Evaluation of ethical climate in health services: a systematic review

Taís Carpes Lanes [1], Ana Carolina de Souza Magnago [2], Thais Costa Schutz [3], Alessandra Suptitz Carneiro [4], Bruna Xavier Morais [5], Graziele de Lima Dalmolin [6]

Abstract

Ethical climate refers to the perceptions shared by health professionals of how ethical issues should be handled in their organization. This study aimed to identify scientific evidence of studies that used the Hospital Ethical Climate Survey in ethical climate assessment. This is a systematic review of 33 articles selected from Scopus, PubMed and Medline databases. Ethical climate was associated with workers' health issues and it was evaluated as moderate to positive by health professionals. The topic was classified as positive for the "peers," "patients" and "managers" factors, and negative for "physicians" and "hospital" factors. The review concluded that assessing the ethical climate is important for improving the work environment and that the Hospital Ethical Climate Survey is a valid and reliable instrument for such evaluation.

Keywords: Ethics. Health services. Nursing.

Resumo

Avaliação do clima ético nos serviços de saúde: revisão sistemática

O clima ético refere-se à perceptibilidade dos profissionais de saúde quanto ao tratamento ético das questões do trabalho. Este estudo buscou identificar as evidências científicas das produções que utilizaram o instrumento *Hospital Ethical Climate Survey* na avaliação do clima ético. Trata-se de revisão sistemática realizada nas bases de dados Scopus, PubMed e Medline, sendo selecionados 33 artigos. Evidenciou-se que o clima ético foi associado às questões de saúde do trabalhador e avaliado como de moderado a positivo pelos profissionais de saúde. O clima ético foi classificado como positivo para os fatores "pares", "pacientes" e "gestão", e como negativo para os fatores "médicos" e "hospital". Compreende-se a importância da avaliação do clima ético para a sustentabilidade e melhorias do ambiente de trabalho. Neste caso, o *Hospital Ethical Climate Survey* se apresentou válido e fidedigno ao ser aplicado em serviços de saúde.

Palavras-chave: Ética. Serviços de saúde. Enfermagem.

Resumen

Evaluación del clima ético en servicios de salud: revisión sistemática

El clima ético se refiere a la percepción de los profesionales de la salud sobre el tratamiento ético de las cuestiones laborales. Este estudio buscó identificar evidencias científicas de producciones que utilizaron el instrumento *Hospital Ethical Climate Survey* en la evaluación del clima ético. Se trata de una revisión sistemática realizada en las bases de datos Scopus, PubMed y Medline, con 33 artículos seleccionados. Se demostró que el clima ético estaba asociado a problemas de salud en el trabajo. En la evaluación por factores, el clima ético se clasificó como positivo para los factores "pares", "pacientes" y "gestión", y como negativo para los factores "médicos" y "hospital". Se concluyó que es importante evaluar el clima ético para garantizar la sostenibilidad y mejorar el clima laboral. En este caso, la aplicación del *Hospital Ethical Climate Survey* en los servicios de salud resultó válida y confiable.

Palabras clave: Ética. Servicios de salud. Enfermería.

1. PhD student taislanes_rock@hotmail.com – Universidade Federal de Santa Maria (UFSM) **2.** Undergraduate anasmagnago@gmail.com – UFSM **3.** Master's student thais.schutz@hotmail.com – UFSM **4.** PhD student alessandracarneiro1994@gmail.com – UFSM **5.** PhD student bruna_morais100@hotmail.com – UFSM **6.** PhD grazi.dalmolin@gmail.com – UFSM, Santa Maria/RS, Brasil.

Correspondence
Taís Carpes Lanes – Rua João Goulart, 401, casa 2, fundos, Camobi CEP 97105-220. Santa Maria/RS, Brasil.

The authors declare no conflict of interest.

Research

Ethical climate can be defined as the perceptions shared by health professionals of how ethical issues concerning healthcare and workplace relations should be handled [1,2]. These issues refer to problems in patient care, diagnosis and treatment, institutionally and among health teams [3]. Ethics in this environment is influenced by the organizational behavior and is usually positive when the workplace favors the exercise of autonomy and the inclusion of all professionals involved in care, allowing them to discuss and participate in the decision-making process [1].

This indicator has been assessed in hospital and non-hospital services [1,2], using instruments that include the Ethical Climate Questionnaire for services, industrial and trade organizations [2]; Ethical Decision-Making Climate Questionnaire for intensive care units [4]; and Hospital Ethical Climate Survey (Hecs) for hospital areas [5-7].

Hecs was developed in 1998 in Chicago, in the United States, to assess the perceptions shared by nurses on the ethical climate; it was validated in a study with 360 professionals from two acute care hospitals located in a city in the Western United States [1]. This instrument consists of five factors or subscales: "patients," "physicians," "peers," "hospital (hospital management)" and "managers" (unit management) [1]. Each factor assesses whether interpersonal relationships can help or hinder the ethical decision-making process, considering everyone involved in the problem situation [1,8].

For each factor, the ethical climate can be classified as negative, moderate or positive, depending on the quality of the relationships and how ethical the deliberation will be among the parties involved [1,8,9]. An ethical climate assessment may indicate turnover intention, job dissatisfaction [10], worker distress [11], moral stress [12], and tendency to commit medical errors [13]. These indicators can morally embarrass workers, reason why they must be identified.

An ethical assessment can also help recognize elements that strengthen or weaken the ethical and moral performance of workers, which is reflected on the quality and safety of care provided to patients. With this evaluation, actions can be planned to improve the work environment and facilitate shared decision-making based on deontology and the principles of the institutions. Considering all these benefits, this study aimed to analyze scientific evidence of studies using Hecs to assess ethical climate.

