

ORIGINAL ARTICLE

doi: https://doi.org/10.1590/S1980-220X2018040703586

Patient safety culture in home care service*

Cultura de segurança do paciente no serviço de atenção domiciliar Cultura de seguridad del paciente en el servicio de atención a domicilio

How to cite this article:

Oliveira PC, Santos OP, Villela EFM, Barros PS. Patient safety culture in home care service. Rev Esc Enferm USP. 2020;54:e03586. doi: https://doi.org/10.1590/ S1980-220X2018040703586

D Patrícia Conceição Oliveira¹

D Odeony Paulo dos Santos²

🝺 Edlaine Faria de Moura Villela¹

Patrícia de Sá Barros¹

* Extracted from the dissertation: "Avaliação da cultura de segurança do paciente na atenção domiciliar na perspectiva da equipe de saúde", Programa de Mestrado Profissional em Saúde Coletiva, Universidade Federal de Goiás, 2018.

¹ Universidade Federal de Goiás, Programa de Pós-Graduação em Saúde Coletiva, Goiânia, GO, Brazil.

² Universidade Federal de Goiás, Programa de Pós-Graduação em Medicina Tropical e Saúde Pública, Jataí, GO, Brazil.

ABSTRACT

Objective: Verify perceptions of the health team about patient safety culture in home care in a large city in Brazilian Midwest region. **Method:** A survey study involving Safety Attitudes Questionnaire and professional profile inventory. **Results:** From the 37 professionals, most were female (n = 32, 86.5%), lived with their spouse (n = 25, 67.6%), worked in a statutory work regime (n = 29; 78.4%) and have only one job (n = 23; 62.2%). A higher median score for job satisfaction (80.0) and a lower score for management perception (31.8) were found. There was a negative correlation between weekly workload and teamwork (p = 0.02). Safety climate was significantly higher among consolidated (Consolidação das Leis do Trabalho – CLT) professionals in the safety climate (p = 0.001) and overall (p = 0.005) domains. Physicians had a higher perception of the safety climate domain when compared to professionals in other categories (p = 0.005). Age was positively associated to the climate in the safety (p = 0.002), working conditions (p = 0.03) and overall (p = 0.04) domains. **Conclusion:** Teamwork and job satisfaction were scored as positive and management actions were considered the main weakness of the safety culture.

DESCRIPTORS

Patient Safety; Home Care Services; Organizational Culture; Safety Management; Quality of Health Care.

Corresponding author: Patrícia Conceição Oliveira Instituto de Patologia Tropical e Saúde Pública, Departamento de Saúde Coletiva Rua 235, s/n, 2º andar, Setor Universitário CEP 74605-050 – Goiânia, GO, Brazil. patriciacífisio@gmail.com

Received: 09/10/2018 Approved: 09/24/2019

1

INTRODUCTION

The culture of an organization consists of sharing its employees' norms, values, behavioral patterns, rituals and traditions⁽¹⁾. Specifically, safety culture refers to the value an organization places on the safety and health of its workforce through its policies, procedures and practices, as well as a commitment to provide the necessary resources to adequately address the concerns regarding safety⁽²⁻³⁾. The safety culture in health services recognizes the inevitability of error and the incorporation of a non-punitive system for reporting and analyzing adverse events, replacing guilt and punishment with the opportunity to learn from failures and to improve healthcare⁽⁴⁾. Further, the patient safety culture in care environments is associated with reduced risk of incidents^(1,5-6).

An assessment of patient safety culture is the first step towards its implementation⁽⁷⁾ in order to improve care⁽⁶⁾ and to support service management through its monitoring, thus influencing organizational changes⁽³⁾. Such assessment initially only occurred in the hospital environment^(1,8-9), but in recent years its use has been increasing in long-term care facilities^(8,10), elderly homes⁽⁹⁾, and primary attention⁽¹⁾, as it is understood that risks are present in all healthcare spheres⁽¹¹⁾.

There is a shortage of studies which address patient safety culture in the area of home care. Only one qualitative study was found in national and international databases⁽¹²⁾.

In an ever-expanding world, including Brazil⁽¹³⁻¹⁴⁾, home care is part of a complex context, since patients treated in this environment tend to be older, have a greater number of comorbidities and disabilities, as well as several medical prescriptions, which fragment care. Moreover, such a care context requires an increasing use of previously used hospital technologies, which is associated with a higher risk of errors and adverse events^(11,13,15).

In this perspective, the following guiding question is raised: What is the culture of patient safety in home care from the perspective of health professionals? The objective of this study was to verify the perceptions of the health team about the patient safety culture in home care in a large municipality in the Midwest region of Brazil.

METHOD

STUDY DESIGN

A descriptive, cross-sectional, survey study.

SCENARIO

2

The study was developed in the Home Care Service (*Serviço de Atenção Domiciliar – SAD*), which serves users of the Unified Health System (*SUS*) of a large city in the Midwest of Brazil.

The municipality was qualified in the Ministry of Health's Best at Home Program in 2012, and provides care to patients in need of multiprofessional care, valuing resource rationality and dehospitalization⁽¹⁶⁾.

