In addition, a scale with questions regarding feelings of belonging and comfort was used: how much do you feel like you belong to the SAMU team in which you are inserted? How comfortable do you feel in the SAMU team in which you are inserted? The responses were measured using a visual scale with scores from zero to ten.

Data collection was planned jointly with the service coordinator, discussing the best strategy to approach and invite workers to participate in the research. Thus, professionals were invited individually to their work environment, allowing them to fill out the instruments immediately or return them within 15 days. Due to this possibility, the researcher and the undergraduate student returned to the field five times, on different days and times. At the time of

return, checks were carried out in order to validate the completion and avoid issues that were not marked or were marked twice.

A database was constructed using Excel® software, in which the variables were inserted and tabulated and later imported into the statistical program SPSS®, version 20.0, for statistical analyses.

The sample was characterized using descriptive statistics, using summary measures (mean, median, minimum, maximum and standard deviation). The feeling of belonging and comfort in the team were measured by scores between zero and ten. Job satisfaction was obtained based on the scores, with the mean being calculated for each dimension, ranging from 1 to 5 points, and the overall mean; it should be noted that there is no cut-off point. The analysis of the relationship between the dimensions of the EST-S20/23 was performed using Pearson's correlation test. To interpret the strength of association, the following were considered: 0.10 to 0.29 – weak; 0.30 to 0.49 – moderate and  $\geq 0.50$  – strong<sup>15</sup>.

To verify the relationship between the dimensions of EST-S20/23 and the numerical sociodemographic and work-related variables, the Pearson correlation test was used, and for the categorical variables, the Wilcoxon-Mann-Whitney, Kendall, Kruskal-Wallis or Brunner-Munzel tests. To test the hypothesis of equality and differences in the means between the dimensions of EST-S20/23, analysis of variance (ANOVA) for repeated measures was performed. The significance level adopted was 5%. The research protocol was approved by the Research Ethics Committee, according to CAAE 10438919.5.0000.5392 in 2020, and was developed in accordance with the recommendations of Resolution No. 466/2012 of the National Health Council. Workers were invited to participate and informed about the objectives, the research method and the guarantee of all ethical issues. All participants signed the Free and Informed Consent Form (FICF).

## RESULTS

Regarding the sociodemographic characteristics of the professionals, 60 (63.2%) identified themselves as men, it was found that the average age was 44 (+ 9.2) years, ranging from 23 to 61 years, and that 37 of them (38.9%) had completed higher education. Regarding the area of training, nursing predominated 40 (64.5%), with 22 (35.5%) nurses, 17 (27.4%) nursing technicians and 1 (1.6%) nursing assistant.

Regarding employment data, 38 (40%) worked as emergency drivers, 16 (16.8%) nursing technicians, 13 (13.7%) nursing assistants and 9 (9.5%) nurses. It is worth mentioning that 13 (59%) professionals continued to work as nursing technicians or assistants, even though they had a degree/bachelor's degree in nursing.

Regarding employment relationships, 58 (61.1%) were municipal civil servants, 54 (56.8%) were hired via CLT by the social organization, 53 (55.8%) worked during the day, 85 (89.5%) worked 12X36h/shift and 41 (44.6%) had another job.

The average time working at SAMU was 7.9 (+5.6) years (minimum of six months and maximum of 20 years) and working together on the same team was equivalent to 3.9 (+4.0) years, ranging from four months to 14 years. The average number of shifts worked per month was 13.2 (+4.0).

In total, 40 teams were part of the service, and it was identified that 58 (61.1%) workers were part of the basic life support unit (BLS), 26 (27.4%) were part of the advanced life support unit (ALS) and 11 (11.6%) were part of the ERC.

Table 1 presents the results relating to the measures of central tendency and dispersion regarding job satisfaction.

**Table 1:** Distribution of means, standard deviation, median and confidence interval, according to professionals' perception of job satisfaction (n=95). São Paulo, SP, Brazil, 2021.

Dimensions	Mean (sd*)	Median	CI <sup>†</sup> 95%
IJS <sup>‡</sup>	4,6 (0,6)	4,8	(4,5; 4,7)
SPWE <sup>§</sup>	4,4 (0,8)	4,8	(4,2; 4,5)
SHR <sup>**</sup>	4,6 (0,5)	4,7	(4,5; 4,7)
Total score	4,5 (0,6)	4,8	

**Legend:** \*SD= standard deviation; <sup>†</sup>CI= confidence interval; <sup>‡</sup> IJS = intrinsic job satisfaction; <sup>§</sup>SPWE = satisfaction with the physical work environment; <sup>\*\*</sup>SHR = satisfaction with hierarchical relationships.

