Interventions to promote coping in nursing professionals: Integrative literature review

Intervenções para promoção de coping em profissionais da enfermagem: Revisão integrativa de literatura Intervenciones para promover el coping en profesionales de enfermería: Revisión integrativa de la literatura

RESUMO

Objetivo: identificar e mapear, na literatura científica, intervenções a fim de promover o coping e superar estressores ocupacionais em profissionais da enfermagem. Método: revisão integrativa de literatura, via Portal de Periódicos da CAPES, nas bases de dados Pubmed, CINAHL, Scopus e WoS, em fevereiro de 2021. Incluídos estudos experimentais, publicados entre janeiro de 2011 e janeiro de 2021. Resultados: das 4662 publicações recuperadas, três (03) artigos foram incluídos na revisão. Estes testaram diferentes mecanismos de coping, sendo: auriculoterapia, relaxamento muscular progressivo com musicoterapia e programa de gerenciamento de estresse. Nos três estudos as intervenções foram consideradas estatística e significativamente eficientes para melhoria do coping e como ferramenta para o gerenciamento do estresse ocupacional quando comparadas ao grupo controle. Conclusão: ao instrumentalizar os profissionais de enfermagem quanto a habilidades de coping para resolução de problemas, estes tendem a implementar e aprimorar tais mecanismos em benefício próprio e daqueles ao seu redor.

DESCRITORES: Adaptação psicológica; Ajustamento emocional; Esgotamento profissional; Estresse psicológico; Equipe de enfermagem.

ABSTRACT

Objective: to identify and map, in the scientific literature, interventions to promote coping and overcome occupational stressors in nursing professionals. Method: integrative literature review, via the CAPES Journal Portal, in the Pubmed, CINAHL, Scopus and WoS databases, in February 2021. Experimental studies published between January 2011 and January 2021 were included. Results: of the 4662 publications retrieved, three (03) articles were included in the review. These tested different coping mechanisms, namely: auriculotherapy, progressive muscle relaxation with music therapy and a stress management program. In the three studies, the interventions were considered statistically and significantly efficient to improve coping and as a tool for managing occupational stress when compared to the control group. Conclusion: when training nursing professionals in problem-solving coping skills, they tend to implement and improve such mechanisms for their own benefit and those around them.

DESCRIPTORS: Adaptation psychological; Emotional adjustment; Burnout professional; Stress psychological; Nursing team.

RESUMEN

Objetivo: identificar y mapear, en la literatura científica, intervenciones para promover el coping y la superación de estresores ocupacionales en profesionales de enfermería. Método: revisión integrativa de la literatura, en el Portal de Revistas CAPES, en las bases de datos Pubmed, CINAHL, Scopus y WoS, en febrero de 2021. Se incluyeron estudios experimentales publicados entre enero de 2011 y enero de 2021. Resultados: de las 4662 publicaciones recuperadas, tres (03) artículos fueron incluidos en la revisión. Estos probaron diferentes mecanismos de coping, a saber: auriculoterapia, relajación muscular progresiva con musicoterapia y un programa de manejo del estrés. En los tres estudios, las intervenciones se consideraron estadística y significativamente eficientes para mejorar el coping y como una herramienta para manejar el estrés laboral en comparación con el grupo control. Conclusión: al formar a los profesionales de enfermería con habilidades de coping para la resolución de problemas, tienden a implementar y mejorar tales mecanismos para su propio beneficio y el de su entorno.

DESCRIPTORES: Adaptación psicológica; Ajuste emocional; Agotamiento profesional; Estrés psicológico; Grupo de enfermería.

RECEBIDO EM: 07/02/22 **APROVADO EM:** 17/03/22

Liliana Antoniolli

Nurse, Doctoral Student of the Postgraduate Program in Nursing, Federal University of Rio Grande do Sul - Porto Alegre, RS, Brazil. CAPES/UFRGS scholarship holder.

ORCID: 0000-0003-0806-9910

Edwing Alberto Urrea Vega

Nurse, Doctoral Student of the Postgraduate Program in Nursing, Federal University of Rio Grande do Sul - Porto Alegre, RS, Brazil. Brazil PAEC Scholarship OEA-GCUB/UFRGS.

