

ANALYSIS OF THE EFFECTS OF INTEGRATIVE COMMUNITY THERAPY AND AURICULOTHERAPY ON THE HEALTH OF PROFESSIONALS AT A PUBLIC UNIVERSITY HOSPITAL DURING THE COVID-19 PANDEMIC

ANÁLISE DOS EFEITOS DA TERAPIA COMUNITÁRIA INTEGRATIVA E AURICULOTERAPIA NA SAÚDE DE PROFISSIONAIS DE UM HOSPITAL PÚBLICO UNIVERSITÁRIO DURANTE A PANDEMIA POR COVID-19

ANÁLISIS DE LOS EFECTOS DE LA TERAPIA COMUNITARIA INTEGRATIVA Y LA AURICULOTERAPIA EN LA SALUD DE LOS PROFESIONALES DE UN HOSPITAL UNIVERSITARIO PÚBLICO DURANTE LA PANDEMIA DE COVID-19



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How to reference this paper:

BORGES, M. E. G.; FLORES, L.; TRACZ, R.; MULLER, E. V.; YOUNG BLOOD, M. R.; CANTUÁRIA, T. S.; MIRANDA, T. L.; REBONATO, T. A.; GIOLO, S.; SILVA, M. Z. da. Analysis of the effects of integrative community therapy and auriculotherapy on the health of professionals at a public university hospital during the COVID-19 pandemic. **Temas em Educ. e Saúde**, Araraquara, v. 20, n. 00, e024003, 2024. e-ISSN: 2526-3471. DOI: <https://doi.org/10.26673/tes.v20i00.18717>



| Submitted: 28/11/2023
| Revisions required: 05/06/2024
| Approved: 20/06/2024
| Published: 12/08/2024

ABSTRACT: This study aimed to analyze the effects of Integrative Community Therapy (ICT) and Auriculotherapy on the health of professionals at a University Hospital during the COVID-19 pandemic. This is a retrospective study with a quantitative design. Data were tabulated in Microsoft Excel® 2010, and descriptive analysis was performed using absolute (n) and relative (%) frequencies, while analytical analysis was conducted using the paired t-test. A total of 213 professionals participated in the interventions. Before the interventions, the professionals had mean scores of stress (8.2), anxiety (7.8), happiness (7.5), pain (6.0), sleep quality (5.8), and emotional well-being (3). After the interventions, the mean scores were: stress (5.1), anxiety (5), pain (2.4), happiness (8.9), sleep quality (8.2), and emotional well-being (5). Auriculotherapy contributed to reducing scores of anxiety, stress, and pain, as well as promoting increased scores of happiness and sleep quality. ICT, in turn, increased the score of emotional well-being.

KEYWORDS: Auriculotherapy. Occupational health. Complementary therapies. Integrative community therapy. Unified Health System.

RESUMO: O objetivo deste estudo foi analisar os efeitos da Terapia Comunitária Integrativa (TCI) e da Auriculoterapia na saúde de profissionais de um Hospital Universitário durante a pandemia da COVID-19. Trata-se de um estudo retrospectivo com delineamento quantitativo. Os dados foram tabulados no Microsoft Excel® 2010 e a análise descritiva foi realizada por frequências absolutas (n) e relativas (%), enquanto a análise analítica foi conduzida por meio do teste t pareado. Um total de 213 profissionais participaram das intervenções. Antes das intervenções, os profissionais apresentavam escores médios de estresse (8,2), ansiedade (7,8), felicidade (7,5), dor (6,0), qualidade do sono (5,8) e bem-estar emocional (3). Após as intervenções, os escores médios foram: estresse (5,1), ansiedade (5), dor (2,4), felicidade (8,9), qualidade do sono (8,2) e bem-estar emocional (5). A Auriculoterapia contribuiu para a redução dos escores de ansiedade, estresse e dor, além de promover o aumento dos escores de felicidade e qualidade do sono. A TCI, por sua vez, aumentou o escore de bem-estar emocional.

PALAVRAS-CHAVE: Auriculoterapia. Saúde ocupacional. Terapias complementares. Terapia comunitária integrativa. Sistema Único de Saúde.

