

## Original article

**Impact of massage therapy on the quality of work in public hospitals: a descriptive study***Impacto da massoterapia na qualidade do trabalho em hospitais públicos: estudo descritivo.***Luis Eduardo Valente Monteiro<sup>1</sup>, Dario Yamashiro<sup>2</sup>, Gilmar Pereira Coan<sup>1,3</sup>, Patrícia Mitsue Saruhashi Shimabukuro<sup>4</sup>, Adelaide Moral Tarifa<sup>2</sup>, Emilio Carlos Del Massa<sup>5</sup>**<sup>1</sup> Preceptor and anesthesiologist, DG Medicina Perioperatória, São Paulo, SP, Brazil<sup>2</sup> Instructor, Centro de Ensino e Treinamento Casa de Saúde Santa Marcelina, São Paulo, SP, Brazil<sup>3</sup> Professor, Faculdade Santa Marcelina, São Paulo, SP, Brazil<sup>4</sup> Nurse, DG Medicina Perioperatória, São Paulo, SP, Brazil<sup>5</sup> Anesthesiologist, DG Medicina Perioperatória, São Paulo, SP, Brazil

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**ABSTRACT****Keywords:**  
Complementary Therapies.  
Health Personnel.  
Massage.**Palavras-chave:**  
Massagem.  
Pessoal de saúde.  
Terapias complementares.Received on:  
05/16/2025Accepted on:  
10/23/2025Published on:  
12/31/2025

To analyze the impact of massage therapy on the quality of work of health professionals in two public hospitals managed by an anesthesiology company. Cross-sectional, descriptive, and quantitative study, conducted through massage therapy interventions with healthcare professionals from two public hospitals located in the eastern zone of the city of São Paulo. Data were analyzed using classical descriptive statistics. It should be noted that this study followed the ethical precepts of research. Fifty-eight health professionals, linked to public hospitals of an anesthesiology company, participated in this study. Regarding the socio-professional profile, the majority of participants were female (n = 33/56.90%), with a predominance of the age group of 30 to 39 years (n = 23/39.66%), followed by 18 to 29 years (n = 21/36.21%), occupying the role of nursing assistant or technician (n = 13/22.41%). There was a predominance of those who went to work feeling tired (n = 25/43.10%), considering psychological stress as the greatest challenge of the work routine (n = 29/50.0%). The majority evaluated their work routine negatively (n = 30/51.72%) and stated that fatigue and/or stress affect their work routine (n = 56/96.55). Regarding the aspects inherent to the massage therapy intervention, all participants positively evaluated the intervention in the following variables (n=58/100%): meeting expectations; more frequent provision; positive impact on satisfaction in performing work activities; effectiveness in reducing stress and improving performance in the workplace; and the likelihood of recommending it to others. Furthermore, if they could choose a time, they would choose to take a break during the day (n=36/62.07%), since the experience provides benefits mainly in the physical (n=34/58.62%) and psychological (n=16/27.59%) aspects. In line with the literature, the work routine of health professionals imposes challenges that can be alleviated, to some degree, through massage therapy interventions. This study provides evidence of the potential benefits of massage therapy for healthcare professionals in public hospitals. The intervention appears to be well-received and effective in reducing stress and improving job performance.



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## RESUMO

*Analisar o impacto da massoterapia na qualidade do trabalho de profissionais da saúde de hospitais públicos. Estudo transversal, descritivo e quantitativo, realizado a partir de intervenção por massoterapia junto a profissionais da saúde de dois hospitais públicos localizados na zona leste da cidade de São Paulo. Os dados foram analisados por meio de estatística descritiva clássica, e o estudo seguiu os preceitos éticos da pesquisa. Participaram do estudo 58 profissionais da saúde, vinculados a hospitais públicos de uma empresa de anestesiologia. No perfil socioprofissional, a maioria dos participantes era do sexo feminino (n = 33/56,90%), com predominância da faixa etária de 30 a 39 anos (n = 23/39,66%), seguida de 18 a 29 anos (n = 21/36,21%), ocupando a função de auxiliar ou técnico de enfermagem (n = 13/22,41%). Observou-se predominância daqueles que relataram ir trabalhar sentindo-se cansados (n = 25/43,10%), considerando o estresse psicológico como o maior desafio da rotina de trabalho (n = 29/50,0%). A maioria avaliou sua rotina de trabalho de forma negativa (n = 30/51,72%) e afirmou que o cansaço e/ou o estresse afetam sua rotina de trabalho (n = 56/96,55%). Quanto à intervenção por massoterapia, a totalidade dos participantes avaliou positivamente as seguintes variáveis (n = 58/100%): atendimento às expectativas; oferta com maior frequência; impacto positivo na satisfação em realizar as atividades laborais; eficácia na redução do estresse e na melhoria do desempenho no ambiente de trabalho; e probabilidade de recomendação a outras pessoas. Ademais, caso pudessem escolher um momento, optariam por realizar uma pausa durante o dia (n = 36/62,07%), uma vez que a experiência possibilita ganhos, principalmente, nos aspectos físico (n = 34/58,62%) e psicológico (n = 16/27,59%). Alinhando-se à literatura, a rotina de trabalho dos profissionais da saúde impõe desafios que podem ser amenizados, em algum grau, por meio de intervenções por massoterapia. O estudo fornece evidências sobre os benefícios potenciais da massoterapia para profissionais da saúde em hospitais públicos, mostrando-se bem aceita e eficaz na redução do estresse e na melhoria do desempenho no trabalho.*

## INTRODUCTION

Massage therapy, one of the Integrative and Complementary Health Practices (PICS), has emerged as an effective approach to improving work quality and the well-being of healthcare professionals. Recognized by the World Health Organization (WHO) and incorporated into healthcare systems, this therapeutic technique offers a holistic and humanized perspective of care, aiming at disease prevention, promotion of recovery, and an emphasis on empathetic listening<sup>1,2</sup>.