ORCID: 0000-0002-9578-4252



Pâmela Haack

Nurse, Graduated from the FEEVALE University, RS, Brazil.

ORCID: 0000-0001-9622-2465

Andrey Godoy Duarte

Nursing Graduate, School of Nursing, Federal University of Rio Grande do Sul - Porto Alegre, RS, Brazil. ORCID: 0000-0002-8140-1601

Andréia Barcellos Teixeira Macedo

Nurse, Doctoral Student of the Postgraduate Program in Nursing, Federal University of Rio Grande do Sul - Porto Alegre, RS, Brazil.

ORCID: 0000-0003-4219-4731

Sônia Beatriz Cócaro de Souza

Nurse. PhD in Medical Sciences – Psychiatry, Full Professor at the Department of Medical-Surgical Nursing and Postgraduate Program in Nursing, Federal University of Rio Grande do Sul, Porto Alegre, RS, Brazil. ORCID: 0000-0001-9394-5465

INTRODUCTION

sycho-emotional disorders, among which stress, anxiety and depression stand out, have been identified since 2016 as the second leading cause of illness among nursing professionals. ¹ And, the occurrence of natural or man-made catastrophes and disasters and epidemic and pandemic events highlights the weaknesses in the nursing work context, above all, the need for attention to the psycho-emotional health of these professionals. ²

Recognizing that the work environment can contribute to psycho-emotional illness and that it has a significant impact on the physical and psychological health of workers, it is necessary for them to develop skills and techniques to control emerging and even stressful demands, arising from routine and work environment. ³

Coping is among the strategies that professionals can use to minimize the impact of different stressful events on health. Conceptualized as a set of strategies, or efforts, cognitive and behavioral intentionally used to deal with frustrating and tense situations, seeking adaptation and self-regulation to the various events that generate discomfort or stress. ^{1,4}

The effective use of coping responses has the potential to help professionals to consciously overcome or minimize the negative and conflicting situations experienced at work. Whether they are related to direct patient care, management demands, institutional requirements and interpersonal relationships. Contributing to the maintenance of well-being and minimization of psycho-emotional illness. ³

Specialists in the field of occupational health suggest that there are three levels of interventions to maintain well-being at work: at the primary level, it seeks to eliminate or minimize the stressors of the place or organization of work, at the secondary level, it is oriented to institute interventions that help the individual to deal with the stress generated in their workplace and with the symptoms caused by it, before the disease really sets in and, at a tertiary level, develop worker assistance programs for the treatment of occupational diseases. ⁵

In a systematic review study, the authors showed that 82% of all interventions at the individual level led to a significant reduction in work-related exhaustion variables or positive changes in risk factors for illness. ⁶ Therefore, the relevance of expanding and deepening the study on the subject is justified. For this purpose, the objective was to identify and map, in the scientific literature, interventions to promote coping and overcome occupational stressors in nursing professionals.

METHOD

This is an integrative literature review, structured in six steps: I) definition of the guiding question of the review; II) search and selection of primary studies; III) data extraction from primary studies; IV) critical assessment of primary studies, V) synthesis of review results; VI) presentation of the review.⁷

The research question was organized through the PICO strategy, increasing the probability of finding the best evidence in secondary sources that fulfill the assumptions of Evidence-Based Practice. Thus, the guiding question was elaborated: "Which interventions were tested in nursing professionals in order to promote coping and overcome occupational stressors?".

Following the purpose of the integrative review ⁷, the controlled terms were combined: psychological adaptation, occupational stress, nursing staff and nurse, adapted to the different databases to carry out searches according to language and combination of descriptors and Boolean operators.

The online search was carried out in February 2021, via the Portal of Periodicals of the Coordination for the Improvement of Higher Education Personnel of the Ministry of Education (CAPES/MEC), in the Pubmed, CINAHL, Scopus and WoS databases. Regarding WoS, the Core Collection of Web of Science, Derwent Innovations Index, Korean Journal Database (KCI), Russian Science Citation Index and



SciELO Citation Index were internally re-

Primary articles were included, from experimental studies, published in Portuguese, English and Spanish, available in full online and referring to the proposed theme, published from January 2011 to January 2021. And, excluding publications presented in thesis, dissertation, editorials, review articles, manuals, protocols, book chapters, reflections, opinions and expert comments, as well as duplicate publications in the databases that did not answer the guiding question.