RESUMEN: El objetivo de este estudio fue analizar los efectos de la Terapia Comunitaria Integrativa (TCI) y la Auriculoterapia en la salud de los profesionales de un Hospital Universitario durante la pandemia de COVID-19. Se trata de un estudio retrospectivo con un diseño cuantitativo. Los datos fueron tabulados en Microsoft Excel® 2010 y el análisis descriptivo se realizó mediante frecuencias absolutas (n) y relativas (%), mientras que el análisis analítico se llevó a cabo mediante la prueba t pareada. Un total de 213 profesionales participó en las intervenciones. Antes de las intervenciones, los profesionales presentaban puntuaciones medias de estrés (8,2), ansiedad (7,8), felicidad (7,5), dolor (6,0), calidad del sueño (5,8) y bienestar emocional (3). Después de las intervenciones, las puntuaciones medias fueron: estrés (5,1), ansiedad (5), dolor (2,4), felicidad (8,9), calidad del sueño (8,2) y bienestar emocional (5). La Auriculoterapia contribuyó a la reducción de las puntuaciones de ansiedad, estrés y dolor, además de promover el aumento de las puntuaciones de felicidad y calidad del sueño. La TCI, por su parte, aumentó la puntuación de bienestar emocional.

PALABRAS CLAVE: Auriculoterapia. Salud ocupacional. Terapias complementarias. Terapia comunitaria integrativa. Sistema Único de Salud.

Introduction

Worker Health encompasses a set of actions aimed at promoting health, preventing morbidity and mortality, and reducing risks and vulnerabilities among the working population through the integration of actions that address diseases, injuries, and their determinants arising from development models, productive processes, and work (Brasil, 2018). Therefore, the quality of life of the worker is directly related to the conditions to which they are exposed (Alves; Correia; Silva, 2019; Brasil, 2018). In this context of promoting worker health and quality of life, Integrative and Complementary Health Practices (PICS) have gained strength and visibility in the Brazilian scenario, especially in recent years due to the COVID-19 pandemic. This is mainly because they are cost-effective practices and contribute to the strengthening of public health policies (Matos *et al.*, 2023; Temitski, 2023).

Auriculotherapy is a Chinese practice with an individual approach, defined by the principles of oriental medicine. Its scientific basis lies in the knowledge of neurology and embryology, determining the auricular microsystem as a form of reflexology mediated by the parasympathetic system, that is, a neurological response (Silva *et al.*, 2021).

Integrative Community Therapy (TCI) is a Brazilian collective care practice that emerged as a strategy for social inclusion and mental health support. It is defined as a space for welcoming, listening, exchanging knowledge, and sharing emotions, conducted in a circular and horizontal manner (Lemes *et al.*, 2020). It is a tool used to cope with daily suffering, resulting in significant mental health outcomes with low execution costs (Lemes *et al.*, 2020).

Numerous studies consistently highlight the efficacy of both auriculotherapy and TCI in improving a variety of psycho-emotional conditions (Kurebayashi *et al.*, 2017; Igeski *et al.*, 2020; Alves *et al.*, 2021). These practices emerge as powerful tools not only for mitigating emotional disturbances but also for promoting overall well-being, especially in challenging contexts such as those faced by healthcare professionals during the COVID-19 pandemic. Among these professionals, who dealt with the stress and extreme demands of hospitals, auriculotherapy and TCI demonstrated promising results, providing significant relief for symptoms like anxiety, stress, and depression. These approaches not only address symptoms but also strengthen emotional resilience and mental balance, offering essential support to those facing exceptional challenges on the healthcare frontlines (Araújo *et al.*, 2023; Ibanhez; Nascimento, 2023; Temitski, 2023).

Thus, the present study aims to analyze the effects of integrative community therapy and auriculotherapy on the health of professionals in a Public University Hospital during COVID-19.

Methodology

This study consists of a retrospective, quantitative design conducted at the University Hospital, located in the municipality of Ponta Grossa-PR. Data collection was performed using records from auriculotherapy sessions and questionnaires distributed to participants of the Integrative Community Therapy (TCI) sessions, using non-validated instruments. All professionals at the University Hospital (HU) were attended to from August 2022 to March 2023, with sessions conducted and recorded by the multidisciplinary team of the Integrative Health Outpatient Clinic at the State University of Ponta Grossa.

