Systematic Review

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Influence of the ethical climate on workers' health among healthcare professionals: a systematic review

Influência do clima ético na saúde do trabalhador entre profissionais de saúde: revisão sistemática

Influencia del clima ético en la salud del trabajador entre los profesionales de la salud: una revisión sistemática

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ABSTRACT

Objective: To evaluate the influence of the ethical climate on workers' health among healthcare professionals.

Method: Systematic review and meta-analysis conducted in MEDLINE/PubMed, EMBASE, SciVerse Scopus (Elsevier), Cumulative Index to Nursing and Allied Health Literature and Web of Science. Trained reviewers performed the selection, data extraction, and assessment of methodological quality. Meta-analysis was applied for data synthesis.

Results: Among the 2644 studies, 20 were included for analysis, in which three (15.0%) articles were classified as high quality (score ≥ 80%), while 17 (85.0%) were classified as regular (score 50-79%). There was a moderate negative correlation between the ethical climate and overall moral distress (r=-0.43; 95%CI -0.50; -0.36) and the frequency of moral distress (r=-0.36; 95%CI -0.45; -0.25), as well as the positive and strong correlation between ethical climate and job satisfaction (r=0.71; 95%CI 0.39-0.88).

Conclusion: The negative and positive perception of the ethical climate among healthcare professionals, respectively, influenced the increase in moral distress and job satisfaction.

Descriptors: Ethics. Health personnel. Occupational health. Nursing. Systematic review.

RESUMO

Objetivo: Avaliar a influência do clima ético na saúde do trabalhador entre os profissionais de saúde.

Método: Revisão sistemática nas bases MEDLINE/PubMed, EMBASE, SciVerse Scopus (Elsevier), Cumulative Index to Nursing and Allied Health Literature e Web of Science. A seleção, a extração dos dados e a avaliação da qualidade metodológica foram realizadas por revisores capacitados. Aplicou-se a meta-análise para a síntese dos dados.

Resultados: Dentre os 2644 estudos, foram incluídos 20 para análise, em que três (15,0%) artigos foram classificados como de alta qualidade (pontuação ≥ 80%), enquanto 17 (85,0%) foram classificados como regulares (pontuação 50-79%). Houve correlação negativa e moderada entre o clima ético e o sofrimento moral geral (r=-0,43; IC95% -0,50; -0,36) e a frequência de sofrimento moral (r=-0,36; IC95% -0,45; -0,25), bem como a correlação positiva e forte entre o clima ético e a satisfação no trabalho (r=0,71; IC95%0,39-0,88).

Conclusão: A percepção negativa e positiva do clima ético entre os profissionais de saúde, respectivamente, influenciou no aumento do sofrimento moral e na satisfação no trabalho.

Descritores: Ética. Pessoal de saúde. Saúde ocupacional. Enfermagem. Revisão sistemática.

RESUMEN

Objetivo: Evaluar la influencia del clima ético en la salud de los trabajadores entre los profesionales de la salud.

Método: Revisión sistemática y metanálisis utilizando MEDLINE/PubMed, EMBASE, SciVerse Scopus (Elsevier), Cumulative Index to Nursing and Allied Health Literature y Web of Science. La selección, la extracción de datos y la evaluación de la calidad metodológica fueron realizadas por revisores capacitados. Se aplicó metanálisis para la síntesis de datos.

Resultados: Entre 2644 estudios, 20 fueron incluidos para el análisis, en el que tres (15,0%) artículos fueron clasificados como de alta calidad (puntuación ≥ 80%), mientras que 17 (85,0%) fueron clasificados como regulares (puntuación 50-79%). Ocurrió correlación negativa y moderada entre el clima ético y el sufrimiento moral general (r=-0,45; IC95% -0,52; -0,38) y la frecuencia del sufrimiento moral (r=- 0,32; IC 95% -0,45; -0,18), así como una correlación positiva y fuerte entre el clima ético y la satisfacción laboral (r=0,71; IC 95%0,39-0, 88).

Conclusión: La percepción negativa y positiva del clima ético entre los profesionales de la salud, respectivamente, influyeron en el aumento del malestar moral y la satisfacción laboral.

Descriptores: Ética. Personal de salud. Salud laboral. Enfermería. Revisión sistemática.

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INTRODUCTION

The ethical climate is defined as the workers' perception of how ethical issues are dealt within their daily work, or if there are organizational conditions that support them in ethical reflections during their practice, contemplating care, management, policies and deliberation of ethical problems in services[1,2]. This perception can be negative or positive, according to the classification of the ethical climate through the Hospital Ethical Climate Survey (HECS)[1].

A positive rating can be associated with sharing decisions, access to information needed for care and a friendly team relationship, with respect for opinions of people involved in patient care. The negative perception occurs when the professional does not have the institution's support or openness to act according to its ethical values and difficulties in accessing information that can support in decision-making[1].

Given this context, a positive ethical climate becomes necessary to provide qualified health care and with a lower risk of illness for the worker[3,4]. Thus, studies have shown that a positive ethical climate in the organizational environment promotes professional satisfaction with their work, making a healthy and safe environment for quality health care[3,5,6].