Method

This is a systematic review of six stages: 1) review question formulation; 2) definition of selection criteria and databases; 3) development and completion of a form for data collection and extraction; 4) critical evaluation of primary studies; 5) analysis and descriptive synthesis of the review results; and 6) knowledge synthesis [14].
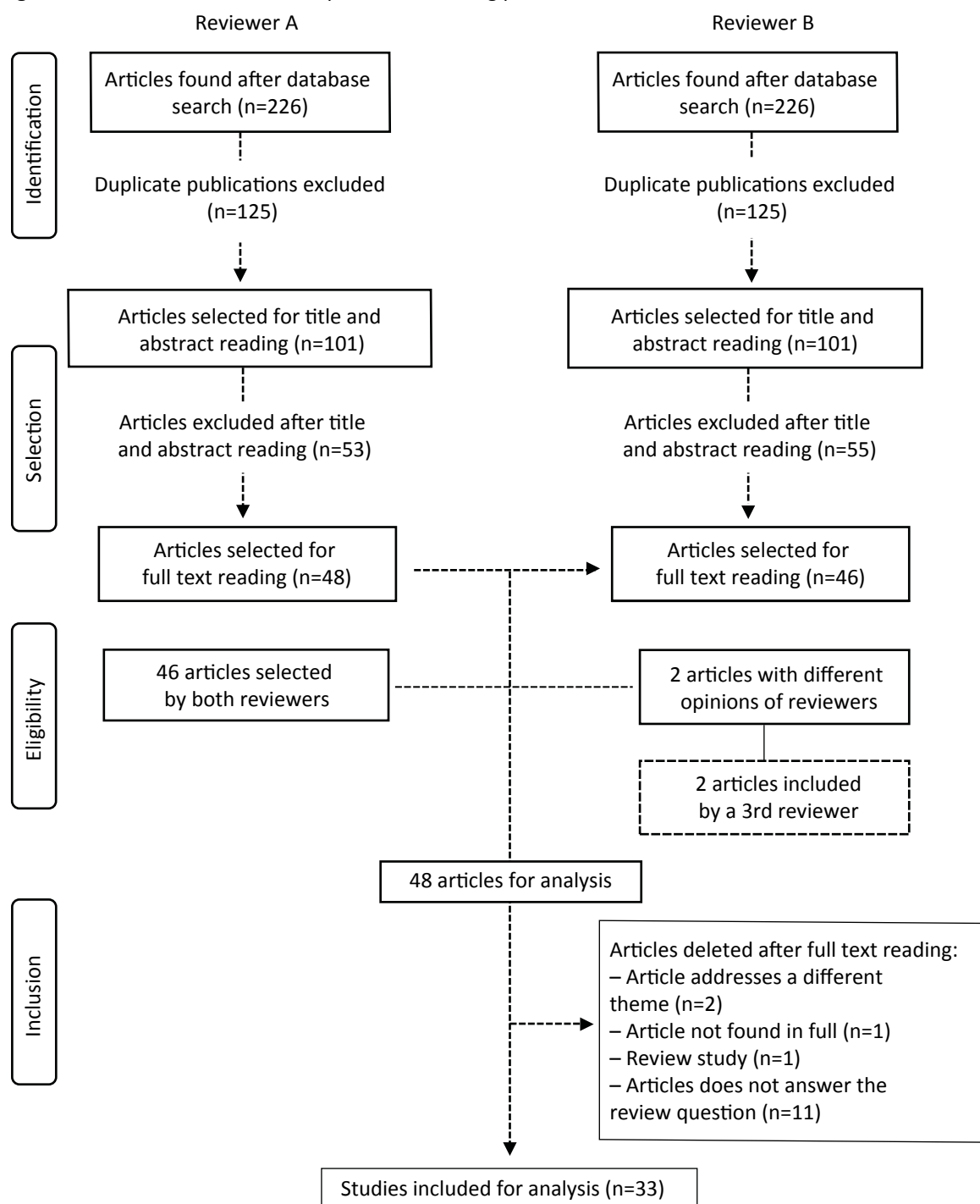
In the first stage, based on the Picot strategy – population (P), intervention (I), comparison (C), outcome (O) and time (T) [14] –, we defined the following review question: "What are the scientific evidences of ethical climate assessment published in the literature using the Hecs instrument?" The second stage defined the selection criteria and databases – Scopus, PubMed and Medline Complete. This review included only original full articles, published in English, Portuguese or Spanish, which used Hecs to assess the ethical climate with health professionals.

In the Scopus database, the following combinations of keywords were used: "ethical climate *and* nursing *and* questionnaire *or* instrument *or* scale *or* validation," and 54 studies were found; in PubMed, "ethical climate *and* nursing *or* nurse" found 90 publications; and in Medline, "ethical climate *and* hospital ethical climate *and* nursing *or* nurse" resulted in 87 studies.

We conducted database search and analysis of all studies in May 2019, in a dual independent review process, by the author and a previously trained scientific initiation scholarship student. Five studies were excluded because they were not in English, Portuguese or Spanish, totaling 226 publications, which were submitted to the selection process according to Figure 1.

In the third stage, all 33 selected articles were assessed regarding data quality and relation with the research problem. For the analysis, a data extraction table was developed, with the following information: authors, database, study field, country and year of publication, journal, language, objectives, method, abstract, theme (if the article addresses the theme), main results and conclusions.