Inclusion criteria for the study were: being a professional at the HU, regardless of employment type, including residents; not being on work leave; attending at least four auriculotherapy sessions and/or participating in at least one complete TCI session. Exclusion criteria were: professionals who did not complete four auriculotherapy sessions or did not fully participate in TCI sessions. The study was previously approved by the Research Ethics Committee of the State University of Ponta Grossa (70180023.4.0000.0105).

In 2022, the Integrative Health Outpatient Clinic was established at the University to address the challenges posed by the pandemic and post-pandemic processes, as the overall health of the staff and community was significantly affected. Thus, the PICS Clinic was implemented at the University Hospital for professionals working at secondary and tertiary levels, starting with a collective approach (Integrative Community Therapy - TCI) and a clinical approach (auriculotherapy). These therapies were selected based on their efficacy, safety, and cost-effectiveness for implementation.

Regarding auriculotherapy, prior scheduling and anamnesis were necessary for evaluation and protocol development, tailored to each individual. Sessions began in August of the same year, with four consecutive weekly sessions per patient, conducted during work hours, each lasting approximately 30 minutes.

During the first session, in addition to the assessment form containing demographic questions, lifestyle habits, and complaints, a questionnaire with five objective questions was administered. These questions were developed based on five indicators (anxiety, stress, pain,

sleep quality, and happiness) and were evaluated using scores (0 to 10) to obtain information regarding anxiety, stress, sleep quality, happiness, and pain. The questionnaire was re-administered during the final session to assess the effects of auriculotherapy on the professionals.

The evaluation form was developed to examine both the mental and physical health status of these professionals. The alarming increase in psychiatric symptoms among these professionals, already a prior concern, was exacerbated by various factors, including inadequate infrastructure, strenuous work hours, and a lack of adequate health support amid the pandemic.

Initially, seven pre-established points were used: Shenmen, Kidney, Autonomic Nervous System, Anxiety, Heart, Muscle Relaxation, and Subcortex, along with individualized points according to each patient's complaint. For the procedure, the skin was prepared using antiseptics with 70% alcohol and cotton, followed by the application of mustard seeds on the auricular pavilion. The seeds were fixed with micropore tape, and participants were asked to maintain them for six days, massaging the points whenever possible throughout the day. On the sixth day, participants were instructed to remove the seeds and take a one-day break to allow the skin to rest, with point replacement occurring on the seventh day. For point replacement, there was an alternation between the auricular pavilions to prevent injuries or adaptation to the stimuli.

Regarding Integrative Community Therapy (TCI), 14 TCI sessions were held, occurring once a week and conducted by two community therapists. The methodology of these sessions followed the stages proposed by Barreto (2010): welcoming, topic selection, contextualization, problematization, reflective questioning, and closure. Before each session, an attendance list was distributed, and emotional well-being was assessed using the Likert scale of faces, with scores ranging from 1 to 5 (1 being the worst emotional state and 5 the best). The same procedure was repeated at the end of the TCI sessions.

Demographic data and indicators were collected through active search in the evaluation forms and physical questionnaires and subsequently entered into a spreadsheet. Quantitative data were tabulated in Microsoft Excel® 2010, and descriptive analysis was performed using absolute (n) and relative (%) frequencies. The paired t-test was used to compare scores recorded within the same group of individuals at two different points in time: before and after the intervention (auriculotherapy sessions and TCI sessions). For this, the difference between the scores recorded at the two different points in time was calculated for each individual (i.e., $D =$

score after - score before), and the null hypothesis that the mean of the differences does not differ from zero was tested ($H_0: \mu D = 0$).

The significance level adopted was 0.05 (5%). The non-rejection of the null hypothesis indicates that the intervention did not produce a statistically significant effect. Conversely, rejection of the null hypothesis indicates that the intervention had some effect. In this case, a sample mean of the differences greater than zero implies that the intervention increased the evaluated score; otherwise, it decreased the score. The results were presented in tables.