The initial search was performed through the analysis of titles and abstract and debugged duplicate articles. To extract the data from the primary studies, a form was prepared in the Microsoft Excel 2013° program containing the following information: title, authors, department of origin of the first author, journal and year of publication, objective, study design, population/ sample, main results, limitations, and conclusions or final considerations.

The steps of selection, data extraction, and critical evaluation of the primary studies in their entirety were carried out independently by two researchers. Prior to each of the stages, a measurement process was carried out among the researchers, in order to seek consensus on key aspects of the main theme of the study. In the event of disagreement between the researchers, a third evaluator was necessary in order to reach a consensus.

The critical analysis and synthesis of the selected studies was performed in a descriptive way, based on a synoptic table, in order to identify and compare points of agreement and disagreement, among other relevant findings, related to the guiding question.

The authors of the researched sources were respected, according to Law number 9,610, of February 19th, 1998, which consolidates the legislation on copyright in Brazil. 8

RESULTS

4662 publications were identified, sub-

mitted to the selection process, detailed in the selection flowchart (Figure 1), leaving three (03) articles that make up the corpus of the integrative review. These tested different coping strategies in nursing professionals, namely: auriculotherapy, progressive muscle relaxation with music therapy and a stress management program.

Table 1 presents the synthesis of the studies that constituted the final sample of the review, containing authorship, year of publication, research method, applied coping scale, sample, country of research and intervention results.

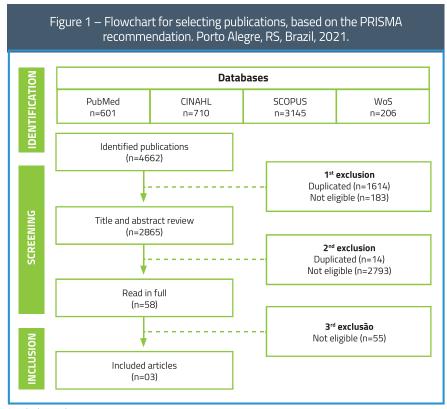
DISCUSSION

The work environment can contribute to psycho-emotional illness, and this has a significant impact on the physical and psychological health of the worker. Interfering with social behaviors and provoking physiological responses that reflect negatively on professional skills, social relationships and the individual's well-being. 9-11

In this sense, it is essential to explore the use of non-drug interventions, such as Integrative and Complementary Practices (ICP), with a view to equipping nursing professionals with coping mechanisms to deal with and overcome situations of exhaustion, conflict and stress arising from the work environment. 9-10

Auriculotherapy, considered a PIC, relies on the principles of traditional Chinese medicine. Its use proposes the restoration of the balance of energetic aspects, from the stimulation of points in the body or in microsystems, such as the ear. It is considered a coping strategy to reduce stress and anxiety.

In an RCT that sought to identify and analyze differences between before and after the treatment of auriculotherapy with needles and seeds, in the domains of coping and for the reduction of stress levels of the collaborators of the nursing team of a teaching hospital in São Paulo - Brazil, the



Source: survey data, Porto Alegre, RS, Brazil, 2021

authors 9 showed that, after applicability of the auriculotherapy technique, disruptive coping responses, that is, that cause a negative general adjustment, in the confrontation and withdrawal domains, were less used in both intervention groups.

Suggesting that auriculotherapy, both with needles and seeds, can have a positive impact to improve the active coping response in the nursing team. Furthermore, they showed that auriculotherapy was positive for reducing stress levels in the nursing team, with better results in the group undergoing intervention with semi-permanent needles than in the seed group. ⁹

In turn, mind-body practices, such as breathing exercises, yoga, meditation, progressive muscle relaxation (PMR) and music therapy, have been used in recent years with ICP to reduce stress and fatigue and improve individual coping styles. PMR involves stretching and relaxing all muscle groups in the body, from head to toe, helping to reduce the effects of chronic stress on the body and helping to draw individuals' attention to their skeletal muscles. Music therapy, on the other hand, uses rhythm, melody, harmony and other elements of music to provide improvements in the neuroendocrine system of individuals, triggering significant changes in the structure of feelings and thoughts. 10