POPULATION AND SAMPLE

The population comprises a multiprofessional group of 38 health professionals selected from the following inclusion criteria: health professionals of both genders who work in the SAD of the municipality, with experience in the service for at least 6 months. The following potential subjects were excluded: professionals who were away from work for vacation, leave of absence, health treatment, absence from work or refusal to participate. From the 38 eligible professionals, only one refused to participate. Thus, the sample consisted of 37 professionals working in the SAD under the management of the Municipal Health Secretariat (*SMS*) of the studied municipality.

DATA COLLECTION

Data collection was performed from December 1, 2017 to March 31, 2018, on the premises of the SAD professionals' capacity unit, and was previously scheduled with the participants without inconvenience to the service. Participants were instructed to respond to the self-administered assessment form which contained the health professional's profile (age, marital status, type of employment bond, workload and on-the-job training) and the Safety Attitudes Questionnaire (SAQ), and they could consult the researcher if they had any questions.

The SAQ instrument is widely used^(1,3,5), and was chosen because it has good psychometric properties and is validated and culturally adapted to the Brazilian reality. The SAQ is composed of questions involving the perception of patient safety and professional data (position held, gender and length of work time). This instrument measures the perception of health professionals through six domains: Teamwork Climate: items 1 to 6; Safety Climate: items 7 to 13; Job Satisfaction: items 15 to 19; Stress Recognition: items 20 to 23; Perception of Management: items 24 to 29; and Working Conditions: items 30 to 33. Items 14 and 34 to 36 are not part of any domain, and are therefore analyzed separately⁽¹⁷⁾.

The answer to each question follows a five-point Likert scale. The final score of the instrument ranges from zero to 100, where zero corresponds to the worst perception of safety attitudes by health professionals and 100 to the best perception. Total score values equal to or greater than 75 points are considered positive⁽¹⁷⁾.

DATA ANALYSIS AND TREATMENT

Data were analyzed using Stata software, version 14.0 (StataCorp, 2015). Descriptive statistics were used to describe the numerical and nominal variables. P-values < 0.05 were considered statistically significant. Cronbach's alpha coefficient was used for internal consistency analysis, with values ≥ 0.7 representing good reliability⁽¹⁸⁾.

A bivariate analysis was performed to verify the association between demographic and labor variables and the SAQ domains, which was confirmed by the multiple analysis. Pearson's correlation tested the relationship between climate scores and numerical variables. Student's t-test or analysis of variance (ANOVA) for independent samples verified the differences between mean scores of nominal variables. Linear regression analysis examined factors associated with the SAQ domain scores, and variable regression models with a p-value < 0.05 were included in the bivariate analysis of gender and age to fit the models.

ETHICAL ASPECTS

The study was approved by the Research Ethics Committee of the Universidade Federal de Goiás, under Opinion no. 2.334.607, October 2017. It met the requirements of Resolution 466/2012 of the National Health Council, which concerns research with human beings.

RESULTS

A total of 37 questionnaires were answered, thereby comprising 97.4% of the study population. Sociodemographic characteristics showed a mean age of professionals of 38.92years (SD = 9.89), ranging from 25 to 65 years; five (13.5%) were male and 32 (86.5%) were female. Regarding marital status, 25 participants (67.6%) lived with their spouse and 12 (32.4%) did not have a spouse.

Regarding the professional profile, nine (24.3%) were nursing technicians, eight (21.6%) physicians, six (16.2%) nurses, five (13.5%) physiotherapists, four (10.8%) social workers, two (5.4%) speech therapists, two (5.4%) nutritionists, and one psychologist (2.7%). The employment bond of most professionals was statutory (n = 29; 78.4%), only eight were contracted (21.6%), and 23 (62.2%) had only one job, while the others (n = 14; 37.8%) had two jobs. Regarding working time in such specialty, it was observed that 14 (37.9%) professionals had worked in their respective area for less than 5 years, 12 (32.4%) had worked 5 to 10 years, and 11 (29.7%) for more than 10 years. The average weekly workload was 44.9 hours (SD = 11.2), ranging from 30 to 70 hours. No professional in the study had patient safety and safety care training.

Table 1 details the frequencies of SAQ questions by scale items, with the highest satisfaction percentages in the job satisfaction domain questions (example: 91.9% [n = 34] said they like their work), and lower percentages in the management perception (example: 13.5% [n = 5] responded that management is doing a good job).

 Table 1 – Distribution of absolute numbers and percentages of SAQ questions by domain – Brazil, 2018.