Results

A total of 176 professionals underwent auriculotherapy and 128 participated in the TCI sessions. Of those who received auriculotherapy, 91 were excluded for not meeting the inclusion criteria. Thus, the participants of this study totaled 213 individuals, with ages ranging from 21 to 65 years (Table 1).

Regarding the demographic profile of auriculotherapy participants, most were between 30 and 49 years old (48.2%, $n = 41$), and 90.6% ($n = 77$) were women, primarily working as General Service Assistants (31.8%, $n = 27$). For the TCI demographic profile, most participants were also between 30 and 49 years old (56.3%, $n = 72$), 96.9% ($n = 124$) were women, and 45.3% ($n = 58$) worked in the nursing field.

Table 1 – Demographic Profile of Healthcare Professionals and Staff of the University Hospital

		Auriculotherapy		TCI	
		N	%	n	%
Gender	Female	77	90,6	124	96,9
	Male	8	9,4	4	3,1
Age	18 – 29	32	37,6	31	24,2
	30 – 49	41	48,2	72	56,3
	50 – 59	10	11,8	24	18,8
	60 or older	2	2,4	1	0,8
Performance	General Services Assistant	27	31,8	-	-
	Nursing	25	29,4	58	45,3
	Pharmacy	8	9,4	14	10,9
	Administration	6	7,1	8	6,3
	Healthcare Resident	11	6,2	35	27,3
	Social Service	4	4,7	31	24,2
	Other	15	17,6	17	13,3
Total		85		128	

Source: Prepared by the authors (2023).

During the auriculotherapy sessions, the primary complaints reported by the participants were psycho-emotional, such as pain, sleep disorders, and gastrointestinal system disorders. On average, patients reported having more than two of these complaints. Of the total complaints mentioned by the participants, 98.8% (n = 84) referred to anxiety and stress, 76.5% (n = 65) to pain, 41.2% (n = 35) to sleep disorders, 11.8% (n = 10) to sadness, 10.6% (n = 9) to gastrointestinal disorders, and 17.6% (n = 15) referred to other types of complaints (Table 2).

Table 2 presents the analyzed variables and the results of the comparison of scores before and after the intervention with auriculotherapy. The sample mean of the score differences shows negative values for anxiety, stress, and pain, and positive values for sleep and happiness. Given that the null hypothesis rejection was confirmed by the paired t-test (p-values < 0.001), it can be concluded that the intervention had a significant effect, contributing to the improvement of these conditions. Therefore, for the individuals who participated in the present study, the intervention reduced anxiety, stress, and pain, as well as improved sleep quality and happiness.