The average total score was 4.5 (+0.6), with a median of 4.8. Regarding the dimensions, a lower average was observed for “SPWE” (4.4 (+0.8) and higher average values were obtained for “SHR” (4.6 (+0.5) and “SIT” (4.6 (+0.6). Regarding the perception of job satisfaction by SAMU professionals, a difference in the averages between the dimensions of EST-S20/23 was verified through the analysis of variance ( $p < 0.001$ ).

Table 2 shows the comparisons between the average scores of the dimensions of EST-S20/23, according to gender, type of team, position/function, employment relationship and work regime.

**Table 2:** Distribution of mean scores for the EST-S20/23 dimensions, according to gender, type of team, position/function, employment relationship and work regime (n=95). São Paulo, SP, Brazil, 2021.

Variables	IJS <sup>§</sup> median (sd <sup>††</sup> )	SPWE <sup>**</sup> median (sd <sup>††</sup> )	SHR <sup>††</sup> median (sd <sup>††</sup> )	Total score
<b>Gender</b>				
Woman	17,7 (2,7)	20,6 (5,1)	50,0 (6,5)	88,3 (13,4)
Man	18,7 (1,9)	22,8 (3,2)	50,6 (5,0)	92,0 (9,3)
p-value	0,118*	0,014*	0,891 <sup>†</sup>	0,217 <sup>†</sup>
<b>Team</b>				
Advanced life support	19,0 (1,5)	23,3 (2,4)	51,8 (4,0)	94,0 (7,1)
Basic life support	18,5 (2,0)	22,6 (3,4)	50,8 (5,0)	91,9 (9,6)
Regulatory Center	15,7 (3,3)	15,5 (5,4)	45,0 (8,5)	76,2 (15,3)
p-value	0,003 <sup>‡</sup>	< 0,001 <sup>‡</sup>	0,039 <sup>‡</sup>	0,002 <sup>‡</sup>
<b>Position/Function</b>				
Rescue driver	18,7 (1,6)	22,6 (3,2)	50,8 (4,8)	92,1 (8,7)
Nursing technician	18,7 (2,1)	22,6 (3,3)	51,6 (4,2)	92,9 (9,2)
Nursing assistant	17,9 (2,7)	22,8 (4,0)	49,4 (6,3)	90,0 (12,3)
Nurse	18,9 (1,5)	23,9 (1,6)	52,4 (3,6)	95,2 (6,4)
Interventional physician	19,6 (1,1)	23,0 (1,9)	52,4 (3,2)	95,0 (4,9)
Medical regulation assistant technician	13,0 (1,4)	11,2 (3,4)	42,6 (8,0)	66,8 (9,1)
Regulatory physician	19,0 (0,8)	20,3 (2,9)	49,3 (3,9)	88,5 (7,1)
Radio operator	16,0 (4,2)	16,5 (6,4)	42,5 (17,7)	75,0 (28,3)
p-value	0,003 <sup>‡</sup>	0,004 <sup>‡</sup>	0,185 <sup>‡</sup>	0,021 <sup>‡</sup>
<b>Employment relationship</b>				
Municipal public	18,0 (2,4)	21,6 (4,6)	49,5 (6,1)	89,1 (12,1)
Social organization	18,8 (2,0)	22,5 (3,4)	51,7 (4,4)	93,1 (8,7)
p-value	0,040*	0,306 <sup>†</sup>	0,040*	0,076 <sup>†</sup>
<b>Work regime</b>				
Consolidation of labor laws	18,8 (2,0)	22,3 (3,6)	51,5 (4,6)	92,5 (9,2)
Statutory	17,9 (2,4)	22,1 (4,2)	49,3 (5,9)	89,2 (11,7)
Other	14,7 (2,9)	14,3 (7,8)	43,7 (12,3)	72,7 (20,4)
Cooperated	18,5 (2,1)	23,0 (2,8)	51,0 (5,7)	92,5 (10,6)
p-value	0,019 <sup>‡</sup>	0,196 <sup>‡</sup>	0,124 <sup>‡</sup>	0,145 <sup>‡</sup>

**Legend:** \*Brunner-Munzel test; <sup>†</sup>Wilcoxon-Mann-Whitney test; <sup>‡</sup>Kruskal-Wallis test; <sup>§</sup>IJS = intrinsic job satisfaction; <sup>\*\*</sup>SPWE = satisfaction with the physical work environment; <sup>††</sup>SHR = satisfaction with hierarchical relationships; <sup>‡</sup>sd = standard deviation

When analyzing Table 2, there is evidence of significant associations between the “IJS” dimension and type of team, position/function, employment relationship and work regime; “SPWE” with gender, type of team and position/function; “SHR” and employment relationship; and total score and type of team.