		SD/PD		PA/TA		
Questions	n	%	n	%	n	%
Teamwork climate						
1. Nurse input is well received in this service.	1	2.7	5	13.5	31	83.8
2. (R) It is difficult to speak openly in this service if I perceive a problem with patient care.	16	43.2	3	8.1	18	48.6
3. Disagreements are appropriately resolved in this service.	7	18.9	1	2.7	29	78.4
4. I have the support I need from other staff members to care for patients.	1	2.7	1	2.7	35	94.6
5. It is easy for professionals working in this service to ask questions when there is something they do not	4	10.8	2	5.4	31	83.8
6. The physicians and nurses here work together as a well-coordinated team.	6	16.2	1	2.7	30	81.1
Safety climate						
7. I would feel safe being treated here as a patient.	10	27.0	2	5.4	25	67.6
8. Medical errors are handled appropriately in this service.	6	16.2	8	21.6	23	62.2
9. I know the proper channels to direct questions regarding patient safety in this service.	21	56.8	3	8.1	13	35.1
10. I receive appropriate feedback about my performance.	22	59.5	3	8.1	12	32.4
11. (R) It is difficult to discuss errors in this service.	14	37.8	3	8.1	20	54.1
12. Lam encouraged by my colleagues to report any patient safety concerns I may have.	7	18.9	2	5.4	28	75.7
13. The culture in this service makes it easy to learn from the errors of others.	12	32.4	1	2.7	24	64.9
Job satisfaction	-					
15. I like my job.	2	5.4	1	2.7	34	91.9
16. Working here is like being part of a family.	2	5.4	2	5.4	33	89.2
17. This is a good place to work.	5	13.5	3 1	8.1	29	/8.4
19. Morale in this service is high	20	10.0 54 1	5	2./ 13.5	32 12	32.4
Stress Recognition	20	51.1	5	15.5	14	52.1
20. When my workload becomes excessive, my performance is impaired	8	21.6	_	_	20	78.4
21. I am less effective at work when fatigued	3	8.1	-	_	34	91.9
22 Lam more likely to make errors in tense or hostile situations	5	13.5	-	-	32	86.5
23. Fatigue impairs my performance during emergency situations.	14	37.8	1	2.7	22	59.5
Perception of Unit/Municipal Health Secretary (SMS) Management						
24. Unit – The administration supports my daily efforts.	16	43.2	5	13.5	16	43.2
24. SMS – The administration supports my daily efforts.	24	63.9	8	21.6	5	13.5
25. Unit – The administration doesn't knowingly compromise patient safety.	17	45.9	5	13.5	15	40.5
25. SMS – The administration doesn't knowingly compromise patient safety.	20	54.1	7	18.9	10	27.0
26. Unit – The administration is doing a good job.	17	45.9	8	21.6	12	32.4
26. SMS – The administration is doing a good job.	27	73.0	5	13.5	5	13.5
27. Unit – Problematic professionals of the team are dealt with constructively.	24	64.9	9	24.3	4	10.8
27. SMS – Problematic professionals of the team are dealt with constructively.	25	67.6	9	24.3	3	8.1
from unit management.	25	67.9	2	5.4	10	27.0
28. SMS – I get adequate, timely information and opportunities about events which might affect my work	27	72.0	4	10.0	(1()
from SMS.	27	/3.0	4	10.0	0	16.2
29. The levels of staffing in this service are sufficient to handle the number of patients.	21	56.8	5	13.5	11	29.7
Working conditions		60.0	_	40 -	0	
30. This service does a good job of training new team members.	23	62.2	5	13.5	9	24.3
31. All the necessary information for diagnostic and therapeutic decisions is routinely available to me.	20	54.1	1	2./	16	43.2
32. Trainees in my profession are adequately supervised.	28	/5./	1	2./	8 32	21.6
Separate items	-	10.0		2.7	52	00.5
3 Separate thems 14. My sofety suggestions would be put into action if Lexpressed them to administration	25	67.6	7	18.0	5	12 F
34. They a good collaboration with the medical team in this service.	25 /	10.8	1	2 7	30	13.5
35. Lexperience good collaboration with the nharmacists in this service	3	8.1	5	13.5	29	78.4
36. (R) Communication failures which lead to delays in care are common.	6	16.2	2	5.4	29	78.4
SD: Strongly disagree: PD: Partially disagree: N: Neutral: PA: Loartially agree: TA: Ltotally agree: R: Reversed questions. SN	1S: Mu	nicipal H	ealth S	ecretaria	t. Note:	(n = 37)

Table 2 shows a higher median score for job satisfaction (80.0) and a lower score for management perception (31.8). Regarding Cronbach's alpha values, the following domains Table 2 – SAQ score analysis by domain – Brazil, 2018.

showed good reliability: job satisfaction (0.88); overall (0.80), perception of the unit/Municipal Healthy Secretariat management (0.79), and stress recognition (0.71).

Domains	Mean (SD)	95% CI	Median	IQR	MinMax.	Cronbach's Alphat			
Domain 1: Teamwork climate	75.3 (16.5)	69.8-80.8	79.2	25.0	29.2-100.0	0.65			
Domain 2: Safety climate	55.5 (16.9)	49.8-61.1	53.6	21.4	17.9-89.3	0.56			
Domain 3: Job satisfaction	72.6 (23.3)	64.8-80.3	80.0	25.0	0.0-100.0	0.88			
Domain 4: Stress recognition	75.0 (22.2)	75.0-82.4	75.0	34.4	12.5-100.0	0.71			
Domain 5: Perception of unit/SMS management	32.4 (18.5)	26.3-38.6	31.8	32.8	2.3-70.5	0.79			
Domain 6: Working conditions	42.2 (20.7)	35.2-49.1	42.2	34.4	0.0-81.2	0.40			
Overall	58.8 (9.8)	55.6-62.1	59.4	11.4	25.6-77.4	0.80			
SD: Standard deviation: 95% CI: 95% Confidence Interval: IOR: Interguartile range: Min.: minimum: Max.: maximum: 1: Standardized Cronbach's Alpha. Note: (n=37)									

The comparison between the safety climate domains and the investigated variables (gender, work regime, employment and workload) showed a statistically significant difference between: safety climate and work regime (p = 0.001); safety climate and workload (p = 0.005); overall domain and work Table 3 - Bivariate analysis of climate factors for domains - Brazil, 2018.

regime (p = 0.05). The safety climate was significantly higher among CLT professionals in the safety and overall climate domains. Physicians had a higher perception of the safety climate domain when compared to professionals in other categories (Table 3).