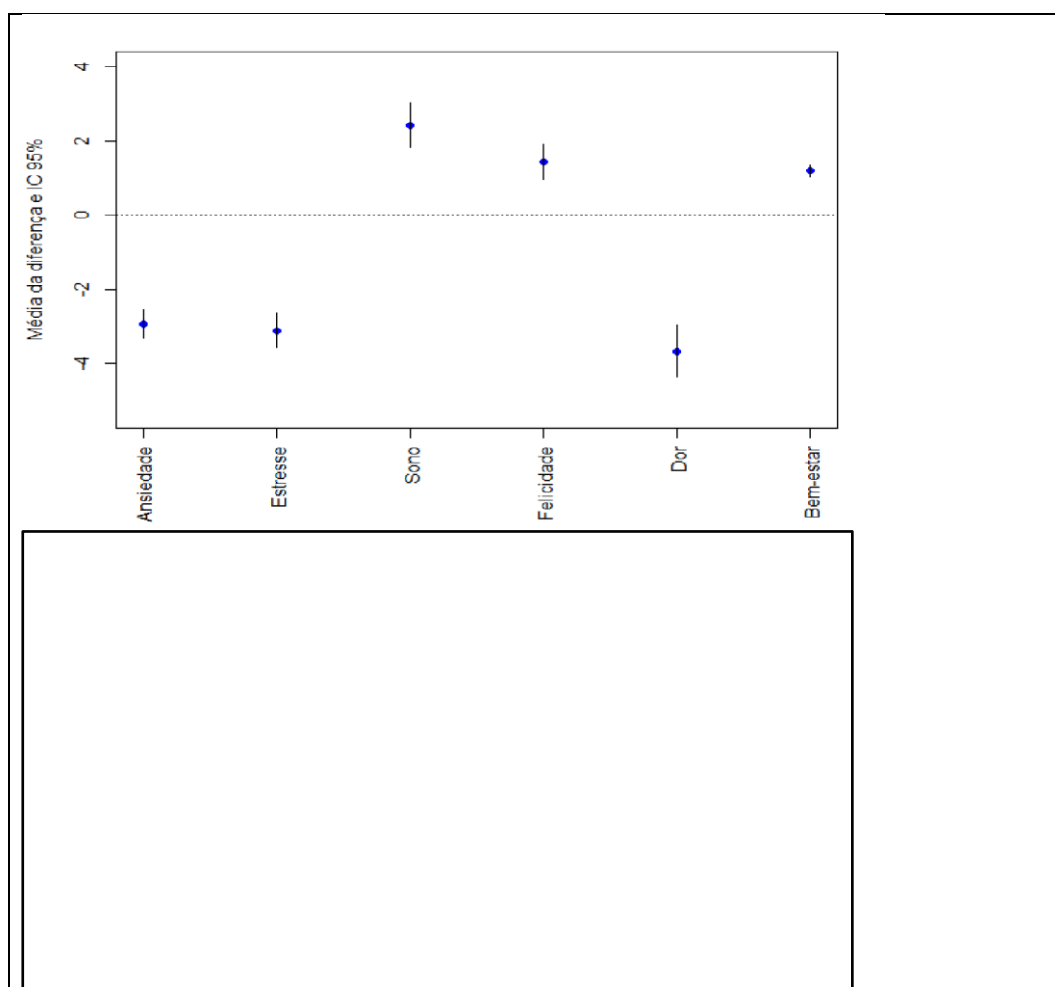
Table 2 – Sample Mean of the Difference in Scores Recorded After and Before the Intervention (Auriculotherapy), Confidence Intervals, and Results of the Paired t-Test

Scale	n	(SD)	IC 95%	Teste t	p-Value
Anxiety	85	-2,92 (1,75)	(-3,29; -2,54)	-15,4	<0,001
Stress	85	-3,12 (2,14)	(-3,58; -2,65)	-13,4	<0,001
Sleep	85	2,43 (2,77)	(1,84; 3,03)	8,09	<0,001
Happiness	85	1,45 (2,20)	(0,97; 1,92)	6,06	<0,001
Pain	85	-3,66 (3,26)	(-4,36; -2,95)	-10,3	<0,001

Note: = sample mean of the difference in scores, SD: standard deviation of the difference in scores, CI: confidence interval obtained by \bar{D} , obtained by $\bar{D} \pm 1.96(SD/\sqrt{N})$. Source: Prepared by the authors (2023).

The 95% confidence intervals presented in Figure 1 corroborate the significant effect of the auriculotherapy intervention, as they do not contain the value zero and show values below zero for anxiety, stress, and pain, indicating a reduction in these conditions after the intervention. Similarly, they show values above zero for sleep and happiness, indicating an improvement in these conditions after the intervention.

Figure 1 – Confidence intervals for the mean difference in scores recorded after and before the auriculotherapy interventions and Integrative Community Therapy. Brazil, 2023.



Source: Prepared by the authors (2023).

Regarding emotional well-being, the results presented in Table 3 and Figure 1 also showed a significant effect of the intervention (TCI sessions). The sample mean of the difference in scores presented a positive value, with zero not belonging to the 95% confidence interval, corroborating the rejection of the null hypothesis by the paired t-test (p -value < 0.001). Thus, for the individuals analyzed in this study, the emotional well-being score increased after the intervention (TCI sessions).

Table 3 – Sample mean of the difference in scores recorded after and before the TCI sessions, confidence intervals, and paired t-test results. Brazil, 2023.