Research

http://dx.doi.org/10.1590/1983-80422020284436

Rev. bioét. (Impr.). 2020; 28 (4): 718-29   **719**

Figure 1. Flowchart of the dual independent screening process for the articles included in this review

Reviewer A   Reviewer B

Identification

| Articles found after database search (n=226) | Articles found after database search (n=226) |

Duplicate publications excluded (n=125) | Duplicate publications excluded (n=125)

Selection

| Articles selected for title and abstract reading (n=101) | Articles selected for title and abstract reading (n=101) |

Articles excluded after title and abstract reading (n=53) | Articles excluded after title and abstract reading (n=55)

| Articles selected for full text reading (n=48) | Articles selected for full text reading (n=46) |

Eligibility

| 46 articles selected by both reviewers | 2 articles with different opinions of reviewers |

2 articles included by a 3rd reviewer

48 articles for analysis

Inclusion

Articles deleted after full text reading:
– Article addresses a different theme (n=2)
– Article not found in full (n=1)
– Review study (n=1)
– Articles does not answer the review question (n=11)

Studies included for analysis (n=33)

Research

The fourth stage consisted of a critical evaluation of primary studies using an evidence classification system. Different classifications could be used, depending on the type of study question of selected primary studies. The method selected was the seven levels of classification: 1) systematic review or meta-analysis; 2) randomized controlled clinical trial; 3) clinical trials without randomization; 4) cohort and case-control studies; 5) systematic review of descriptive and qualitative studies; 6) descriptive or qualitative study; and 7) opinion of authorities and/or report of expert committees [15].

The fifth stage involved the analysis and descriptive synthesis of the review results, allowing

the assessment of individual studies and data comparison. Data extraction aims to find results that answer the review question, emphasizing differences and similarities between the studies selected, without inferences from the reviewer.

In the sixth stage ("knowledge synthesis"), the results, conclusions and limitations of the studies are presented together with the authors' considerations and reflections. Our investigation maintained the authorship and reliability of the articles included in this review.

Results

Most studies were conducted in North America (30.3%; n=10), specifically in the United States (27.3%; n=9) [1,3,10,11,16-20], between 2014 and 2015 (36.4%; n=12) [13,16-18,21-28], published by *Nursing Ethics* (33.3%; n=11) [8,9,12,13,19,25,27,29-32], rated by Qualis Periódicos as A1, with impact factor of 2.597. Hospital settings were the most frequent study field (84.8%; n=28) [1,3,5-9,11-13,16-21,23,24,26,29-37], in acute/critical care units (24.2%; n=8) [1,11,16,18,20,29,32,37]. Nurses participated in all studies [1,3,5-13,16-37], but some also had the participation of physicians [6,11,17,30,37], nursing auxiliaries [6,22,27,30], social workers [10,17], and pharmacists [17].

Table 1 presents authors, design, levels of evidence, variables associated with ethical climate, and the main results of the studies comprising the sample. Cross-sectional studies were the most common study design (90.9%; n=30), with level of evidence 6.

Table 1. Synopsis of selected articles

Identification	Study design	Level of evidence	Variables associated with ethical climate	Main results
Olson; 1998 [1]	Methodological	6	None	Hecs proved to be a valid and reliable instrument for the assessment of ethical climate.
Bahcecik, Oztürk; 2003 [5]	Cross-sectional	6	Sociodemographic data	Ethical climate was associated with time of experience and age of the professional.
Hart; 2005 [3]	Cross-sectional	6	Turnover intention Intention to leave nursing	Nurses who perceived ethical climate as positive reported a greater intention to remain in the area. Relationship between ethical climate and intention to leave nursing.
Ulrich and collaborators; 2007 [10]	Cross-sectional	6	Job satisfaction Turnover intention Ethical stress	Participants less inclined to turnover and with a low level of ethical stress considered the ethical climate more positively. Positive ethical climate increased job satisfaction and reduced turnover intentions.
Hamric, Blackhall; 2007 [11]	Cross-sectional	6	Moral distress Labor data	Nurses with a high level of moral distress rated the ethical climate more negatively. Nurses considered the ethical climate more negatively than physicians.
Pauly and collaborators; 2009 [29]	Cross-sectional	6	Moral distress	The more positive the ethical climate, the lower the levels of moral distress.
Lützén and collaborators; 2010 [12]	Cross-sectional	6	Ethical stress	Negative perception of the ethical climate increased moral stress.
Silén and collaborators; 2011 [33]	Cross-sectional	6	Moral distress	Positive ethical climate is associated with a lower frequency of moral distress.
Joolaee and collaborators; 2013 [34]	Cross-sectional	6	Job satisfaction	The more positive the ethical climate perception, the higher the satisfaction level reported by nurses.
Claeys and collaborators; 2013 [35]	Methodological and cross-sectional	6	None	Ethical climate was positive in the units. The lowest score was for the "hospital" factor, and the highest was for the "peers" factor.

Research

http://dx.doi.org/10.1590/1983-80422020284436

Rev. bioét. (Impr.). 2020; 28 (4): 718-29

721

Table 1. Continuation

Identification	Study design	Level of evidence	Variables associated with ethical climate	Main results
Han; 2014 [21]	Cross-sectional	6	Turnover intention	The more positive the ethical climate, the lower the turnover intention.
Hwang, Park; 2014 [13]	Cross-sectional	6	Labor data Turnover intention Experience with medical error	Significant differences were found between ethical climate and years of nursing and teaching experience. Nurses with a positive perception of the ethical climate presented lower rate of turnover intention and were less likely to commit medical errors.
Suhonen and collaborators; 2014 [22]	Cross-sectional	6	Individualized nursing care	Nurses who rated the ethical climate more positively were more likely to realize care provided was more individualized.
Sauerland and collaborators; 2014 [16]	Mixed	6	Moral distress Moral residue	Nurses who reported higher levels of moral distress rated the ethical climate more negatively.
Khalesi and collaborators; 2014 [23]	Cross-sectional	6	None	The highest rate of ethical climate was for the "managers" factor, and the lowest for the "physicians" factor. Hecs proved to be a valid and reliable instrument for the assessment of ethical climate.
Ghorbani and collaborators; 2014 [24]	Cross-sectional	6	Sociodemographic data	Sociodemographic data did not influence the perceptions of nurses about the ethical climate.
Whitehead and collaborators; 2015 [17]	Cross-sectional	6	Moral distress Labor data	More positive perceptions of the ethical climate were associated with lower levels of moral distress. Physicians rated the ethical climate more positively than nurses.
Numminen and collaborators; 2015 [25]	Cross-sectional	6	Self-assessed professional competence Turnover intention Job satisfaction	Nurses with a higher level of competence, satisfied with their jobs and who never planned to change jobs, presented a more positive perception of the ethical climate.
Jahantigh and collaborators; 2015 [26]	Cross-sectional	6	Sociodemographic data Desired ethical climate	A significant relationship was observed between age/work environment and the ethical climate. A significant difference was observed between the perceptions shared by nurses of the ethical climate and the desired mean score for ethical climate.
Suhonen and collaborators; 2015 [27]	Cross-sectional	6	None	The ethical climate was positive in general, with a higher score for the "peers" factor and a lower score for the "physicians" factor.
Sauerland and collaborators; 2015 [18]	Cross-sectional	6	Moral distress	Significant inverse relationship between moral distress and ethical climate.
Numminen and collaborators; 2015 [28]	Cross-sectional	6	Practice environment Turnover intention	Nurses who were satisfied with the quality of care evaluated the ethical climate more positively. Nurses with turnover intention evaluated the practice environment and the ethical climate less positively.