Variables		Teamwo	vork Safety climate		Job satisfaction Stress recognit		gnition	Perception of management		Working conditions		Overall			
variables	N	Mean (SD)	p- value	Mean (SD)	p- value	Mean (SD)	p- value	Mean (SD)	p- value	Mean (SD)	p- value	Mean (SD)	p- value	Mean (SD)	p- value
Gender															
Male	5	70.8 (25.7)	0 5 2	57.1 (24.9)	0.70	57.0 (34.2)	0.10	67.5 (34.6)	0.42	37.7 (20.9)	0.49	45.0 (30.4)	0.74	55.9 (17.1)	0.40
Female	32	76.0 (15.1)	0.32	55.2 (15.9)	0.79	75.0 (20.8)	0.10	76.2 (20.2)	0.42	31.6 (18.3)	0.40	41.8 (19.4)	0.74	59.3 (8.5)	0.49
Work regime															
CLT	8	79.2 (8.9)	0.20	71.9 (12.0)	0.001*	,74.4 (15.2)	0.80	72.6 (28.5)	0.73	40.9 (13.0)	0.08	49.2 (22.0)	0.27	64.8 (4.2)	0.05*
Statutory	29	74.3 (18.1)	0.29	51.0 (15.3)	0.001	72.1 (25.3)	0.00	75.6 (20.7)	0.75	30.1 (19.3)	0.08	40.3 (20.3)	0.27	57.2 (10.4)	0.05
Employment															
One	23	77.9 (12.5)	0.20	56.2 (16.5)	0.77	75.2 (15.7)	0.46	79.3 (20.6)	0.10	32.6 (19.0)	0.02	40.5 (19.7)	0 51	60.3 (6.9)	0.25
Two	14	71.1 (21.5)	0.29	54.3 (18.3)	0.77	68.2 (32.4)	0.46	67.8 (23.6)	0.12	32.1 (18.3)	0.93	45.1 (22.6)	0.51	56.5 (13.3)	0.25
Workload															
Nursing team	15	76.4 (15.0)		51.4 (15.1)		73.3 (25.2)		78.7 (17.6)		33.8 (20.7)		28.7 (19.2)		58.7 (8.6)	
Medical team	8	79.2 (8.9)	0.60	71.9 (12.0)	0.005*	*74.4 (15.2)	0.93	72.6 (28.5)	0.70	40.9 (13.0)	0.18	49.2 (22.0)	0.50	64.7 (4.2)	0.11
Others	14	75.3 (16.5)		50.5 (16.2)		70.7 (26.2)		72.3 (23.7)		26.1 (17.5)		42.0 (22.0)		55.6 (12.1)	

*P<0.05: statistically significant difference. P-value: t-test for independent samples; SD: standard deviation. Note: (n=37).

Table 4 shows the correlation between the safety climate A negative correlation was observed between the weekly and age domains, weekly workload and time in the specialty. workload and teamwork domain (p = 0.02).

Table 4 - Correlation between safety climate domains and quantitative variables - Brazil, 2018.

	Teamwork climate		Teamwork Safet climate climat		ty Job ate satisfaction		Stress recognition		Perception of management		Working conditions		Overall	
	r ²	р	r ²	р	r ²	р	r ²	р	r ²	р	r ²	р	r ²	р
Age (years)	0.23	0.15	0.20	0.22	0.02	0.88	0.07	0.65	-0.03	0.85	0.24	0.13	0.24	0.15
Weekly workload (hours)	-0.36	0.02*	-0.05	0.74	-0.09	0.57	-0.19	0.24	0.17	0.28	-0.04	0.79	-0.18	0.26
Time in the specialization	0.18	0.26	-0.15	0.35	0.04	0.78	-0.07	0.65	-0.18	0.27	-0.05	0.73	-0.08	0.63

P: P-value; SD: Standard deviation; *P<0.05: statistically significant difference; r²: Pearson correlation coefficient. Note: (n= 37).

Table 5 presents the linear regression analysis of factors associated with safety climate domains obtained in the regression models. The variables with p-value < 0.20 in the bivariate analysis and the gender and age variables were included in the respective domain models for adjustment.

Weekly workload was associated with teamwork climate (p = 0.025). Age was positively associated with safety climate (p = (0.002), working conditions (p = 0.03) and overall (p = 0.04). The work regime showed a statistically significant association with

the safety climate (p < 0.001) and the overall domain (p = 0.004). The position was positively associated with the overall domain (p = 0.007). Age and gender showed no statistically significant association with job satisfaction (p = 0.64; p = 0.18, respectively), stress recognition (p = 0.67, p = 0.56, respectively), and management perception (p = 0.62; p = 0.92, respectively). The workload and work regime also did not present a statistically significant association with the perception of management (p = 0.30 for the medical team and others; p = 0.09, respectively).