Scale	n	(SD)	IC 95%	t-Test	p-Value
Emotional well-being	128	1,19 (0,87)	(1,04; 1,35)	T = 15,5	<0,001

Note: = sample mean of the score difference, SD: standard deviation of the score difference, CI: confidence interval obtained by.

Source: Authors (2023).

Discussion

In total, 213 professionals were considered eligible to participate in the present study, with 85 participants in the auriculotherapy intervention and 128 in the TCI session intervention. The findings of this study reveal alarming results regarding the health-disease binomial among workers at a hospital that is a regional reference for COVID-19 care in the state of Paraná. Nearly all the workers (90.6% female) reported experiencing some level of anxiety and stress (98.8%). The prevalence of chronic pain was also high (76.5%). According to the World Health Organization (WHO), the COVID-19 pandemic triggered a 25% increase in the prevalence of anxiety and depression worldwide (Padre *et al.*, 2022).

Furthermore, studies conducted during the pandemic period indicate an association between chronic pain, anxiety, and depressive symptoms, suggesting that those with some form of chronic pain are more susceptible to higher levels of anxiety and depressive symptoms than those without chronic pain (Miotto *et al.*, 2022).

Regarding the demographic profile, there was a similarity in both interventions, with participants predominantly female (94.4%), aged between 30 and 49 years (53%), and from the nursing field (39%). This research shows that females were the most participative, possibly because women more frequently seek mental health support, while among men there is still some prejudice and even denial (Vasconcelos, 2016). Additionally, it is important to highlight

that the predominance of women in the health field, especially in nursing, is a well-documented phenomenon (Viana; Ribeiro, 2023).

The main complaints identified during the auriculotherapy sessions were anxiety (98.8%), stress (98.8%), pain (76.5%), poor sleep quality (41.2%), and low happiness (11.8%). Despite using non-validated instruments, the prevalence of these symptoms among professionals is exorbitant. These data are similar to those from studies conducted with 1,257 health professionals in 34 hospitals in Wuhan, where 71% reported distress, 50.4% depressive symptoms, 44.6% anxiety, and 34% insomnia (Lai *et al.*, 2020).

Another important factor to consider is the emotional well-being of these professionals. When invited to assess their well-being during the pre-intervention phase with TCI, most identified themselves as neither happy nor sad (score 3). This can be explained by high levels of anxiety, stress, poor sleep quality, and unhappiness, which have a direct impact on an individual's physical and mental well-being (Prado *et al.*, 2020). According to the WHO, one of the main factors contributing to increased stress is the social isolation resulting from the pandemic, affecting primarily young people and women (WHO, 2022), which corroborates the findings of this study.

Generally, people spend a significant portion of their lives in work environments, which can contribute to the onset of illness, particularly for those in healthcare settings, such as hospitals. The hospital environment is conducive to illness due to numerous occupational, chemical, biological, physical, and psychosocial risks (Silva *et al.*, 2021).

This reality was highly evident in the pandemic context, as the already concerning levels of psychiatric symptoms among these professionals were exacerbated by various factors, such as inadequate infrastructure, long work hours, poor healthcare support, and a shortage of Personal Protective Equipment (PPE) (Prado *et al.*, 2020; Dantas, 2021). Such conditions make this a conducive environment for the development of mental disorders, such as anxiety, depression, and stress.

Another aspect to consider is the direct and continuous exposure to suffering, pain, and death, which often makes the experience more exhausting and distressing, exacerbated by the pandemic context (Lai *et al.*, 2020; Silva *et al.*, 2021). Given that the University Hospital (UH) is a reference center for COVID-19 care, it is believed that the manifestation of emotional and physical symptoms among its professionals was even more alarming.

The efficacy of Integrative and Complementary Health Practices (PICS), such as auriculotherapy and Community Integrative Therapy (TCI), has been investigated for the

management of psychological symptoms in the general population. However, there are still few studies addressing the non-pharmacological management of these symptoms among healthcare professionals (Kurebayashi *et al.*, 2017; Igeski *et al.*, 2020; Silva *et al.*, 2021).

In 2016, the Ministry of Health (MS) funded a semi-presential auriculotherapy course with regional centers in 21 Brazilian states. Over the course of a year, more than 4,000 professionals completed the training. Additionally, in 2008, in-person training in Community Integrative Therapy (TCI) was provided to a similar number of primary healthcare professionals from all regions of the country (Tesser; Sousa; Nascimento, 2018).