The negative perception of the ethical climate is a predictor for the risk of harm to workers' health[7]. Among the types of harm, moral distress stands out and its influence on turnover intention[2]. Turnover intention refers to the change of work sector in the institution due to several reasons, such as: inadequate working conditions, interpersonal relationship problems between colleagues in the sector and problems with the unit's management for example[2]. The occurrence of these issues highlights the importance of a positive ethical climate to reduce illness and strengthen the worker through moral issues. The literature presents studies on the association and correlation between the ethical climate and moral distress, the turnover intention and job satisfaction[4–8].

Faced with this issue, in June 2020 a preliminary search was conducted in the International Prospective Register of Systematic Reviews (PROSPERO), Cochrane Database of Systematic Reviews and in the Joanna Briggs Institute (JBI): Database of Systematic Reviews and Implementation Reports in order to investigate the records of reviews on the themes of ethical climate and workers' health. The search found two systematic reviews on ethical interventions[9] and the ethical climate in the work context of frontline professionals in business organizations[10], but none from the perspective of the influence of the ethical climate on workers' health among healthcare professionals. Thus, there is a need for analysis and synthesis of this evidence, including the use of meta-analytical tests, to identify the variables that are essentially influenced by the negative and positive ethical climate in the work of healthcare professionals[11–13].

Based on the results and recognition of the variables involved in workers' health regarding the ethical climate, the aim is in future studies, to direct and prospect interventions to promote the health of professionals and quality of patient care. The application of the results into practice will be in the form of planning and construction of strategies that promote an ethical climate and consequently reduce the risk to the worker's health[5–7].

Thus, the objective was to evaluate the influence of the ethical climate on workers' health among healthcare professionals.

METHOD

It consists of a systematic meta-analytical review reported based on the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) and conducted according to the JBI methodology on etiological and risk evidence[14]. The protocol for this review was registered in PROSPERO under the number: CRD42020199979. No changes were made after the review was finalized, with the same information provided in the protocol. The systematic review was conducted in the city of Santa Maria, RS, Brazil from August 2020 to April 2023.

The research question was developed according to the acronym PEO (P: population – health professionals; E: exposure – ethical climate; O: outcome – worker's health). Thus, the research question was defined: "Does the ethical climate have an influence on workers' health among healthcare professionals?".

Original articles were included, of observational type, cross-sectional or longitudinal, descriptive or analytical, that presented the analysis of the correlation between the ethical climate and the workers' health variables, such as moral distress, job satisfaction, abandonment of the profession, the turnover intention, burnout syndrome and among others. The inclusion of these variables occurred because the literature addresses the association between these variables of workers' health and the ethical climate, showing significant correlations[3,5,6]. Articles written in English, Portuguese or Spanish, composed of a sample or population of healthcare professionals from any area and healthcare service were also included.

In addition, articles that used the HECS instrument to evaluate the ethical climate and validated instruments for measuring workers' health variables were included. The use of the HECS was defined because it is the most used instrument to assess the ethical climate among health professionals

in different health services, when compared to other instruments[4]. Additionally, the systematic review with meta-analysis recommends that the studies have homogeneity between the variables so that the tests can be performed. Among the variables are: instruments, population, research context, sample, statistical tests and analyses, for example[14]. No restriction on the publication year and geographical location was set, as the goal was to access all studies that fit within the scope of the research.

The HECS instrument consists of 26 items divided into five factors: peers, physicians, hospital, management, and patients. The instrument was developed in 1998 by Linda Olson[1] in Chicago, United States and adapted and validated for Brazil in 2022[7]. The instrument analysis occurs through the mean and standard deviation, in which above 3.5 is considered the perception of a positive ethical climate and lower, as a negative ethical climate[1,7].

An initial search in the SciVerse Scopus (Elsevier) and MEDLINE/PubMed (via National Library of Medicine) databases was performed to identify articles on the subject and to assist in the development of search strategies. For this, 10 relevant articles were selected in which the words of the text in the titles, abstracts and descriptors were used to make the search strategies.

Data search sources were MEDLINE/PubMed (via National Library of Medicine), EMBASE (Elsevier), SciVerse Scopus (Elsevier), Cumulative Index to Nursing and Allied Health Literature (CINAHL) with Full Text (EBSCO) and Web of Science – Core Collection (Clarivate Analytics). The search strategies were composed of keywords, MeSH and Entry Terms with the selection of articles until the final date of the review (04/09/2023).

Based on the PEO acronym, the following words were used to compose the strategies: Population: health personnel, nurses, nursing, physicians, physician assistants, physician-nurse relations, nursing supervisory, healthcare professionals, nursing staff, registered nurses, nurse- physician; Exposure of interest: ethics, ethical climate, hospital ethical climate survey, hecs, ethical climate positive, ethical climate negative, ethical climate positively, ethical climate negatively, ethical climate questionnaire; Outcome: workers health, occupational stress, job stress, moral distress, burnout, psychological exhaustion, turnover personnel, turnover intentions, job satisfaction, work satisfaction, moral distress scale-revised, occupational, turnovers, moral residue, personnel turnover. The complete composition of the strategies can be found in the supplementary material.