4

Table 5 – Factors associated	d with safe	ty climate – Braz	il, 2018.
Domains	β ¹	95% CI	p-value
Teamwork climate			
Age	0.35	-0.19; 0.90	0.194
Gender			
Male (R)			
Female	1.60	-19.15; 22.35	0.876
Weekly workload	-0.53	-0.99; -0.07	0.025
F-value (p-value): 2.89 (0.049	9); R ² : 0.189)	
Safety climate			
Age	0.78	0.31; 1.24	0.002
Gender			
Male (R)	10.10	0.50.04.54	0.400
Female	12.12	-2.52; 26./6	0.102
Work regime (R)			
CLI	24.20	47 32. 31 34	- 0.001
Resition	-34.29	-47.23; -21.24	< 0.001
Nursing toom (P)			
Medical team	34.07	20 25: 47 89	< 0.001
Others	-0.38	-10 13: 9 36	0.936
E-value (p-value): 8.01 (< 0.0	01)· R ² · 0 5	17	0.550
lob satisfaction	01// 11 013	.,	
Age	-0.23	-1.26: 0.79	0.64
Gender			
Male (R)			
Female	20.78	-10.06; 51.63	0.18
F-value (p-value): 0.94 (0.400); R ² : 0.08	,	
Stress recognition			
Age	0.13	-0.50; 0.77	0.67
Gender			
Male (R)			
Female	9.75	-24.20; 43.71	0.56
F-value (p-value): 0.91 (0.44)	; R ² : 0.09		
Perception of management			
Age	0.17	-0.55; 0.90	0.62
Gender			
Male (R)			
Female	-0.92	-19.90; 18.05	0.92
Position	0.07	7.06.24.61	0.20
Medical team	8.37	-7.86; 24.61	0.30
Others	-/./9	-22.93; 7.35	0.30
CLT			
CLI Statutony	12.64	27 56. 2 28	0.00
F-value (n-value): 1 36 (0 269	-12.04	-27.30, 2.20	0.09
Working conditions	<i>),</i> R . 0.10		
Age	0.83	0.07 1.59	0.033
Gender	0.05	0107 1100	01000
Male (R)			
Female	-1.97	-33.95: 30.01	0.901
Work regime (R)		,	
CLT			
Statutory	-16.30	-46.06; 13.44	0.273
F-value (p-value): 4.62 (0.004	4); R ² : 0.159)	
Overall			
Age	0.38	0.02; 0.74	0.040
Gender			
Male (R)			
Female	9.60	-4.44; 23.66	0.174
Work regime (R)			
CLT			
Statutory	-15.72	-26.18; -5.26	0.004
Position			
Nursing team (R)			0.00-
Medical team	14.27	4.21; 24.33	0.007
Others	-2.64	-9.22; 3.94	0.420
r-value (p-value): 3.25 (0.024	i); K *: 0.359	1	

R: Reference category; 95% CI: 95% confidence interval; ¹Regression coefficient. Note: (n = 37).

DISCUSSION

The internal reliability of the instrument demonstrated that the job satisfaction, stress recognition, perception of management and overall domains presented Cronbach alpha values higher than $0.70^{(18)}$, confirming the robustness to measure the safety culture in home care.

Knowing the opinion of health professionals is essential to understand the issues related to loss of patient safety, as they are directly linked to care management⁽⁶⁾. The participation of 65% to 85% of the population is considered adequate to evaluate the safety culture⁽¹⁹⁾. Therefore, the values presented in this study express the perceptions and attitudes about the patient safety culture in the evaluated service.

Regarding the sociodemographic profile of professionals, feminization among health professionals is confirmed as a growing trend⁽²⁰⁻²¹⁾. The nursing category is predominant among respondents because it is the majority of professionals in health institutions, as recommended in the SUS home care regulations⁽¹⁶⁾.

The results obtained in this study indicated that the teamwork climate and stress recognition domains were considered positive for patient safety attitudes. In the teamwork domain, it was found that there was a large percentage of respondents who stated that it was difficult to speak openly when they noticed a problem in patient care. There is a need to improve discussion among team members and openness to error discussion^(3,22).

Studies have examined the barriers that professionals encounter when perceiving problems related to patient care. Power dynamics, feelings of resignation, negative past experiences or ineffectiveness of reported episodes, fear of impairing relationships with colleagues or superiors, and lack of psychological security were identified as the main reasons for a professional's difficulty in expressing themselves. It is concluded that the "organizational climate" is an explicit motivator for a professional's silence on safety issues, and therefore encouragement, reinforcement and development of the team's ability to listen and respond appropriately to the concerns expressed are fundamental⁽²²⁻²³⁾.

The safety climate regarding service management showed the worst means of the domains. It is mentioned the strategy to take a proactive and transparent approach to addressing safety issues so that health professionals see that their opinions are valued and followed without a threat of retaliation⁽²³⁾. Another indication is the need to develop a strong safety climate or share employee perceptions that safety is rewarded, supported, valued and prioritized over other organizational goals⁽²⁴⁾.