Training in Integrative and Complementary Health Practices (PICS) in Brazil is insufficient and primarily concentrated in private institutions, with few PICS training programs available through the public system (Tesser; Nascimento, 2018; Bard, 2021). Consequently, the training model is designed to meet the needs of private practice, which does not necessarily address the requirements of the Unified Health System (SUS). This constitutes one of the greatest challenges for expanding and implementing these practices within the public health system.

Auriculotherapy and Community Integrative Therapy (TCI) were chosen as intervention methods because they are practices for which the Ministry of Health provides training. Both have different approaches—one being individual and clinical, and the other collective—and offer significant benefits for mental and physical health, as well as being low-cost and safe (Tesser; Sousa; Nascimento, 2018; Bard, 2021).

Comparing the pre-and post-intervention periods with auriculotherapy, healthcare professionals and staff showed a reduction in scores for stress, anxiety, and pain, as well as an increase in scores related to sleep quality and happiness, highlighting a positive effect of the intervention. Seven pre-established points were used for all participants, in addition to individualized points based on the complaints reported by the patient. The selection of points for the pre-established ShenMen, Kidney, Autonomic Nervous System (ANS), Anxiety, Muscle Relaxation, Subcortex, and Heart protocol was based on characteristics, properties, and evidence (Bassi; Boaretto; Martins, 2023; Rodrigues, 2023).

The ShenMen point is known for its anxiolytic effects and mood improvement. The Kidney point plays a key role in regulating body fluids and hormonal balance, and is associated with fear, insecurity, and vitality. The ANS point, through its sympathetic and parasympathetic actions, works synergistically to facilitate the body's autonomous functioning, promoting relaxation and anxiolytic effects. The Anxiety point is used to promote emotional control and

reduce anxiety levels. The Muscle Relaxation point is indicated for relaxation, reducing muscle tension, and analgesia. The Subcortex point works to rebalance the functions of the nervous system. Finally, the Heart point, in addition to being responsible for the circulatory system, aids in sleep induction, emotional control, and awareness (Bassi; Boaretto; Martins, 2023; Rodrigues, 2023).

It is believed that the combined use of the pre-established protocol and individualized points contributed to the significant results of the research in question. Studies indicate that the use of the Cybernetic Trio (ShenMen, Kidney, and ANS) shows positive results in reducing levels of anxiety, stress, and depression (Bassi; Boaretto; Martins, 2023). Furthermore, various studies demonstrate satisfactory outcomes in physical and mental well-being with the use of other points (Weber *et al.*, 2022; Rodrigues, 2023). Regarding individualized points, it is inferred that auriculotherapy applied individually is more effective and can better address the specific demands of each person, according to the intensity of symptoms and complaints (De Oliveira *et al.*, 2021).

Concerning TCI, the comparison between pre-and post-intervention periods revealed a significant increase in the emotional well-being score. In other words, those who participated in TCI sessions generally showed an improvement in emotional well-being. This supports studies of various methodologies that demonstrate the efficacy of TCI in reducing symptoms such as anxiety, stress, and depression, which directly affect overall well-being (Alves *et al.*, 2021; Lemes *et al.*, 2020).

Moreover, several studies highlight TCI as an important care technology in the context of mental health (Garcia; Tavares; Assunção, 2018), acting in the prevention of emotional suffering. Thus, TCI addresses issues and suffering, aids in their reframing and coping, stimulates speech and participation, and promotes the building and strengthening of bonds (Alves *et al.*, 2021).

It is further noted that its accessible and participatory methodology is highly relevant as a therapeutic resource in the Unified Health System (SUS), whether due to its low cost or its broad approach to comprehensive care. TCI facilitates the management of suffering in a sensitive and culturally appropriate manner, de-medicalizes healthcare services, recognizes the impact of social determinants on the health-disease process, and values the holistic dimension of the individual, including their internal resources such as empowerment, autonomy, trust, and self-esteem (Igeski *et al.*, 2020).