The selection of articles occurred in a double-independent way by two reviewers (A and B), who assessed the titles and abstracts of the articles for potential eligibility. For the selection, the record and reference managers Rayyan and EndNote were used. After identifying potential studies, the full text was assessed. Reviewers searched for other new studies in the reference list of articles included in the review.

Inconsistencies between reviewers A and B were resolved by consensus after the selection of articles was completed. Both reviewers met in person for discussion and final decision on the inclusion or exclusion of articles that showed discrepancies in their analysis based on the eligibility criteria.

The two reviewers (A and B) extracted the data using a Microsoft Excel spreadsheet prepared for this research. Before starting this stage, the data extraction spreadsheet was tested in five articles and discussed by both reviewers. One reviewer (A) extracted the data properly and the other reviewer (B) verified whether the extracted information was consistent, identifying errors and inconsistencies. The spreadsheet had the following data: General characteristics and methods: authors, study design, scenario and statistical correlation tests between the ethical climate and the workers' health variables. Participants: sample or population, professional category, age or age group and gender. Results: descriptive data and correlation between ethical climate and the variable related to workers' health.

The three reviewers (A, B and C) assessed the methodological quality and risk of bias of the studies in a double-independent manner, using the Joanna Briggs critical appraisal tools (Checklist for Analytical Cross Sectional Studies)[15]. The reviewers were trained by a member of the review team, who applied a pilot test with the first five articles included in this study among the reviewers, to guarantee the quality and accuracy of the evaluation.

The Joanna Briggs critical appraisal tools (Checklist for Analytical Cross Sectional Studies) consists of eight evaluation criteria for analytical cross-sectional studies, classified on a scale of: "yes", "no", "nuclear" or "not applicable". The three reviewers (A, B and C) used this instrument to evaluate the methodological quality of the articles included in the review. The quality of the information was considered excellent through the classification "yes" of all the listed criteria[15].

The score for the answers to each item ranged: 0 for the answer "no"; 1 for the answer "yes"; "unclear" for the answer that was not clear and "not applicable" for the answer that did not apply to the articles[15]. Thus, the maximum score

was eight points and calculated through percentages. The quality of each study was classified as high (80%-100%), regular (50%-79%) or low (<50%)[16]. Differences in the assessment of methodological quality and study bias were resolved by consensus among the three reviewers, through an in-person meeting.

Also, to better evaluate the quality of the studies, the inter-researcher reliability was calculated based on the intra-class correlation coefficient: 0.40 = bad; 0.4 ≤ a <0.75 = satisfactory and ≥0.75 = excellent[17]. This test is aimed to provide clarity and reliability in the evaluations of studies among research reviewers.

For the synthesis of results, meta-analysis was used, which is a technique for combining the results of studies providing another new estimate[18]. The associations between the ethical climate and the worker's health variables were evaluated using Pearson's correlation coefficient (r value). The r values from the different studies were summarized using the "Fisher's z transformation". For this, the correlation coefficients were converted to the z variable, which has a normal distribution, using the following transformation formula: $z = 0,5[\ln(1+r) - \ln(1-r)]$[19]. Additionally, the studies were weighted based on the magnitude of the standard error (SE) of each study, which was calculated according to the following formula: $EP = 1/(\sqrt{N-3})$, where N is the sample size of the corresponding study. For correlation classification, the following parameters were used: 0.1 to 0.29 weak correlation; from 0.3 to 0.49 moderate correlation and above 0.5 is considered a strong correlation[19].

Thus, the meta-analytical approach employed calculated weighted Fisher's z coefficients, which were subsequently transformed back to r values with 95% confidence intervals (95%CI). A random effects model was used separately for the outcome and each variable of interest (Ethical climate and Overall moral distress; Ethical climate and Intensity of moral distress; Ethical climate and Frequency of moral distress; Ethical climate and turnover intention; Ethical climate and job satisfaction).

Heterogeneity between studies was assessed using the chi-square test, adopting a significance level of p<0.10, and by estimating the inconsistency between studies (I^2), with up to 25% being considered as low heterogeneity, close to to 50% of moderate heterogeneity and above 75% of high heterogeneity[20,21].

Statistical analyses were conducted using the Stata 14.2 software, and the meta-analysis results are presented in a forest plot. The results of the studies were summarized in a table, which included the citation, design, sample size, participants, variables associated with the ethical climate and its main results.

RESULTS

Study selection

A total of 2,644 articles were found, of which 355 were duplicated and were included only once, totaling 2289 studies for the analysis, as shown in Figure 1.

The review *corpus* consisted of 20 articles[3,5,6,8,13,22–36]. A search was performed in the references of the included articles, however, no study that responded to the research objective was found.