Table 3 shows the findings of the relationship between the dimensions and the variables: time working in the team, monthly shifts and working hours per shift.

**Table 3:** Correlation between total score and dimensions of EST-S20/23 and the variables time working in the team, monthly shifts and working hours per shift (n=95). São Paulo, Brazil, 2021.

Dimensions	Variables	n	color	95%CI.lo	95%CI.hi	p-value
IJS <sup>‡</sup>	Time spent on the team	95	-0,262*	-0,440	-0,064	0,010
	Monthly shifts	94	-0,440*	-0,590	-0,261	< 0,001
	Working hours per shift	95	0,313†	0,186	0,430	< 0,001
SPWE <sup>§</sup>	Time spent on the team	95	-0,242*	-0,423	-0,043	0,018
	Monthly shifts	94	-0,457*	-0,604	-0,280	< 0,001
SHR <sup>**</sup>	Time spent on the team	95	-0,241*	-0,422	-0,041	0,019
	Monthly shifts	94	-0,252*	-0,432	-0,052	0,014
<b>Total score</b>	<b>Time spent on the team</b>	<b>95</b>	<b>-0,266*</b>	<b>-0,444</b>	<b>-0,068</b>	<b>0,009</b>
	<b>Monthly shifts</b>	<b>94</b>	<b>-0,389*</b>	<b>-0,549</b>	<b>-0,203</b>	<b>&lt; 0,001</b>

**Legend:** \*Pearson Correlation Test Value; †Kendall Correlation Test Value; ‡ IJS = intrinsic job satisfaction; §SPWE = satisfaction with the physical work environment; \*\*SHR = satisfaction with hierarchical relationships.

By analyzing Table 3, there is evidence of a negative and moderate association between “IJS”, “SPWE”, total score and the variable monthly shifts, a positive and moderate association between “IJS” and working hours per shift and a negative and weak association between “IJS”, “SPWE”, total score and time spent on the team.

Regarding the professionals' feelings of belonging and comfort with their teams, most professionals gave values above 8 points, with the majority (69.9%) of workers giving the maximum value (10 points) in the first item - belonging and (71%) in the second - comfort.

## DISCUSSION

The results of this study showed a positive perception of job satisfaction among professionals working at SAMU, although in a heterogeneous manner. There was evidence of an association between satisfaction and sociodemographic and work variables. Furthermore, workers demonstrated a sense of belonging and comfort with the teams in the practice environment.

Regarding sociodemographic characteristics, it was found that most professionals declared themselves to be men and the average age was 44 years, characterizing an adult population. The findings of this study are analogous to those found in studies including SAMU in Brazil and in MPHC services in Spain, with a predominance of men and a tendency for a workforce of adults, with an average age of 38 years, unlike other health care contexts in which women usually predominate<sup>16,17</sup>.

Regarding education, most had completed higher education and the prevalent area of training among graduates was nursing. It was noted that some nursing technicians/auxiliaries, despite having completed higher education, remained in their position/function without progression corresponding to completed higher education in the area, since this requires participation in a new selection process.

In national and international literature, studies describe the presence of this phenomenon called “overqualification”, which is considered a form of underemployment, becoming a challenge to be overcome by both managers and nursing professionals.

Authors report that in situations in which workers perceive that their knowledge, skills and competencies exceed the requirements attributed to the position/function, it is not uncommon for feelings of discontent, frustration and apathy to arise, with a significant impact on job satisfaction and organizational commitment<sup>18</sup>.

Regarding employment data, the majority (40%) worked as emergency drivers, 61.1% were municipal public servants, 56.8% worked under the Brazilian formal working regime and 44.6% had another employment relationship. The results of this research corroborate national studies involving SAMU professionals from different states<sup>16,19</sup>.

As for the length of service in SAMU, the average was 7.9 (+5.6) years and the length of time working together in the same team corresponded to 3.9 (+4.0) years. Regarding the typology of the teams, there was a predominance of workers who composed the basic life support units (BLS).

Investigations conducted in a SAMU in Brazil and in MPHC services in Finland identified that the average length of service of professionals in these environments corresponded to between 4.7 and 10 years, respectively<sup>12,20</sup>.