Auriculotherapy and TCI interventions have positive impacts in the hospital setting. As auriculotherapy sessions and TCI circles progressed, levels of anxiety, pain, and stress decreased, while levels of well-being, happiness, and sleep quality increased. In other words, the complaints reported at the beginning of the study were significantly reduced by the end. This reinforces that integrative and complementary practices (PICS) are a valuable strategy for alleviating mental and physical suffering, in addition to fostering the therapeutic bond, a crucial factor that was impacted during the pandemic (Lemes *et al.*, 2020; Morais *et al.*, 2020; Silva *et al.*, 2021).

In addition to their efficacy, the techniques have proven to be non-invasive, safe, and low-cost. These findings are supported by other studies advocating for the use of these practices in various health contexts (Lemes *et al.*, 2020; Morais *et al.*, 2020; Silva *et al.*, 2021; Rodrigues, 2023). It is also noteworthy that auriculotherapy is easier to implement in clinical settings compared to other techniques, due to its brief application time, low technical complexity, and relative safety (Lemes *et al.*, 2020; Morais *et al.*, 2020).

Regarding the limitations of this study, the use of non-validated instruments and the difficulty of adherence by professionals stand out, as interventions occurred during working hours, raising concerns about participation. Other limitations include the lack of a control group and the absence of blinding in the sample, factors that may affect the validity of the findings. Future studies are necessary to enhance the reliability of similar research, considering aspects such as the choice of instruments, sampling, and the inclusion of a control group.

Despite these limitations, the study has significant implications for public health by providing cost-effective techniques to improve quality of life and health. These techniques can offer clinically significant therapeutic benefits and, according to the literature, may provide additional advantages over conventional therapies or even surpass the effects achieved with pharmacotherapy (Rodrigues, 2023).

Final considerations

The research analyzing the effects of Integrative Community Therapy (TCI) and auriculotherapy on the health of professionals at a public university hospital during the COVID-19 pandemic revealed significant findings regarding the impact of these interventions on the participants' physical and mental well-being. The results indicate that integrative approaches

can play a crucial role in supporting the health of staff in hospital settings during challenging periods.

The data highlight the effectiveness of TCI as a significant tool for strengthening emotional support among professionals, demonstrating its capacity to mitigate the psychological impact of the pandemic. Additionally, auriculotherapy showed a significant reduction in levels of anxiety, pain, and stress, as well as a considerable increase in happiness and sleep quality scores.

It is essential to emphasize the importance of these findings within the context of occupational health, particularly for professionals who faced exceptional challenges during the pandemic. By considering the implementation of these therapies as part of health personnel support programs, managers and policymakers can explore innovative strategies to promote team well-being, improve emotional resilience, and, consequently, the quality of care provided.

In summary, this study contributes to the growing body of knowledge on integrative interventions in the field of occupational mental health, underscoring the importance of holistic approaches to support the health of healthcare professionals, especially during challenging times such as the COVID-19 pandemic.

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CRediT Author Statement

Acknowledgements: Yes, we would like to thank the institutions that made this research possible. Our gratitude goes to the State University of Ponta Grossa for providing the space and support, to the Integrative Health Clinic (ASI) affiliated with the University for welcoming us researchers and for the services offered to the community, as well as to the Municipality of Ponta Grossa for the opportunity to conduct the Multidisciplinary Residency in Collective Health.

Funding: There was no funding.

Conflicts of interest: The authors declare no conflicts of interest.

Ethical approval: Yes, the study was approved by the Research Ethics Committee of the State University of Ponta Grossa (70180023.4.0000.0105).

Availability of data and material: Yes, the data and material are available to the authors and will be subsequently disclosed to the institutions that facilitated the research.

Author contributions: Each author contributed to the study as follows: Data collection was carried out by authors Maria and Luana; Writing was conducted by authors Maria, Luana, Rita, Suely, and Tereza; Formatting was done by authors Tacyana and Thayza; Review was carried out by authors Erildo and Marcelo; Review and guidance were provided by author Milene.

Processing and editing: Editora Ibero-Americana de Educação.
Proofreading, formatting, normalization and translation.



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