Authors 10 who conducted an intervention study to examine the effects of PMR combined with music on stress, fatigue and coping styles among intensive care unit (ICU) nurses in Turkey, showed that scores for coping styles in the acceptance sub-dimension (emotion-focused coping) were significantly higher in the Intervention Group (IG) compared to the Control Group (CG) at weeks 4, 8, and 12 post-intervention. And that the use of instrumental support (problem-focused coping), venting (ineffective coping), and emotional support (emotion-focused coping) were significantly higher in the IG compared to the CG at week 12. Furthermore, the IG's stress and fatigue scores significantly decreased at week 8 and week 12 compared to the CG. Indicating that PMR combined with music therapy seems to be effective in

Table 1. Characterization of the articles included in the integrative review and description of the main results regarding the intervention. Porto Alegre, RS, Brazil, 2021.

Authors	Method / Coping scale	Sample / country of research	Intervention Results
Kurebayashi et al. (2012) ⁹	Quantitative - RCT. Lazarus and Folkman Coping Strategies Inven- tory (IEC)	75 nursing pro- fessionals from a teaching hospital: 27 IG* needle, 26 IG* seeds, 22 CG** Brazil	Auriculotherapy with both needles and seeds had a positive impact to improve coping in the nursing team when compared to the control group.
Ozgundon- du; Metin (2019) ¹⁰	Quantitative – RCT. Progressive muscle relaxation sessions combi- ned with music. COPE Brief.	56 nurses from Intensive Care Units (ICU): 28 in the IG* and 28 in the CG**. Turkey	Progressive muscle relaxation combined with music had positive and statistically significant effects in improving coping styles among nurses in the IG* when compared to the CG**.
Alkhawaldeh et al (2020) ¹¹	Quantitative - RCT. Implementa- tion of the stress management pro- gram. Brief COPE (BCOPE)	170 public health nurses (PHNs): 83 in the IG* and 87 in the CG**. Jordan	A stress management program was found to be significantly effective in improving the coping strategies of nurses in the IG* when compared to the CG**. Being significantly different in the three data collection periods (p <0.05).
*IG= Intervention Group; **CG= Control Group; Source: survey data, Porto Alegre, RS, Brazil, 2021.			

improving the coping styles of participating nurses.

Beyond the individual level, stress management refers to the act of developing and implementing strategies or interventions to collectively reduce or control occupational stress. Coping strategies have been considered effective and highly targeted interventions to help nurses improve their adaptation to work-related stressors. ¹¹

The Intervention Program for Stress Management in Nurses (PIGEE - Programa de Intervenção para Gestão do Estresse em Enfermeiros) is a person-centered intervention designed to reduce occupational stress and improve nurses' coping responses. PIGEE was proposed to provide and teach sufficient knowledge and skills in different stress management techniques with a view to increasing awareness and perception, improving behavior to deal with stressors properly, avoiding negative consequences of occupational stress on the worker's psy-

chophysiological health. Since all the topics included in the mentioned program were selected according to the seven subscales of the nursing stress scale. ¹¹

In evaluating the effect of PIGEE on reducing occupational stress and improving coping responses among public health nurses in Jordan, the authors 11 showed that in the measurements 'immediately after' and '2 months after' the intervention, the results showed that the IG had significantly higher levels of coping responses than the CG in all coping subscales. There was a statistically significant difference within the IG in the levels of coping between the following data collection times: before the intervention and immediately after the intervention (M=51.02, SD 4.01; M=76.69, SD 4.16; p=0.001) and before the intervention and 2 months later (M=51.02, SD 4.01; M=75.71, SD 4.06; p=0.001). Both coping levels and occupational stress levels were significantly different between the



two study groups in the three data collection periods. Therefore, the program was considered effective to improve the coping responses of IG nurses when compared to the CG, as well as efficient for managing occupational stress in practice.

By educating nursing professionals on the impacts and symptoms of stress, ways to develop effective coping mechanisms and problem-solving skills, professionals tend to implement and improve such mechanisms for their own benefit and those around them. However, it is noteworthy that coping responses can present different results depending on the situations and people involved, thus, regarding the limitations of this review, it is observed that the studies were conducted with nursing professionals inserted in peculiar work spaces, as well as in different time periods.