Characteristics of the studies

Studies with a cross-sectional design prevailed (75%; n=15)[3,5,6,8,22–25,30–36], conducted in the United States (n=5; 33.3%)[1,26–28,31] and in Iran (n=5; 25%)[3,5,8,25,35], published between 2005 and 2023, particularly in 2017 (n=4; 26.7%)[3,5,6,30], with a total of 4896 participants. Most of the participants were female, except for one study that did not present this information in its text, and another that had a male prevalence[32] (90%; n=18)[3,5,6,8,22–31,33–36], aged between 21 and 60 years and working as nurses (90%; n=18)[3,5,6,8,13,22–27,30–36] and physicians (15%; n=3) in the hospital setting (100%, n=100)[3,5–6,8,13,22–36]. In the strategies, the term "healthcare professional" was used to cover all professional categories, however, articles were found mostly with nurses and physicians.

Regarding the individual results for each variable, it was found that the ethical climate was evaluated individually in 17 studies[3,6,8,13,23–31,33–36], in which it was perceived as positive (70.6%; n=12)[3,6,24,26,27,29–31,33–36] by varying its mean from (3.51 ± 0.53)[3] to 3.93 (± 0.58)[36], and the variation of the sum of their means from (94.39 ± 18.3)[26] to (100.60 ± 14.41)[34].

The moral distress variable was evaluated in 11 studies[8,23–24,26–27,29,31–34,36] in general, by intensity and frequency. The intensity and frequency of moral distress ranged from low, being Intensity: (0.11 ± 0.38) to (2.09 ± 1.68) and Frequency: (0.21 ± 0.69) to (1. 45 ± 1.34) the lowest values among the studies[27] to moderate, being Intensity: (3.79 ± 2.21) to (2.14±2.42) and Frequency: (0.23±0. 93) to (2.86±1.88) the highest values among the studies[26].

The overall mean of moral distress ranged from moderate, with (1.94 ± 0.66) being the lowest value among the studies[8] to high, with (96.5 ± 55.8) being the highest value among the studies[31]. In the individual analysis, the ethical climate and moral distress were calculated using the median, interquartile range, mean and/or sum of means.

Turnover was evaluated using the mean of two studies, which was classified as low turnover intention (100%; n=2)