Research

Table 1. Continuation

Identification	Study design	Level of evidence	Variables associated with ethical climate	Main results
Jahantigh, Zare, Shahrakipour; 2016 [36]	Cross-sectional	6	Sociodemographic data Ethical behavior	The relationship between sociodemographic data/ethical behavior and the ethical climate was not significant.
Bartholdson and collaborators; 2016 [30]	Cross-sectional	6	Labor data	Nurses rated the ethical climate positively less frequently than physicians.
Boer and collaborators; 2016 [37]	Longitudinal	4	Labor data Moral distress	Nurses rated the ethical climate more negatively than physicians. The positive ethical climate helps nurses and physicians cope with moral distress.
Jang, Oh; 2019 [31]	Cross-sectional	6	Job satisfaction Ethical leadership	Job satisfaction was positively correlated with the ethical climate. No significant association was found between ethical climate and ethical leadership.
Özden and collaborators; 2019 [9]	Cross-sectional	6	Ethical leadership Job satisfaction Sociodemographic and labor data	Significant positive correlation was found among ethical leadership, ethical climate and job satisfaction. A statistically significant difference was found between ethical climate and working hours, work type, work conditions and job satisfaction. Nurses who had been longer in the institution presented higher scores for leadership and ethical climate. Nurses who were more satisfied with the profession and relationships with their colleagues rated the ethical climate more positively.
Asgari and collaborators; 2019 [32]	Cross-sectional	6	Job satisfaction	A significant relationship was found between ethical climate and job satisfaction.
Lemmenes and collaborators; 2018 [19]	Cross-sectional	6	Sociodemographic and labor data	Nurses under 30 years of age rated the ethical climate more positively than nurses over 30 years of age. Significant relationship between ethical climate and specialties: adult critical care nurses presented higher total mean scores.
Constantina, Papastavrou, Charalambous; 2019 [8]	Cross-sectional	6	Labor data	Nurses with an undergraduate degree rated the ethical climate more positively than nurses with a graduate degree.
Altaker, Howie-Esquivel, Cataldo; 2018 [20]	Cross-sectional	6	Moral distress Psychological empowerment	Nurses who rated the ethical climate more positively had lower levels of moral distress. A positive correlation was found between HECS and Psychological Empowerment Instrument.
Charalambous and collaborators; 2018 [7]	Methodological	6	None	Hecs proved to be a valid and reliable instrument for the assessment of ethical climate.
Pergert, Bartholdson, Sandeberg; 2019 [6]	Cross-sectional	6	Labor data	Physicians rated the ethical climate more positively than nurses and nursing assistants.

Hecs: Hospital Ethical Climate Survey.

Research

Ethical climate presented association with other variables (84.8%; n=28) [3,5,6,8-13,16-22,24-26,28-34,36,37]. In most studies, ethical climate was associated with moral distress, as assessed by the Moral Distress Scale (24.2%; n=8) [11,16-18,20,29,33,37]; job satisfaction, according to the Job Satisfaction Scale [10], Minnesota Job Satisfaction Questionnaire [34], Minnesota Satisfaction Questionnaire [31], Minnesota Satisfaction Scale [9], and Brayfield and Rothe Job Satisfaction Index [32] (15.2%; n=5); and turnover intention, assessed using the Anticipated Turnover Scale [3] and the Turnover Intention [21] (6.1%; n=2). In addition, questions about job satisfaction [25] and turnover intention [10,13,25,28] were used, which were developed by the authors of the studies (15.2%; n=5). Table 2 shows the mean and standard deviation values used in the overall classification and by Hecs factors.

Table 2. Overall classification and by factors of the Hospital Ethical Climate Survey