Specifically in relation to job satisfaction, a positive perception was found among professionals working in SAMU, with an average of 4.5 points in the overall score, indicating findings superior to those found in a health establishment in Brazil and similar to those of MPHC services in Portugal<sup>11,21</sup>.

Regarding the dimensions, it was observed that satisfaction with the physical environment presented the lowest average (4.4 points), similar to results found in the national literature, with nursing workers in primary health care and hospitals<sup>21,22</sup>. It is reiterated that job satisfaction, in this dimension, involves aspects of physical structure, ventilation, air conditioning, hygiene and health conditions<sup>4</sup>.

This study made it possible to demonstrate a significant association between the general job satisfaction score and the type of team. In Brazil, there was an increase in SAMU coverage, reaching 85% of the population, a predominance of SBV units 2,742 (83%) with their respective teams, composed of nursing technicians/assistants and emergency drivers, and high productivity, represented by 19.0 million requests for assistance received by ERCs and 4.2 million services provided by SBV units in 2019/23.

There was also evidence of a significant association between the "IJS" dimension and type of team, position/function, employment relationship, and work regime; notably, the elements that make up this dimension are based on the emotional bond with what is done at work, with opportunities for achievement, recognition, and possibilities for professional development<sup>4</sup>, in line with the findings of the present study.

In this sense, a study measuring job satisfaction among professionals in MPHC services in Germany revealed that the content and nature of the work and opportunities for professional advancement were the attributes with the highest average satisfaction<sup>13</sup>.

With regard to SPWE, the results revealed an association with the variables gender, type of team and position/function. One of the possible justifications for this finding is due to the fact that these professionals are allocated to at least three distinct teams, with specific functions and unlike other health facilities, with a predominance of men. In addition, the variables type of team and position/function showed evidence of association in two dimensions; confirming that the work environment at SAMU is multifaceted, since (where) the professional performs his/her activities in microenvironments represented by the regulation center, centralized base, mobile units and location of the occurrence<sup>3</sup>.

A study aimed at identifying factors associated with job satisfaction in municipal public health services found that the majority of nursing professionals were female and that better conditions in the work environment were positively associated with satisfaction<sup>24</sup>.

SAMU workers in Fortaleza, Ceará, reported that the service posed safety risks to them and others, with physical space, noise from equipment and vehicles, and inadequate furniture being the main factors that caused harm to users and workers<sup>19</sup>.

Corroborating the findings of this investigation, authors point out that inadequate working conditions, with limited physical space, often adapted, and inappropriate air conditioning, can affect the professionals' assessment of their work environment<sup>22</sup>.

With regard to HRS, an association was found with the employment relationship. This dimension expresses the professional's perception of relationships with colleagues and superiors/bosses, autonomy over their own work, benefits, and the organization's policies<sup>4</sup>.

A study aimed at measuring job satisfaction among nursing technicians in SAMU in the state of Goiás showed that workers who had passed a public exam had lower satisfaction scores compared to those hired under other employment relationships; dissatisfaction was related to the criteria and possibilities for promotions and communication<sup>14</sup>.

In the correlation analysis, there was evidence of a negative and moderate association between "IJS", "SPWE", total score and the variable number of monthly shifts. It is known that the specificities of the care provided by SAMU require workers to have a set of decisive cognitive and socio-emotional skills, imposing a high degree of responsibility, personal commitment and the ability to deal with the dialectic of pleasure and suffering at work<sup>25</sup>. However, carrying out a significant number of monthly shifts constitutes a challenge for professionals working in this service, which directly impacts their satisfaction with the physical environment and intrinsic work.

In addition, authors emphasize that the long weekly work hours and the accumulation of employment relationships can result in physical and emotional exhaustion and make it impossible to engage in rest and leisure activities, impacting professional performance, leading to illness, in addition to putting the care provided at risk, especially due to inattention<sup>26</sup>.

In this sense, a study aimed at evaluating the work context at SAMU in Fortaleza, Ceará, showed that professionals were at risk of illness and occupational health problems due to the harmful nature of the work process<sup>16</sup>. A study with nursing professionals from SAMU in the state of Pernambuco revealed significant associations between stress and inadequate and unhealthy physical environments, restriction of professional autonomy and emotional exhaustion at work.

In addition, there was a positive and moderate association between “IJS” and working hours per shift. In this study, most professionals worked 12-hour shifts; it is known that these shifts include rest periods of at least 36 hours. Another finding is that a large proportion of workers (around 90%) worked in basic or advanced support units, whose main focus is direct assistance in emergency situations, providing feelings of professional achievement, opportunities for growth and, also, the creation of a symbolic image of heroism conferred to the professional exercise of those who work in pre-hospital care (PHC).