The most appropriate safety culture model for the health panorama is a fair culture that recognizes healthcare as a complex and high-risk enterprise; a reporting culture in which people are encouraged to talk about mistakes; and a learning culture in which everyone is willing to learn from mistakes made by making systematic changes to prevent their recurrence^(1,3). Good stress recognition is an important component for improving patient safety^(5,25), as well as

working conditions with training programs for new staff and hiring a sufficient number of staff⁽²⁶⁾.

The lower scores in the perception of management domain suggest low approval of management actions on safety issues, corroborating other studies^(25,27).

A British study revealed that teamwork and positive perceptions by professionals regarding managers were associated with significant gains in patient safety through decreased complications and mortality⁽⁷⁾. Leaders should play a key role in supporting a robust learning system, serve as guardians of the learning system, apply improvement and reliability concepts, and encourage transparency at all levels of the organization⁽²⁾, in addition to providing a quality work environment for the workers⁽⁵⁾.

A study based on hospital data suggests that management should focus on implementing combined initiatives to improve continuous quality and safety climate in order to achieve gains in quality and safety outcomes⁽²⁸⁾. Knowing the relationships between SAQ domains and how each domains interacts with others is essential for management to have parameters in the decision and to evaluate the cause-effect relationship⁽²⁹⁾. Therefore, teamwork and management in support of patient safety are two critical domains for enhancing the safety culture, as they have direct impacts on all other domains except stress recognition^(5,29).

The present study also made it possible to understand the relationship between SAQ domains and the variables of age, time since graduation, experience time in the specialty and type of employment relationship.

Older age is associated with significantly increased scores for safety climate and working conditions, which may be explained by increased attachment to work and a sense of confidence among older people. Another possible explanation would be the better perception of factors which affect patient safety among younger people due to a more recent academic education focused on the patient safety theme⁽⁸⁾. This finding is demonstrated among primary care healthcare professionals in the Netherlands⁽¹⁾.

Better perception of the work safety climate was observed among medical professionals, who coincidentally are those who have a temporary contract as a work bond. This better perception can be explained by the fact that the precarious bond and lack of stability tend to affect more positive responses due to fear of retaliation⁽²⁵⁾. However, it is believed that this is not the main reason for such perception, and the result is attributed to the physicians professional training being more focused on safety culture due to the invasiveness of the procedures they perform.

The results showed that the higher the workload, the worse the perception of the safety climate, which is worrying because workload is associated with a higher risk of errors in care⁽⁶⁾. Damage caused by indignities and inequities in health services is understood to be as preventable and as unacceptable as incorrect surgery and medication errors. Ensuring patient safety is ensuring everyone's right to a free care experience which includes being treated fairly and with dignity⁽²⁾.

The peculiarities of home care with the presence of the caregiver and family members who share the patient care with the team and the unique hospital environment demand a safety culture from health professionals who should support, stimulate and train caregivers, requiring a reflection regarding autonomy and safety⁽¹¹⁾.

The small sample size was the main limitation of this study, associated with the evaluation of a single service, which limits generalizing the results to other services. The scarcity of home care studies leads to comparisons being constrained by differences in work environments, service levels and safety issues.

In this sense, one emphasizes the importance of the findings in this work environment. Future studies should focus on comparing SAQ with other home care services, especially longitudinal studies, and correlate the outcomes of safety behaviors and attitudes and the magnitude of care incidents. It is also suggested to include the perception of the other actors involved, i.e. management and support services. From the care and managerial point of view, the results of the present study may help to implement strategies to consolidate a safety culture in the service.

CONCLUSION

Teamwork climate and job satisfaction were scored as positive; managerial actions are considered the main weaknesses of the patient's safety culture, representing a warning sign that needs to be improved in the service.

RESUMO

Objetivo: Verificar as percepções da equipe de saúde sobre a cultura de segurança do paciente na atenção domiciliar em um município de grande porte na região Centro-Oeste do Brasil. **Método:** Estudo tipo Survey, com aplicação do Questionário de Atitudes de Segurança e perfil profissional. **Resultados:** Dos 37 profissionais, a maioria era do sexo feminino (n=32, 86,5%), vivia com cônjuge (n=25, 67,6%), trabalhava em regime de trabalho estatutário (n=29; 78,4%) e tinha vínculo empregatício (n=23; 62,2%). Verificaram-se maior escore mediano para satisfação no trabalho (80,0) e menor para percepção da gerência (31,8). Houve uma correlação negativa entre a carga horária semanal e o trabalho em equipe (p=0,02). O clima de segurança foi significativamente maior entre profissionais celetistas nos domínios clima de segurança (p=0,001) e global (p=0,005). Os médicos apresentaram maior percepção do clima no domínio segurança quando comparados aos profissionais de outras categorias (p=0,005). A idade foi positivamente associada ao clima nos domínios de segurança (p=0,002), condições de trabalho (p=0,03) e global (p=0,04). **Conclusão:** O trabalho em equipe e a satisfação no trabalho foram pontuados como positivos e as ações gerenciais, consideradas as principais fragilidades da cultura de segurança.