Identification*	Ethical climate classification by HECS factors					Overall classification of ethical climate/HECS
	Patients	**Peers**	**Physicians**	**Managers**	**Hospital**	
	Mean (SD)	**Mean (SD)**	**Mean (SD)**	**Mean (SD)**	**Mean (SD)**	**Mean (SD)**
Ulrich and collaborators; 2007 [10]	–	–	–	–	–	97.3 (14.4)
Pauly and collaborators; 2009 [29]	3.71 (0.573)	4.12 (0.617)	3.35 (0.741)	3.40 (1.071)	3.11 (0.747)	3.48 (0.612)
Silén and collaborators; 2011 [33]	–	–	–	–	–	95.00 (**)
Joolaee and collaborators; 2013 [34]	–	–	–	–	–	3.36 (0.69)
Claeys and collaborators; 2013 [35]	3.90 (0.49)	4.15 (0.49)	3.75 (0.59)	3.85 (0.77)	3.64 (0.59)	3.85 (0.46)
Han; 2014 [21]	3.35 (0.40)	3.61 (0.50)	2.76 (0.60)	3.28 (0.60)	2.78 (0.50)	3.11 (**)
Hwang, Park; 2014 [13]	3.60 (0.60)	3.7 (0.70)	3.0 (0.80)	3.8 (0.80)	3.3 (0.60)	3.5 (0.60)
Suhonen and collaborators; 2014 [22]	–	–	–	–	–	3.85 (0.56)
Sauerland et al.; 2014 [16]	–	–	–	–	–	94.39 (18.3)
Khalesi and collaborators; 2014 [23]	2.80 (0.64)	2.90 (0.65)	2.46 (0.69)	3.04 (0.66)	2.61 (0.72)	2.75 (0.58)
Ghorbani and collaborators; 2014 [24]	3.94 (0.64)+ 4.01 (0.65)++	4.12 (0.5)+ 4.05 (0.64)++	3.31 (0.76)+ 3.46 (0.73)++	4.23 (0.77)+ 4.24 (0.76)++	3.37 (0.81)+ 3.48 (0.88)++	3.76 (0.54)+ 3.82 (0.61)++
Whitehead and collaborators; 2015 [17]	–	–	–	–	–	58.2 (11.1)
Numminen and collaborators; 2015 [25]	4.10 (0.52)	4.33 (0.54)	3.74 (0.58)	3.50 (0.91)	3.54 (0.64)	3.84 (0.45)
Jahantigh and collaborators; 2015 [26]	14.70 (2.76)	15.42 (2.66)	20.98 (4.40)	22.07 (3.93)	21.6 (4.15)	94.78 (15.35)
Suhonen and collaborators; 2015 [27]	3.96 (0.54)	4.29 (0.55)	3.58 (0.71)	3.94 (0.87)	3.64 (0.67)	3.85 (0.56)
Sauerland and collaborators; 2015 [18]	–	–	–	–	–	96.6 (17.77)
Jahantigh, Zare, Shahrakipour; 2016 [36]	–	–	–	–	–	94.78 (15.35)
Boer and collaborators; 2016 [37]	–	–	–	–	–	3.86 (0.46)

continues...

Table 2. Continuation

Identification*	Ethical climate classification by HECS factors					Overall classification of ethical climate/HECS
	Patients	**Peers**	**Physicians**	**Managers**	**Hospital**	
	Mean (SD)	**Mean (SD)**	**Mean (SD)**	**Mean (SD)**	**Mean (SD)**	**Mean (SD)**
Jang, Oh; 2019 [31]	3.69 (0.40)	4.01 (0.48)	3.61 (0.57)	3.98 (0.56)	3.46 (0.47)	3.59 (0.41)
Özden and collaborators; 2019 [9]	–	–	–	–	–	92.62 (17.0)
Asgari and collaborators; 2019 [32]	3.29 (**)	3.72 (**)	1.58 (**)	3.8 (**)	2.61 (**)	3.51 (0.53)
Lemmenes and collaborators; 2018 [19]	3.60 (0.60)	3.94 (0.65)	2.93 (0.81)	3.04 (1.06)	2.97 (0.74)	3.22 (0.65)
Constantina, Papastavrou, Charalambous; 2019 [8]	3.74 (0.69)	3.99 (0.64)	3.06 (0.79)	3.88 (0.92)	3.4 (0.72)	3.58 (0.62)
Altaker, Howie-Esquivel, Cataldo; 2018 [20]	–	–	–	–	–	3.9 (0.5)

*Nine articles [1,3,5-7,11,12,28,30] have no mean and standard deviation values in the overall classification of ethical climate; **has no standard deviation; +hospital A; ++hospital B; – means no classification by factors; SD: standard deviation; Hecs: Hospital Ethical Climate Survey.

As indicated in Table 2, among the studies that evaluated the ethical climate by factors, 84.6% (n=11) had higher scores for the factors of "patients," "peers," and "managers," and lower scores for "hospital" and "physicians" [8,13,19,21,23,24,27,29,31,32,35], rated as negative. The ethical climate assessed with Hecs was moderate to positive. Only one study presented a negative classification [23].

The studies evaluated Hecs in two different ways: by the sum and by the mean values. Eight (24.2%) [9,10,16-18,26,33,36] assessed it based on the sum of the items; 16 (48.5%) [8,13,19-25,27,29,31,32,34,35,37] by the general mean values of the instrument; 12 (36.4%) [8,13,19,21,23-25,27,29,31,32,35] by the mean of each factor; and 5 (15.2%) [8,16,18,23,25] by the mean of each item referring to the values on the Likert scale.

Some studies [20,35] described, from the analysis of mean values, the value to classify the ethical climate as positive (above 3.5) and negative (below 3.5). Other research [9,16,18,24,32] classified the ethical climate by the sum of scores, considering 130 as the maximum value and 26 as minimum value. The ethical climate was assessed as positive above 78 and as negative below this score [26,36].

The articles not described in Table 2 carried out association/correlation analyses between ethical climate and other variables [3,11,12,28,30], were validation studies [1,7], or used percentages to assess the ethical climate in general and/or by Hecs items [5,30]. Hecs was also used in a reduced form, from 26 to 14 [6] and 17 [30] items in hematology-oncology units; to 15 [11] and 25 [37] items in acute/critical care units; and to 16 [17] items in hospital sectors.

The overall reliability of the instrument ranged from 0.85 to 0.95 and was assessed using Cronbach's alpha (63.6%; n=21) [1,3,5,7-12,18-20,22-24,27,31-33,35,37]. Reliability by factors was calculated in 21.2% (n=7) of the articles, with the factors of "peers" ranging from 0.70 to 0.88; "patients" from 0.58 to 0.85; "managers" from 0.73 to 0.93; "hospital" from 0.58 to 0.83; and "physician" from 0.71 to 0.89 [1,7,8,19,23,27,35].