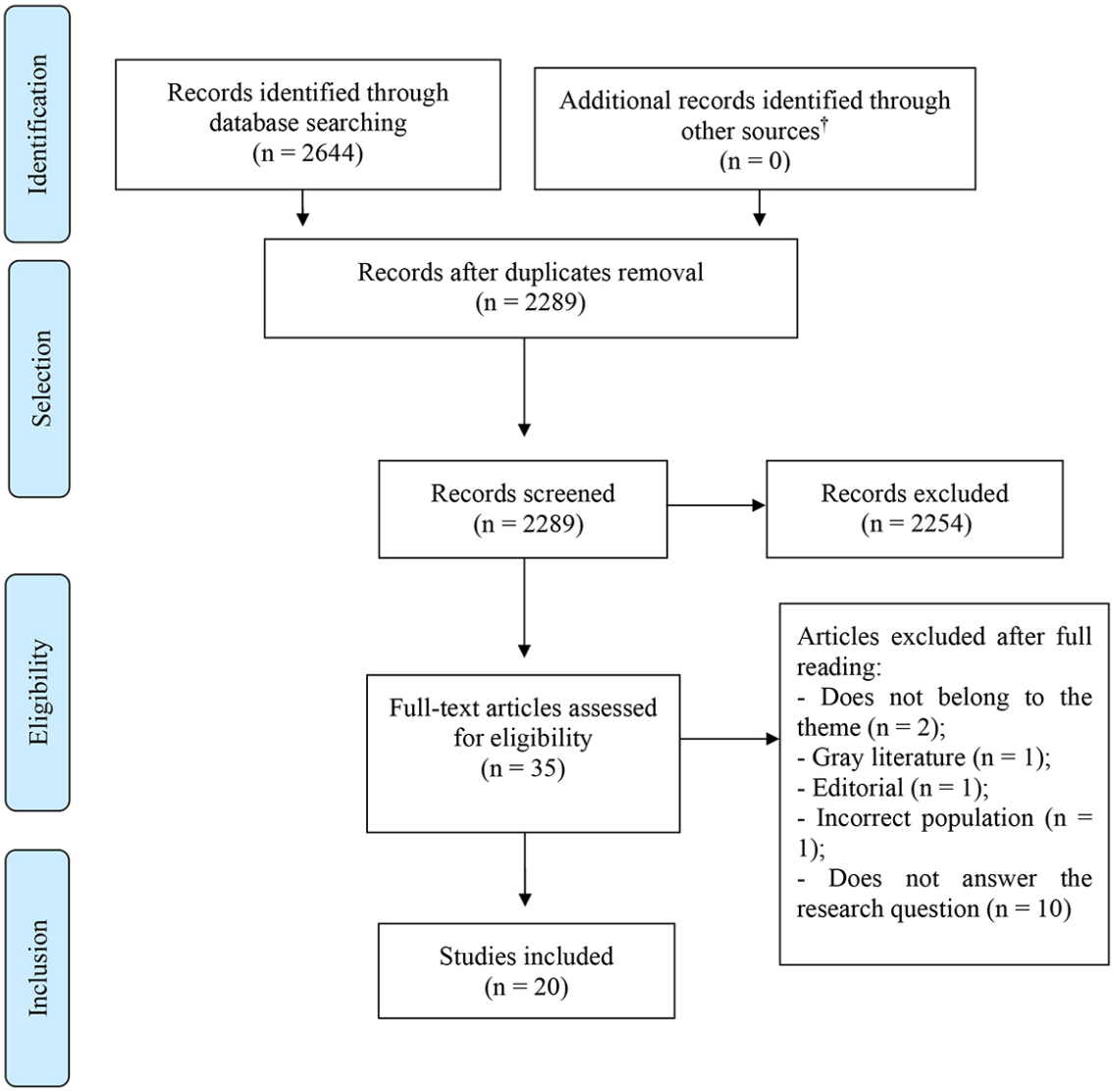

Figure 1 – Flowchart of the double-independent selection process of articles included in the review, according to PRISMA*. Santa Maria, Rio Grande do Sul, Brazil, 2023

Source: Research data, 2023.

*PRISMA = Preferred Reporting Items for Systematic Reviews and Meta-Analyses. †search in the reference list of included articles.

(5.28 ± Does not show the standard deviation)[13] and (3.63 ±1.03)[33]. Job satisfaction was evaluated in five studies, with health professionals satisfied with their work (100%; n=5) [3,5,6,25,30], through means that varied between (3.08 ± 0.45)[30] to (3.17 ± 0.63)[25] and the variation of the sum of the means between (62.15 ± 13.46)[6] to (62.64 ± 9.39)[3]. Only in a single study job satisfaction was evaluated through frequency and percentage (n=138; 74.2%)[5].

Only one study evaluated the intensity of burnout (32.23 ± 12.36) and the frequency of burnout (25.54 ± 12.36), that is, showing high levels for burnout syndrome[35].

Quality assessment

From the 20 included studies, three (15,0%)[3,28,29] were classified as high quality (score ≥ 80%), while 17 (85.0%) were classified as regular (score 50-79%)[5,6,8,13,22–27,30–36]. None of the studies were classified as low quality (score <50%) nor rejected based on quality assessments.

The classification of quality assessment for each study can be seen in Figure 2, with the sign (+) referring to positive responses, the sign (-) to negative responses and n/a referring to not applicable.

	1. Hart., 2005[22]	2. Pauly., et al., 2009[23]	3. Silén., et al., 2011[24]	4. Joolaee., et al., 2013[25]	5. Han., 2014[13]	6. Sauerland I, et al., 2014[26]	7. Sauerland II., et al., 2015[27]	8. Whitehead., et al., 2015[28]	9. Boer., et al., 2015[29]	10. Jang., et al., 2017[30]	11. Ozden., et al., 2017[6]	12. Asgari., et al., 2017[3]	13. Altaker., et al., 2018[31]	14. Asl., et al., 2017[5]	15. Bayat., et al., 2019[8]	16. Hou et al., et al., 2021[32]	17. Kim., et al., 2023[33]	18. Küçükkelepçe, et al., 2022[34]	19. Rivaz, et al., 2020[35]	20. Ventooara et al., 2022[36]
1. Were the criteria for inclusion in the sample clearly defined?	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
2. Were the study subjects and the setting described in detail?	+	-	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+
3. Was the exposure measured in a valid and reliable way?	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4. Were objective, standard criteria used for measurement of the condition?	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
5. Were confounding factors identified?	-	-	-	-	-	+	+	+	+	-	-	+	+	-	-	-	-	-	-	-
6. Were strategies to deal with confounding factors stated?	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
7. Were the outcomes measured in a valid and reliable way?	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+
8. Was appropriate statistical analysis used?	+	+	+	-	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+
Score	4/6	3/6	4/6	3/6	3/6	4/6	4/6	5/6	6/6	4/6	4/6	5/6	4/6	3/6	4/6	4/6	4/6	4/6	4/6	4/6
Total (%)	67	50	67	50	50	67	67	83	100	67	67	83	67	50	67	67	67	67	67	67

Figure 2 – Quality assessment using the Critical Appraisal Checklist for Analytical Cross-Sectional Studies. Santa Maria, Rio Grande do Sul, Brazil, 2023
Source: research data, 2023.

Among the intraclass correlation coefficients, 90% (n=18) [3,5,6,8,13,22–27,30–36] of the studies had excellent to satisfactory agreement in the classification of methodological quality between the three reviewers.

Meta-analysis between ethical climate and workers' health variables

The meta-analysis is presented in a forest plot, according to the subgroups: Ethical climate and Overall moral distress; Ethical climate and Intensity of Moral Distress; Ethical Climate and Frequency of Moral Distress; Ethical climate and turnover intention; Ethical climate and job satisfaction. It was not possible to perform a meta-analysis between the ethical climate and the profession abandonment and the burnout syndrome, as they were analyzed only in a single study[22,35].

The three studies[3,29,32] were excluded from the meta-analysis, as they performed correlation through univariate and multivariate general linear models and Tobit regression, calculating the beta values, in which it was not possible to convert them to the Z-Fischer values.

Ethical climate and Moral distress

Figure 3 shows the forest plot of the subgroup ethical climate and moral distress.