DESCRITORES

Segurança do Paciente; Serviços de Assistência Domiciliar; Cultura Organizacional; Gestão da Segurança; Qualidade da Assistência à Saúde.

RESUMEN

6

Objetivo: Verificar las percepciones del equipo de salud sobre la cultura de seguridad del paciente en la atención domiciliar en un municipio de grande porte en la región Centro-Oeste del Brasil. Método: Estudio tipo Survey, con aplicación del Cuestionario de

Actitudes de Seguridad y perfil profesional. **Resultados:** De los 37 profesionales, la mayoría era del sexo femenino (n=32, 86,5%), vivía con su cónyuge (n=25, 67,6%), laboraba en régimen de trabajo supeditado al código de los funcionarios públicos (n=29; 78,4%) y tenía vínculo laboral (n=23; 62,2%). Se han verificado mayor puntaje mediano para satisfacción en el trabajo (80,0) y menor para percepción de la gerencia (31,8). Hubo una correlación negativa entre la carga horaria semanal y el trabajo en equipo (p=0,02). El clima de seguridad fue significativamente mayor entre profesionales supeditados a la Consolidación de Leyes Laborales en los dominios: clima de seguridad (p=0,001) y global (p=0,005). Los médicos presentaron mayor percepción del clima en el dominio seguridad cuando comparados a los profesionales de otras categorías (p=0,005). La edad fue positivamente asociada al clima en los dominios de seguridad (p=0,002), condiciones de trabajo (p=0,03) y global (p=0,04). **Conclusión:** El trabajo en equipo y la satisfacción en el trabajo fueron puntuados como positivos y las acciones gerenciales, consideradas las principales fragilidades de la cultura de seguridad.

DESCRIPTORES

Seguridad del Paciente; Servicios de Atención de la Salud a Domicilio Cultura Organizacional; Servicios de Atención de la Salud a Domicilio; Administración de la Seguridad; Calidad de la Atención de Salud.

REFERENCES

- Smits M, Keizer E, Giesen P, Deilkås ECT, Hofoss D, Bondevik GT. Patient safety culture in out-of-hours primary care services in the Netherlands: a cross-sectional survey. Scand J Prim Health Care [Internet]. 2018 [cited 2018 June 10];36(1):28-35. Available from: https:// www.ncbi.nlm.nih.gov/pmc/articles/PMC5901437/
- 2. Frankel A, Haraden C, Federico F, Lenoci-Edwards J. A framework for safe, reliable, and effective care. Cambridge: Institute for Healthcare Improvement and Safe & Reliable Healthcare; 2017.
- 3. Basson T, Montoya A, Neily J, Harmon L, Watts BV. Improving patient safety culture: a report of a multifaceted intervention. J Patient Saf. 2018 Feb 9. DOI: 10.1097/PTS.00000000000470 [Epub ahead of print]
- 4. Silva NDM, Barbosa AP, Padilha KG, Malik AM. Patient safety in organizational culture as perceived by leaderships of hospital institutions with different types of administration. Rev Esc Enferm USP. 2016;50(3):490-7. DOI: http://dx.doi.org/10.1590/S0080-623420160000400016
- 5. Huang C-H, Wu H-H, Lee Y-C. The perceptions of patient safety culture: a difference between physicians and nurses in Taiwan. Appl Nurs Res. 2018;40:39-44. DOI: https://doi.org/10.1016/j.apnr.2017.12.010
- 6. Listyowardojo TA, Yan X, Leyshon S, Ray-Sannerud B, Yu XY, Zheng K, et al. A safety culture assessment by mixed methods at a public maternity and infant hospital in China. J Multidiscip Healthc. 2017;10:253-62. DOI: 10.2147/JMDH.S136943
- 7. Vasconcelos PF, Arruda LP, Freire VECS, Carvalho REFL. Instruments for evaluation of safety culture in primary health care: integrative review of the literature. Public Health. 2018;156:147-51. DOI: https://doi.org/10.1016/j.puhe.2017.12.024
- Bondevik GT, Hofoss D, Husebø BS, Deilkås ECT. Patient safety culture in Norwegian nursing homes. BMC Health Serv Res [Internet]. 2017 [cited 2018 June 10];17(1):424. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5479007/
- 9. Gartshore E, Waring J, Timmons S. Patient safety culture in care homes for older people: a scoping review. BMC Health Serv Res [Internet]. 2017 [cited 2018 June 10];17(1):752. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5697159/
- Marshall M, Cruickshank L, Shand J, Perry S, Anderson J, Wei L, et al. Assessing the safety culture of care homes: a multimethod evaluation of the adaptation, face validity and feasibility of the Manchester Patient Safety Framework. BMJ Qual Saf. 2017;26(9):751-9. DOI: 10.1136/ bmjqs-2016-006028
- 11. Vincent C, Amalberti R. Safer Healthcare: strategies for the real world. Oxford: Springer; 2016.
- 12. Berland A, Holm AL, Gundersen D, Bentsen SB. Patient safety culture in home care: experiences of home-care nurses. J Nurs Manag. 2012;20(6):794-801. DOI: 10.1111/j.1365-2834.2012.01461.x
- Schildmeijer KGI, Unbeck M, Ekstedt M, Lindblad M, Nilsson L. Adverse events in patients in home healthcare: a retrospective record review using trigger tool methodology. BMJ Open [Internet]. 2018 [cited 2018 June 20];8(1):e019267. Available from: https://www.ncbi. nlm.nih.gov/pmc/articles/PMC5781156/
- Dantas IC, Pinto Junior EPP, Medeiros KKAS, Souza EA. Perfil de morbimortalidade e os desafios para a atenção domiciliar do idoso brasileiro. Rev Kairós Gerontol [Internet]. 2017 [citado 2018 jul. 20];20(1):93-108. Disponível em: https://revistas.pucsp.br/index.php/ kairos/article/view/32058
- 15. Lyons I, Blandford A. Safer healthcare at home: detecting, correcting and learning from incidents involving infusion devices. Appl Ergon. 2018;67:104-14. DOI: 10.1016/j.apergo.2017.09.010
- 16. Brasil. Ministério da Saúde. Portaria de Consolidação n. 5, de 28 de setembro de 2017. Consolidação das normas sobre as ações e os serviços de saúde do Sistema Único de Saúde [Internet]. Brasília; 2017 [citado 2018 jun. 15]. Disponível em: http://bvsms.saude.gov.br/ bvs/saudelegis/gm/2017/prc0005_03_10_2017.html
- 17. Carvalho REFL, Cassiani SHB. Cross-cultural adaptation of the Safety Attitudes Questionnaire Short Form 2006 for Brazil. Rev Latino Am Enfermagem. 2012;20(3):575-82. DOI: http://dx.doi.org/10.1590/S0104-11692012000300020
- Souza AC, Alexandre NMC, Guirardello EB. Psychometric properties in instruments evaluation of reability and vality. Epidemiol Serv Saude. 2017;26(3):649-59. DOI: 10.5123/S1679-49742017000300022
- Sexton JB, Helmreich RL, Neilands TB, Rowan K, Vella K, Boyden J, et al. The Safety Attitudes Questionnaire: psychometric properties, benchmarking data, and emerging research. BMC Health Serv Res [Internet]. 2006 [cited 2018 Aug 21];6:44. Available from: https://www. ncbi.nlm.nih.gov/pmc/articles/PMC1481614/
- 20. Russo G, Gonçalves L, Craveiro I, Dussault G. Feminization of the medical workforce in low-income settings; findings from surveys in three African capital cities. Hum Resour Health [Internet]. 2015 [cited 2018 Sep 20];13:64. Available from: https://www.ncbi.nlm.nih. gov/pmc/articles/PMC4521355/