Discussion

Regarding the characterization of the studies, they were mostly conducted in the United States, in hospital settings – mainly in critical units – which is justified by the fact that Hecs was developed in Chicago and in hospital areas. The selection of these studies to assess the ethical climate in critical units may be due to the *modus operandi* of the work, which provides more specific and complex care that can generate more dilemmas and ethical conflicts to be resolved, requiring decision-making and moral deliberation [16].

In some of them, the ethical climate assessed by Hecs had an association/correlation with moral

http://dx.doi.org/10.1590/1983-80422020284436

Rev. bioét. (Impr.). 2020; 28 (4): 718-29   **725**

Research

distress, turnover intention, and job satisfaction. Scientific evidence shows that a positive ethical climate is linked with a reduction of factors causing moral distress and stress in the work environment, turnover intention, and intention to leave the profession, as well as team strengthening and job satisfaction [10,12,13,21,25,32-34,37].

Moral distress was the variable presenting more significant associations with ethical climate [16,20,32], particularly related to the obstacle of shared decision-making among professionals [18]. Insecurity of professionals regarding patient care and staff shortage to meet high-intensity demands causes suffering, resulting in an uncooperative environment and increasing the negative perception of the ethical climate [16].

In pediatric and neonatal units, for example, where professionals provide high-complexity care to children, situations favoring the development of moral distress are associated with the experience of witnessing the suffering of patients and family members [16]. In this context, a balanced relationship among team members can improve work flow, relieving tension during care [29].

In general, the ethical climate was assessed as moderate to positive [13,19,21,25,27,29,31,32,35,36]. However, questions that analyzed the relationship between nurses and physicians presented the lowest mean values [13,21,24,26]. The studies identified difficult interaction between these professional categories, possibly due to poor communication and discussion about diagnosis and treatment issues [38]. For being closer to patients, nursing professionals could provide important information for the treatment, but nurses are often excluded from the decision-making process [38].

Relationship problems can be associated with different perceptions about what the ideal work environment should be. This is what studies conducted in oncology and critical care units suggest, which, when comparing perceptions of different professional categories, detected a more positive assessment of the ethical climate among physicians [6,11]. This may be related to the different responsibilities and competencies of each profession within every unit [30,37]. In this context, nurses would have a more critical view of the work process for being in health services for a longer period, seeking to understand conflict situations and deliberating about them with the team under their responsibility [30].

Unlike the relationship between nurses and physicians, studies showed positive perceptions among peers, indicating a relationship of support and cooperation [13,19,21,25,27,29,31,35]. These relationships are associated with the practice of exercising leadership and listening among colleagues, which contribute to the necessary interaction to perform care activities in a homogeneous way [8,25]. Therefore, healthy relationships help to improve the decision-making process and to deal with dilemmas, in addition to providing more secure care to patients [8,30]. In this perspective, most studies showed positive ethical climate regarding "patients," indicating a relationship of mutual respect [13,19,25,27,29,31,35]. When a professional respects the patient's autonomy in the treatment and insertion in care provision, the interaction improves with more trust in the relationships [30].

However, the perception shared by professionals was negative for "hospital." The lack of support and openness to questioning negatively influenced ethical issues [13,21,23,25,29,31,35]. Managers would have to assist in the development and maintenance of a healthy environment, promoting discussion with workers [26]. Then, they should lead the way and handle problems that affect institutions, adopting ethical standards to guide professionals on how to handle impasses [23,31].

Hospital managers, a factor that in most studies received a positive evaluation, need to improve teamwork, investing in enhancements in the workplace and showing their willingness to improve the organizational climate and assistance [39]. The appreciation of professional categories supports work diversification and the creation of respectful relationships, which encourages team performance [34].

Regarding the instrument analyses, the original Hecs validation study [1] assessed the ethical climate using mean values, but without instrument normalization, considering that some studies used the sum of scores [9,10,16-18,26,33,36]. This situation can make analysis difficult due to the lack of standardization. However, a reduced Hecs was used in critical units in other countries [6,11,30,37], which makes it an instrument that can be easily adapted to different locations.

Therefore, Hecs is valid and reliable for assessing the ethical climate in a hospital environment, since the instrument reliability was above 0.70 in the studies that used Cronbach's

alpha calculation [1,3,5,7-12,18-20,22-24,27,31-33,35,37]. This score justifies the instrument application to all health professionals, not only nurses [1,3,5-13,16-37], but also to physicians [6,11,17,30,37], nursing assistants [6,22,27,30], social workers [10,17] and pharmacists [17].

Final considerations

In most studies, ethical climate was associated with issues related to workers' health, such as moral distress, job satisfaction, and turnover intention. In addition, ethical climate classification based on Hecs was moderate to positive, with higher scores for "peers," "patients" and "managers," which were classified as positive, and lower scores for "physicians" and "hospital," considered as negative.

In general, Hecs proved to be valid and reliable for ethical climate assessment. However, the instrument has to be adapted and validated to Brazil to evaluate the ethical climate in health services with different professional categories, allowing the development of studies on associations between ethical climate and other health issues of workers, such as burnout, stress, and moral harassment, considering intervention actions. From this perspective, efforts should be made to improve the ethical climate and the quality of healthcare, reducing psychological problems among health professionals.