The transformations from Fisher's z coefficients to r values indicated a negative, significant and moderate correlation between ethical climate and overall moral distress: r=-0.43 (95%CI -0.50; -0.36); negative, significant and moderate correlation between the ethical climate and the frequency of moral distress: r=-0.36 (95%CI -0.45; -0.25) and non-significant correlation between the ethical climate and the intensity of moral distress: r=0.00(95%CI -0.31; 0.32).

Heterogeneity was considered moderate for overall moral distress (I^2=63.1%; p=0.019), high for frequency (I^2=78.6%; p=0.001) and intensity (I^2=94.4%; p=0.000) of moral distress.

Ethical climate and Job satisfaction

Figure 4 shows the relationship between ethical climate and job satisfaction.

The transformations from Fisher's z coefficients to r values indicated a positive, significant, and strong correlation between ethical climate and job satisfaction: r=0.71 (95%CI 0.39; 0.88). The heterogeneity between studies was considered high (I^2=98.2%; p<0.001).

Ethical climate and Turnover intention

Figure 5 shows the relationship between ethical climate and turnover intention.

Transformations from Fisher's z coefficients to r values indicated a non-significant correlation between ethical climate and turnover intention: r=-0.22 (95%CI -0.62; 0.28). Heterogeneity between studies was also considered high (I^2=97.9%; p=0.000).

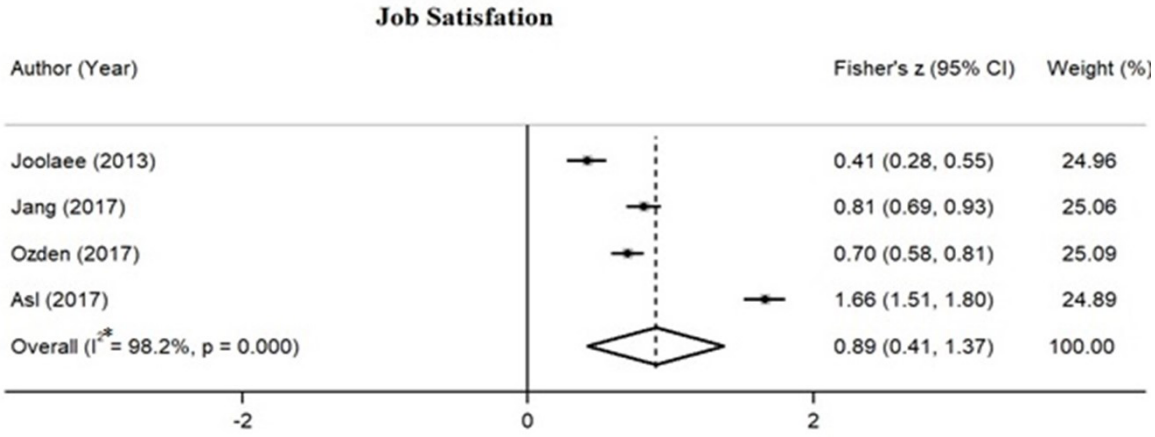

Figure 3 – Forest plot of the relationship between ethical climate and moral distress. Santa Maria, Rio Grande do Sul, Brazil, 2023

Source: Research data, 2023.

*I^2: I-square (heterogeneity bias); significance level of p<0.10. Pearson correlation values (r) of charts: Moral distress – Overall: Pauly (2009)[23] r: –0,420 (p<0.01); Sauerland (2014)[26] r: -0.51 (P <0.001); Sauerland (2015)[27] r:-0.39 (P < 0.005); Whitehead (2015)[28] r: -0.516 (p <0.0001); Altaker (2018)[31] r: -0.354 (p=0.001); Küçükkelepçe (2022)[34] r: -0.336; (p<0.000); Moral distress – Frequency: Pauly (2009)[23] r: –0.419 (p<0.01); Silén (2011)[24] r: -0.328 (p<0.001); Bayat (2019)[8] r: 0.194 (p= 0.001); Küçükkelepçe (2022)[34] r: – 0.322; (p<0.000); Ventooara (2022)[36] r: –0.523 (p < 0.001). Moral distress- Intensity: Pauly (2009)[23] r: –0.160 (p<0.01); Bayat (2019)[8] r: 0.170 (p=0.003).

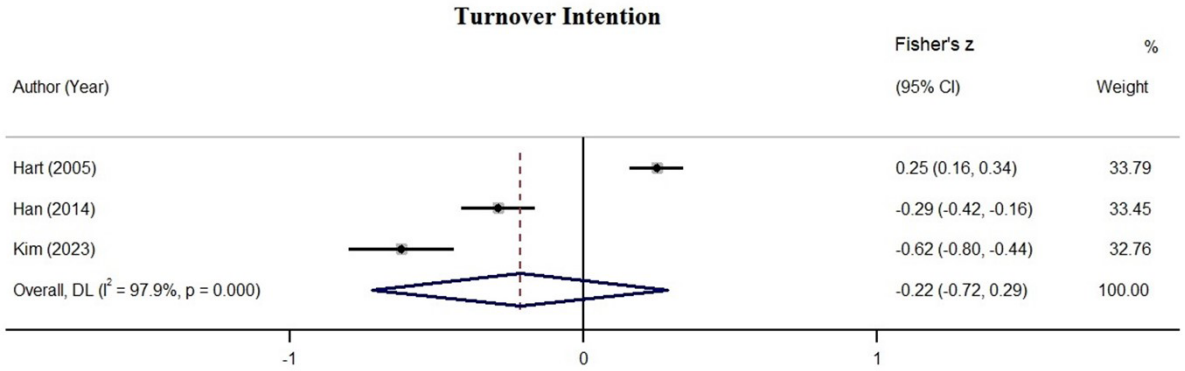

Figure 4 – Forest plot of the relationship between ethical climate and job satisfaction. Santa Maria, Rio Grande do Sul, Brazil, 2023

Source: Research data, 2023.