Authors have revealed that a meaningful work context, the availability of manageable health resources, team cohesion and safety, and positive feedback from patients treated are factors that increase job satisfaction among health professionals and reduce the chances of staff turnover<sup>28</sup>.

A study conducted at a SAMU in the Central West Region, with professionals working in mobile units, demonstrated successful experiences of pleasure, specifically due to the recognition of the work performed and the positive meaning attributed to their task. It also indicated that the expenditure of physical and mental energy in MPHIC brought to workers feelings of self-fulfillment, citizenship, and reward for alleviating the pain and suffering of others<sup>25</sup>.

On the other hand, medical regulation assistant technicians and radio operators have a 6-hour workday and one day off per week; the nature of the work performed by these professionals is different from that performed by workers in basic or advanced support units of SAMU, being restricted to the performance of operational activities of the telephone and radio communication system.

Regarding feelings of belonging and comfort in the team, most professionals attributed values above 8 points. Authors allude to the fact that belonging is a central construct in health and one of the fundamental elements for establishing bonds, as well as requiring socially appropriate skills and abilities, opportunities for relationships, desire and motivation<sup>29</sup>. International literature indicates that the feeling of belonging also constitutes protection against the suffering inherent in the workplace.

In this sense, research exploring the feeling of belonging and the variables associated with “well-being” in the workplace of paramedics working in Australia identified that, for the group of workers who expressed “discomfort” at work, the feeling of belonging showed a strong negative association with distress and a strong positive relationship with the sense of identity, revealing how they think about themselves; for the group of workers with “well-being”, the feeling of belonging was strongly associated with self-efficacy to deal with uncomfortable situations in the workplace, indicating social support<sup>7</sup>.

The study conducted with Red Cross ambulance professionals in Portugal found that workload, conflicts with superiors and insufficient support were listed by participants as factors that trigger stress at work. On the other hand, maintaining benefits, recognition of work by managers, better communication and dialogue, as well as comfort and safety conditions were highlighted as essential in promoting well-being and job satisfaction<sup>30</sup>.

### Study limitations

The limitations of this research are the small sample size, the diversity of instruments used to assess job satisfaction, and the scarcity of literature on the subject in the context of mobile pre-hospital care, which made it difficult to measure and compare the findings.

However, this is innovative research that contributes to the management of SAMU, in particular the human resources of MPHIC services, as it analyzes the work aspects that influence job satisfaction, including the feeling of belonging and comfort in teams, and the establishment of bonds between professionals with repercussions on interpersonal relationships, which are fundamental components for generating a work environment conducive to the integration of actions in effective teamwork, responding to the health needs of patients.



## CONCLUSION

The perceptions of job satisfaction of SAMU professionals, as well as feelings of belonging and comfort within the team, were positive. However, satisfaction with the physical environment is fragile.

Significant associations were found between the dimensions of satisfaction and sociodemographic (gender) and work-related variables (type of team, position/function, employment relationship and work regime).

The correlation analysis showed evidence of negative and moderate associations between “IJS”, “SPWE” total score and the variable number of monthly shifts; and positive and moderate associations between “IJS” and working hours per shift.

The results of this investigation can contribute significantly to the management of MPHC services, providing valuable insights into how satisfaction, belonging and comfort influence the health and nursing workforce at SAMU. Furthermore, these elements are crucial to optimizing processes, results and the health of workers, constituting guidelines for improving the efficiency, effectiveness and quality of care provided in emergency services.

Finally, new studies are recommended, given the relevance and scarcity of research on the topics of job satisfaction, belonging and comfort of SAMU workers, which express the perception and experiences of the members of the health workforce, essential and significant components in the health care of the population. Furthermore, these constructs are closely related to the intention of workers to remain in their jobs and profession, turnover, as well as quality of life at work.

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Conceptualization, H.O.C. and D.M.R.T.; methodology, H.O.C., M.P. and D.M.R.T.; validation, H.O.C., M.P. and D.M.R.T.; formal analysis, H.O.C., M.P. and D.M.R.T.; investigation, H.O.C., M.P. and D.M.R.T.; data curation, H.O.C.; writing – review and editing, H.O.C., M.P. and D.M.R.T.; writing – review and editing, H.O.C., M.P. and D.M.R.T.; visualization, H.O.C., M.P. and D.M.R.T.; supervision, M.P. and D.M.R.T.; project administration, H.O.C. and D.M.R.T. All authors read and agreed with the published version of the manuscript.