References

1. Olson LL. Hospital nurses' perceptions of the ethical climate of their work setting. J Nurs Scholarsh [Internet]. 1998 [acesso 17 abr 2018];30(4):345-9. DOI: 10.1111/j.1547-5069.1998.tb01331.x

2. Victor B, Cullen JB. The organizational bases of ethical work climates. Adm Sci Q [Internet]. 1988 [acesso 17 abr 2018];33(1):101-25. DOI: 10.2307/2392857

3. Hart SE. Hospital ethical climates and registered nurses' turnover intentions. J Nurs Scholarsh [Internet]. 2005 [acesso 12 maio 2018];37(2):173-7. DOI: 10.1111/j.1547-5069.2005.00030.x

4. Benoit DD, Jensen HI, Malmgren J, Metaxa V, Reyners AK, Darmon M *et al*. Outcome in patients perceived as receiving excessive care across different ethical climates: a prospective study in 68 intensive care units in Europe and the USA. Intensive Care Med [Internet]. 2018 [acesso 12 maio 2018];44:1039-49. DOI: 10.1007/s00134-018-5231-8

5. Bahcecik N, Oztürk H. The hospital ethical climate survey in Turkey. Jonas Healthc Law Ethics Regul [Internet]. 2003 [acesso 15 maio 2018];5(4):94-9. Disponível: https://bit.ly/32QxeZU

6. Pergert P, Bartholdson C, Sandeberg M. The ethical climate in paediatric oncology: a national cross-sectional survey of health-care personnel. Psychooncology [Internet]. 2019 [acesso 10 maio 2019];28(4):735-41. DOI: 10.1002/pon.5009

7. Charalambous A, Cloconi C, Papastavrou E, Theodoula A. Psychometric properties of the Hospital Ethical Climate Survey: a cross-sectional study in Greek and Cypriot cancer care settings. J Nurs Meas [Internet]. 2018 [acesso 20 maio 2018];26(2):237-48. DOI: 10.1891/1061-3749.26.2.237

8. Constantina C, Papastavrou E, Charalambous A. Cancer nurses' perceptions of ethical climate in Greece and Cyprus. Nurs Ethics [Internet]. 2019 [acesso 15 maio 2018];26(6):1805-21. DOI: 10.1177/0969733018769358

9. Özden D, Arslan GG, Ertuğrul B, Karakaya S. The effect of nurses' ethical leadership and ethical climate perceptions on job satisfaction. Nurs Ethics [Internet]. 2019 [acesso 15 maio 2020];26(4):1211-25. DOI: 10.1177/0969733017736924

10. Ulrich C, O'Donnell P, Taylor C, Farrar A, Danis M, Grady C. Ethical climate, ethics stress, and the job satisfaction of nurses and social workers in the United States. Soc Sci Med [Internet]. 2007 [acesso 12 maio 2018];65(8):1708-19. DOI: 10.1016/j.socscimed.2007.05.050

11. Hamric AB, Blackhall LJ. Nurse-physician perspectives on the care of dying patients in intensive care units: collaboration, moral distress, and ethical climate. Crit Care Med [Internet]. 2007 [acesso 12 maio 2018];35(2):422-9. DOI: 10.1097/01.CCM.0000254722.50608.2D

12. Lützén K, Blom T, Ewalds-Kvist B, Winch S. Moral stress, moral climate and moral sensitivity among psychiatric professionals. Nurs Ethics [Internet]. 2010 [acesso 6 maio 2018];17(2):213-24. DOI: 10.1177/0969733009351951

13. Hwang JI, Park HA. Nurses' perception of ethical climate, medical error experience and intent-to-leave. Nurs Ethics [Internet]. 2014 [acesso 6 maio 2018];21(1):28-42. DOI: 10.1177/0969733013486797

14. Paula CC, Padoin SMM, Galvão CM. Revisão integrativa como ferramenta para tomada de decisão na prática em saúde. In: Lacerda MR, Costenaro RGS, organizadores. Metodologias da pesquisa para a enfermagem e saúde: da teoria à prática. Porto Alegre: Moriá; 2016. p. 51-76.

15. Melnyk BM, Fineout-Overholt E. Evidence-based practice in nursing and healthcare: a guide to best practice. 2ª ed. Philadelphia: Wolters Kluwer; 2011.

Research

16. Sauerland J, Marotta K, Peinemann MA, Berndt A, Robichaux C. Assessing and addressing moral distress and ethical climate, part I. Dimens Crit Care Nurs [Internet]. 2014 [acesso 20 abr 2018];33(4):234-45. DOI: 10.1097/DCC.0000000000000050

17. Whitehead PB, Herbertson RK, Hamric AB, Epstein EG, Fisher JM. Moral distress among healthcare professionals: report of an institution-wide survey. J Nurs Scholarsh [Internet]. 2015 [acesso 18 abr 2018];47(2):117-25. DOI: 10.1111/jnu.12115

18. Sauerland J, Marotta K, Peinemann MA, Berndt A, Robichaux C. Assessing and addressing moral distress and ethical climate part II: neonatal and pediatric perspectives. Dimens Crit Care Nurs [Internet]. 2015 [acesso 18 abr 2018];34(1):33-46. DOI: 10.1097/DCC.0000000000000083

19. Lemmenes D, Valentine P, Gwizdalski P, Vincent C, Liao C. Nurses' perception of ethical climate at a large academic medical center. Nurs Ethics [Internet]. 2018 [acesso 9 maio 2018];25(6):724-33. DOI: 10.1177/0969733016664980

20. Altaker KW, Howie-Esquivel J, Cataldo JK. Relationships among palliative care, ethical climate, empowerment, and moral distress in intensive care unit nurses. Am J Crit Care [Internet]. 2018 [acesso 10 maio 2019];27(4):295-302. DOI: 10.4037/ajcc2018252

21. Han SJ. Nurse turnover intention and influencing factors. Int Inf Institute [Internet]. 2014 [acesso 10 maio 2019];17(10A):5037-42. Disponível: https://bit.ly/3nsWEFa

22. Suhonen R, Stolt M, Gustafsson ML, Katajisto J, Charalambous A. The associations among the ethical climate, the professional practice environment and individualized care in care settings for older people. J Adv Nurs [Internet]. 2014 [acesso 14 maio 2018];70(6):1356-68. DOI: 10.1111/jan.12297