*I^2: I-square (heterogeneity bias); significance level of p<0.10. Pearson correlation values (r) in: Joolaee (2013)[25] r: 0.39 (p≤0.001); Jang (2017)[30] r: 0.669 (p <0.001); Ozden (2017)[6] r: 0.603 (p <0.001); Asl (2017)[5] r: 0.93 (p <0.001).

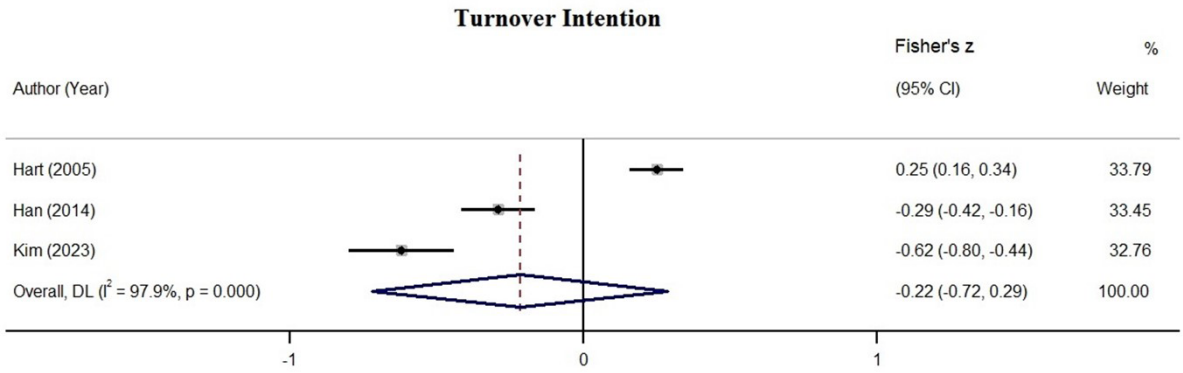

Figure 5 – Forest plot of the relationship between ethical climate and turnover intention. Santa Maria, Rio Grande do Sul, Brazil, 2023

Source: Research data, 2023.

*I^2: I-square (heterogeneity bias); significance level of p<0.10. Pearson correlation values (r) in: Hart (2005)[22] r: 0.384 (p<0.01); Han (2014)[13] r: -0.283 (p<0.001); Kim (2023)[33] r: – 0.549 (p<0.001).

DISCUSSION

The relationship between the ethical climate and the workers' health variables was identified, especially among nurses working in the hospital setting[22–36]. The focus of studies with this population is because the nurses' greater proximity to daily work issues, being one of the mediators in the relationship between patients, the health team and managers[37,38].

Regarding the descriptive results of each variable, that is, ethical climate, moral distress, job satisfaction and turnover intention, it was found that the perception of the ethical climate was evaluated as positive among health professionals, as mentioned in the literature[33–37,39,40]. The evaluation of the positive ethical climate occurs through support for professional practice by managers, being a potential tool to measure collaboration between colleagues and facilitate the resolution of ethical issues[30,40,41].

The result of the moral distress overall scale ranged from moderate to high, being a prominent problem for workers' health. Moreover, professionals showed job satisfaction and low turnover intention. According to previous research, the importance of promoting the growth of workers and their recognition in the workplace is highlighted, with the aim of reducing turnover and promoting job satisfaction[33,42,43].

In the context of the studies analyzed in the present review, all of them presented regular to high methodological quality, with an excellent to satisfactory degree of inter-observer agreement. Additionally, study heterogeneity ranged from moderate to high. It is suggested that in all studies the analyzes were adequate, although they could have been described more clearly in three studies[25–27].

Furthermore, the quality was lower in the identification of confounding factors and strategies to deal with these factors, and some studies were conducted in different settings, populations and countries, resulting in heterogeneity[5,28]. Despite this analysis, the results of the studies were considered reliable and of good quality, corresponding to current clinical practice.

From the meta-analysis, it was found that the ethical climate had a negative and moderate correlation with overall moral distress[23,26–28,31,34] and its frequency[8,23,24,34,36], the more negative the ethical climate is perceived, the greater the moral distress and the frequency of experiencing distressing situations. Likewise, the correlation between the ethical climate and job satisfaction was positive and strong, that is, the more positive the ethical climate is perceived, the more satisfied are the healthcare professionals[6,30].