CONCLUSION

The implementation of effective mechanisms of coping and attention to occupational health are fundamental for the prevention and minimization of physical and emotional illness of nursing professionals. Especially when considering the continuous exposure of these professionals to stressful events and the negative impact on physical and psychological well-being and work performance.

It is expected that the summarized information will encourage nursing teams, employing institutions and regulatory bodies to pay attention to the need to promote and encourage coping skills in professional

practice. And, that nursing professionals are seen and valued beyond technical skills and knowledge, having access to tools and moments so that they can be instrumentalized in terms of coping mechanisms and relevance of their use in professional daily life, which will be beneficial for everyone involved in health care.

It is evident that there are few studies that address interventions, especially integrative and complementary practices, to promote psycho-emotional health among nursing professionals. It is opportune to highlight the relevance and need for investigations that test the effects of innovative and non-pharmacological strategies to promote coping skills in nursing workers.

REFERENCES

- 1. Fernandes MA, Sousa DC, Lima TR, De Olveira ALCB, Ribeiro HKP. Nursing professionals' perception of psychosocial factors and work with substance-dependent patients. Rev Bras Med do Trab. 2018;16(3):297–304.
- 2.Campos Oliveira J, Pedreira Rodrigues J, Nunes Goncalves Fonseca K, Oliveira da Silva Lima R, Carvalho Souza T, Cabral de Carvalho R. Adoecimento e saúde mental diante do cenário de pandemia covid-19, vivenciando pelos profissionais de enfermagem. Saúde Coletiva (Barueri). 2022;12(2), 9571–9584. Available from: https://doi.org/10.36489/saudecoletiva.2022v12i2p9571-9584
- 3. Hasan AA, Tumah H. The correlation between occupational stress, coping strategies, and the levels of psychological distress among nurses working in mental health hospital in Jordan. Perspect Psychiatr Care. 2019;55(2):153–60.
- 4. Antoniazzi AS, Dell'Aglio DD, Bandeira DR. O conceito de coping: uma revisão teórica. Estud Psicol [Internet]. 1998 [cited 2020 Aug 20];3(2):273–94. Available from: http://www.scielo.br/pdf/epsic/v3n2/a06v03n2
- 5. Ravalier JM, Wegrzynek P, Lawton S. Systematic review: Complementary therapies and employee well-being. Occup Med (Chic III). 2016;66(6):428–36.
- 6. Awa WL, Plaumann M, Walter U. Burnout prevention: A review of intervention programs. Patient Educ Couns. 2010;78(2):184–90.

- 7. Mendes KDS, Silveira RC de CP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. Texto Context Enferm. 2008;17(4):758–64.
- 8. Brasil. Lei número 9.610, de 19 de fevereiro de 1998. Altera, atualiza e consolida a legislação sobre direitos autorais e dá outras providências. Diário Of da União [Internet]. 1998;1–21. Available from: https://www.planalto.gov.br/ccivil_03/leis/l9610.htm
- 9. Kurebayashi LFS, Gnatta JR, Borges TP, Silva MJP da. Applicability of auriculotherapy in reducing stress and as a coping strategy in nursing professionals. Rev Lat Am Enfermagem [Internet]. 2012 Oct;20(5):980–7. Available from: https://www.scielo.br/pdf/rlae/v20n5/pt_21.pdf
- 10. Ozgundondu B, Gok Metin Z. Effects of progressive muscle relaxation combined with music on stress, fatigue, and coping styles among intensive care nurses. Intensive Crit Care Nurs [Internet]. 2019 Oct;54:54–63. Available from: https://doi.org/10.1016/j.iccn.2019.07.007
- 11. Alkhawaldeh JM, Soh KL, Mukhtar F, Peng OC, Alkhawaldeh HM, Al Amer R, et al. Stress management training program for stress reduction and coping improvement in public health nurses: A randomized controlled trial. J Adv Nurs [Internet]. 2020 Nov 28;76(11):3123–35. Available from: https://onlinelibrary.wiley.com/doi/10.1111/jan.14506