- 21. Hedden L, Barer ML, Cardiff K, McGrail KM, Law MR, Bourgeault IL. The implications of the feminization of the primary care physician workforce on service supply: a systematic review. Hum Resour Health [Internet]. 2014 [cited 2018 Aug 21];12:32. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4057816/
- 22. Schwappach D, Richard A. Speak up-related climate and its association with healthcare workers' speaking up and withholding voice behaviours: a cross-sectional survey in Switzerland. BMJ Qual Saf. 2018;27(10):827-35. DOI: 10.1136/bmjqs-2017-007388
- 23. Etchegaray JM, Ottosen MJ, Dancsak T, Thomas EJ. Barriers to speaking up about patient safety concerns. J Patient Saf. 2017 Nov 4. DOI: 10.1097/PTS.00000000000334 [Epub ahead of print]
- 24. Vogus TJ. Safety climate strength: a promising construct for safety research and practice. BMJ Qual Saf. 2016;25(9):649-52. DOI: 10.1136/ bmjqs-2015-004847
- 25. Carvalho REFL, Arruda LP, Nascimento NKP, Sampaio RL, Cavalcante MLSN, Costa ACP. Assessment of the culture of safety in public hospitals in Brazil. Rev Latino Am Enfermagem. 2017;25:e2849. DOI: 10.1590/1518-8345.1600.2849
- 26. Lee YC, Wu HH, Hsieh WL, Weng SJ, Hsieh LP, Huang CH. Applying importance-performance analysis to patient safety culture. Int J Health Care Qual Assur. 2015;28(8):826-40. DOI: 10.1108/IJHCQA-03-2015-0039
- 27. Santiago THR, Turrini RNT. Organizational culture and climate for patient safety in Intensive Care Units. Rev Esc Enferm USP. 2015;49(n. spe):123-30. DOI: 10.1590/S0080-623420150000700018
- 28. McFadden KL, Stock GN, Gowen CR. Leadership, safety climate, and continuous quality improvement: Impact on process quality and patient safety. Health Care Manage Rev. 2015;40(1):24-34. DOI: 10.1097/HMR.000000000000006
- 29. Lee Y-C, Weng S-J, Stanworth JO, Hsieh L-P, Wu H-H. Identifying critical dimensions and causal relationships of patient safety culture in Taiwan. J Med Imaging Health Inf. 2015;5(5):995-1000. DOI: 10.1166/jmihi.2015.1482

CC BY

8

This is an open-access article distributed under the terms of the Creative Commons Attribution License.