Moral distress is an emotional imbalance that occurs when healthcare professionals recognize the correct actions to be taken. However, because of barriers from different aspects of the organization, healthcare professionals are unable to define a morally correct action[41]. This reality is in hospital units, as observed in a Finnish study that identified a negative correlation between ethical climate and moral distress ($r = -0.435$, $n = 86$, $p < 0.001$)[11].

The conflicting situations that trigger moral distress are related to the practice of futile and inadequate care. This care is low quality, with cost savings, use of more invasive treatments, as well as less time and number of health professionals working in each shift[3,11].

Upon these challenging ethical issues, healthcare professionals require institutional support to resolve these problems. Based on institutional support, the intention is to maintain

the proper functioning of hospital units and reduce the risk of illness[3].

A study conducted in Turkey with nurses identified that the perception of the ethical climate of critical care nurses explained 12.5% of moral distress, significant for the "physicians" factor of the HECS instrument. The same study pointed out that nurses experience moral distress in situations of work overload due to overcrowding of hospitalized patients and little cooperation between the team and physicians, which is also identified in studies in Sweden[24], Finland[11], Iran[8] and Netherlands[44].

Meanwhile, a Dutch study found no significant association between ethical climate and moral distress in intensive care nurses[44]. The investigation recommends that nurses, because they are working in intensive care units, experience a feeling of solidarity among colleagues, patients and family members[44], understanding that this type of unit is a place of self-reflective and empowering care practice, even if through reports of fatigue[44].

Planning and ethical discussion in care practices create opportunities for sharing information, enhancing the perception of the ethical climate and reducing moral distress, which, in turn, promotes teamwork[45]. The effect of the negative ethical climate on moral distress is perceived in the work environment as lower quality of care, job dissatisfaction and turnover[11,46].

Regarding job satisfaction, it is important to investigate the effect of the ethical climate on it, which is understood as the degree of positive emotion that professionals feel towards their work environment. Additionally, it refers to an individual's state of mind, being a tool for measuring organizational effectiveness[6,42].

Some studies were conducted on the evaluation of the ethical climate and job satisfaction, due to the impact on the clinical care of patients, as well as on workers' health[12,30]. The aspects that lead to a positive correlation between the ethical climate and job satisfaction refer to the relationship between the healthcare team and management, as well as adequate working conditions, professional recognition and good relationships[6]. The understanding and attention of management towards healthcare professionals upon difficult situations influence job satisfaction[30].

Studies point out that job satisfaction is related to the productivity and self-confidence of professionals upon decision-making in conflict situations, such as a care plan for patients in palliative care[30,42]. Productivity and self-confidence come from variables recommended by the ethical climate, among which are management support and partnership during care, offering tools for ethical performance in their work[42].

Comparing the outcomes of this review with the literature, it is understood that job satisfaction indicates the need to provide clear norms and guidelines to employees for the resolution of ethical problems[42]. Researchers explain that the perception of a positive ethical climate motivates healthcare professionals to maintain a fair relationship with their colleagues, promoting a feeling of satisfaction with their work[42].

The primary outcome of this review was the identification of the influence of the ethical climate on the workers' health from the moral distress and job satisfaction variables, according to the meta-analytical analysis. When the ethical climate is perceived positively, on the contrary, it is associated with lower reports of moral distress and higher job satisfaction[25,31].

It is essential that managers of these services understand the importance of a work environment evaluated with a positive ethical climate in the health of their employees, which will result in quality and safe care for patients. Based on these results, researchers and healthcare professionals will be able to visualize the influence of the ethical climate on the workers' health and thus seek strategies to improve the work environment.

All studies showed moderate to high heterogeneity, which is a limitation of the study, as the research was conducted in different countries with various settings, populations, and social contexts. To reduce heterogeneity among the studies, random effects meta-analysis was calculated, and only studies that evaluated the ethical climate using the HECS instrument were included. Furthermore, despite the use of an appropriate search strategy for each database, some studies may have been missed, and others excluded by the decision to limit the review to documents written in English, Portuguese or Spanish.

CONCLUSION

The ethical climate has shown an influence on workers' health, in which the negative and positive perception of healthcare professionals, respectively, influenced the increase in moral distress and job satisfaction. That is, the negative perception of the ethical climate was correlated with moral distress and the frequency of experiencing distressing situations. While the positive perception of the ethical climate was correlated with job satisfaction among healthcare professionals.

Despite different populations such as healthcare professionals, especially nurses working in hospitals in different countries, with prevalence in the United States and Iran, the results of studies on moral distress and job satisfaction when related to the ethical climate are similar. This is justified by the

difficulty of making morally correct decisions and unhealthy relationships between professionals and management. In addition to professional recognition that has an impact on the perception of the ethical climate in organizations across different countries.

It is important to invest in studies that develop strategies to reduce the harm to workers' health, improve job satisfaction and the perception of the ethical climate. Among the strategies, the following stand out: implementation of protocols and ethical guidelines, ethical consultant in each institutional unit, discussion meetings on conflicting cases within the team, making joint deliberation and interactive lectures for ethical education.

Further investigation should consider studies using other instruments for evaluating the ethical climate with worker health variables, however, attention should be given to heterogeneity, reliability, and data generalization.

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