23. Khalesi N, Arabloo J, Khosravizadeh O, Taghizadeh S, Heyrani A, Ebrahimian A. Psychometric properties of the Persian version of the Hospital Ethical Climate Survey. J Med Ethics Hist Med [Internet]. 2014 [acesso 20 maio 2018];7:15. Disponível: https://bit.ly/3nyyvwJ

24. Ghorbani AA, Hesamzadeh A, Khademloo M, Khalili S, Hesamzadeh S, Berger V. Public and private hospital nurses' perceptions of the ethical climate in their work settings, Sari City, 2011. Nurs Midwifery Stud [Internet]. 2014 [acesso 20 maio 2018];3(1):e12867. DOI: 10.17795/nmsjournal12867

25. Numminen O, Leino-Kilpi H, Isoaho H, Meretoja R. Ethical climate and nurse competence: newly graduated nurses' perceptions. Nurs Ethics [Internet]. 2015 [acesso 5 maio 2018];22(8):845-59. DOI: 10.1177/0969733014557137

26. Jahantigh M, Arbabisarjou A, Zare S, Shahrakipour M, Ghoreishinia G. Hospital's ethical climate and nurse's desired ethical climate in Ali-ebn-Abitaleb and Khatam-al-Anbia hospital of Zahedan. Pharm Lett [Internet]. 2015 [acesso 20 maio 2018];7(12):427-31. Disponível: https://bit.ly/32VFF6f

27. Suhonen R, Stolt M, Katajisto J, Charalambous A, Olson LL. Validation of the Hospital Ethical Climate Survey for older people care. Nurs Ethics [Internet]. 2015 [acesso 16 maio 2018];22(5):517-32. DOI: 10.1177/0969733014549878

28. Numminen O, Leino-Kilpi H, Isoaho H, Meretoja R. Newly graduated nurses' competence and individual and organizational factors: a multivariate analysis. J Nurs Scholarsh [Internet]. 2015 [acesso 4 maio 2018];47(5):446-57. DOI: 10.1111/jnu.12153

29. Pauly B, Varcoe C, Storch J, Newton L. Registered nurses' perceptions of moral distress and ethical climate. Nurs Ethics [Internet]. 2009 [acesso 19 abr 2018];16(5):561-73. DOI: 10.1177/0969733009106649

30. Bartholdson C, Sandeberg M, Lützén K, Blomgren K, Pergert P. Healthcare professionals' perceptions of the ethical climate in paediatric cancer care. Nurs Ethics [Internet]. 2016 [acesso 20 maio 2018];23(8):877-88. DOI: 10.1177/0969733015587778

31. Jang Y, Oh Y. Impact of ethical factors on job satisfaction among Korean nurses. Nurs Ethics [Internet]. 2019 [acesso 10 maio 2019];26(4):1186-98. DOI: 10.1177/0969733017742959

32. Asgari S, Shafipour V, Taraghi Z, Yazdani-Charati J. Relationship between moral distress and ethical climate with job satisfaction in nurses. Nurs Ethics [Internet]. 2019 [acesso 20 abr 2019];26(2):346-56. DOI: 10.1177/0969733017712083

33. Silén M, Svantesson M, Kjellström S, Sidenvall B, Christensson L. Moral distress and ethical climate in a Swedish nursing context: perceptions and instrument usability. J Clin Nurs [Internet]. 2011 [acesso 20 abr 2018];20(23-24):3483-93. DOI: 10.1111/j.1365-2702.2011.03753.x

34. Joolaee S, Jalili HR, Rafii F, Hajibabaee F, Haghani H. The relationship between ethical climate at work and job satisfaction among nurses in Tehran. Indian J Med Ethics [Internet]. 2013 [acesso 12 maio 2018];10(4):238-42. DOI: 10.20529/IJME.2013.072

35. Claeys M, Faelens A, Sabbe B, Schrijvers D, Casterlé BDD, Luyten P. Psychometric properties of the Hospital Ethical Climate Survey: a cross-sectional study in a large sample of Belgian psychiatric nurses. Eur J Pers Cent Healthc [Internet]. 2013 [acesso 12 maio 2018];1(1):202-8. DOI: 10.5750/ejpch.v1i1.652

36. Jahantigh M, Zare S, Shahrakipour M. The survey of the relationship between ethical climate and ethical behavior in nurses. Pharm Chem [Internet]. 2016 [acesso 20 maio 2018];8(3):189-93. Disponível: https://bit.ly/3lELjB2

37. Boer JC, Rosmalen J, Bakker AB, Dijk M. Appropriateness of care and moral distress among neonatal intensive care unit staff: repeated measurement. Nurs Crit Care [Internet]. 2016 [acesso 13 maio 2018];21(3):e19-27. DOI: 10.1111/nicc.12206

38. Pimentel D. Relações e conflitos éticos na prática de médicos e enfermeiros. Brasília: CFM; 2017.

Research

39. Esmaelzadeh F, Abbaszadeh A, Borhani F, Peyrovi H. Ethical leadership and organizational climate: the experience of Iranian nurses. Iran Red Crescent Med J [Internet]. 2017 [acesso 15 maio 2018];19(4):e43554. DOI: 10.5812/ircmj.43554

Participation of the authors

Taís Carpes Lanes analyzed and interpreted the data and, with Ana Carolina de Souza Magnago, Thais Costa Schutz, Alessandra Suptitz Carneiro and Bruna Xavier Morais, wrote the article. Graziele de Lima Dalmolin provided guidance and revised the manuscript.

Taís Carpes Lanes
0000-0001-9337-7875

Ana Carolina de Souza Magnago
0000-0003-4902-4110

Thais Costa Schutz
0000-0003-4341-0395

Alessandra Suptitz Carneiro
0000-0001-7506-8606

Bruna Xavier Morais
0000-0002-0446-9231

Graziele de Lima Dalmolin
0000-0003-0985-5788

Research