In the hospital context, where healthcare professionals often face stressful and physically demanding work routines, massage therapy has proven to be particularly relevant. Recent

studies show that this practice can provide significant benefits, such as stress reduction, improved sleep quality, and increased productivity. These positive effects are attributed to the ability of massage to promote muscle relaxation, stimulate blood and lymphatic circulation, and induce the release of hormones associated with well-being, such as serotonin and endorphins<sup>3,4</sup>.

The integration of massage therapy into the hospital work environment demonstrates the commitment of healthcare institutions to the well-being of their staff. This approach not only promotes a healthier and more productive environment but may also positively reflect on the quality of care provided to patients. Over the past decade, several institutions have ex-

plored the incorporation of integrative practices as part of their human resources management policies and workplace health promotion strategies<sup>2,3,5,6</sup>.

By directing the focus toward professionals in the public health sector, this research seeks to provide relevant support for improving the performance and satisfaction of these workers, who operate in work contexts marked by high complexity and continuous demands. The findings presented may serve as a basis for the development and strengthening of public policies aimed at occupational health, favoring the implementation of safer, healthier, and more productive work environments within the public healthcare system<sup>7,8</sup>.

Contemporary studies have highlighted the strategic importance of decompression practices during the workday, especially among healthcare professionals whose activities involve high physical, cognitive, and emotional demands. The international literature indicates that approximately 83% of workers in the United States report symptoms of occupational stress, and about 75% acknowledge direct impacts of this stress on their physical health, reinforcing the magnitude of this issue as a public health and organizational concern<sup>6</sup>.

Accumulated evidence demonstrates that the adoption of regular breaks throughout the work shift contributes to psychophysiological restoration and is associated with measurable improvements in productivity, estimated at up to 13%, in addition to promoting work-life balance by up to 62%. Workers who incorporate systematic breaks into their routines also show a 43% greater capacity for stress management and higher levels of job satisfaction<sup>9</sup>.

In the context of healthcare services, these strategies acquire increased relevance, as professionals are continuously exposed to high-complexity environments, care-related pressure, and emotional overload. From this perspective, massage therapy, when implemented as a relaxation practice during work

breaks, may constitute a low-cost intervention with high potential to reduce stress, improve professional performance, and promote the overall well-being of healthcare teams<sup>9</sup>.

Therefore, the investigation proposed here not only aligns with current trends in workplace health promotion but also represents an important step toward identifying innovative and effective solutions to the challenges faced by public healthcare professionals and institutions.

The objective of this study is to analyze the impact of massage therapy on the quality of work among healthcare professionals in public hospitals.

## MATERIALS AND METHODS

This is a cross-sectional study with a descriptive design and a quantitative approach. The study was conducted in August at two public hospitals located in the city of São Paulo.

The study setting comprises two major public hospitals managed by a Social Health Organization (OSS). The selected institutions represent strategic healthcare units for population care, each with its own specific characteristics and challenges.

Both institutions play a fundamental role in providing healthcare to the local community, offering essential services and emergency care.

Healthcare professionals affiliated with the selected hospitals who worked in the surgical units during the daytime shift were included, encompassing the entire multiprofessional team involved in care activities. Professionals who did not express interest in participating in the research, those on leave or vacation, and those assigned to the night shift were excluded.

The intervention was carried out by massage therapy technicians with more than five years of professional training, hired exclusively for this purpose and external to the anesthesiology service.

The approach was conducted individually with healthcare professionals, providing explanations about the type of study, its objectives, risks, and benefits. After agreeing to participate, individuals signed the Free and Informed Consent Form. Participants were then guided to a rest area, where they underwent a 15-minute massage therapy session. Subsequently, a link to an online questionnaire was sent for later completion, ensuring complete participant anonymity.

The study variables were:

- Position/occupation;
- Age group;
- Sex;
- Evaluation of the organization of the intervention;
  - How the participant felt when coming to work and regarding their work routine;
  - Main challenge in the work routine;
  - Whether fatigue and/or stress negatively affect work performance; whether the intervention (massage therapy) met expectations; how the participant felt after the intervention;
  - Likelihood of recommending this type of intervention to others; whether the participant would like the intervention to be offered more frequently;
  - Whether the participant considers that massage therapy positively impacts satisfaction in performing work activities;
  - If given the opportunity to receive massage therapy at work, which time of day they would choose;
  - In which aspect massage therapy provided a positive experience.

The collected data were systematically organized and processed using Microsoft Office Excel, version 2019. The analysis was conducted using classical descriptive statistical methods, with emphasis on the presentation of absolute and relative frequencies. For clear and concise visualization of the results, the data were presented in tabular format, allow-

ing efficient interpretation of the information obtained during the study.

This study was conducted in full compliance with Good Clinical Practice policies and procedures and with all applicable national laws and regulations, including Resolution No. 466/2012 of the National Health Council. Accordingly, the umbrella project was submitted to and approved by the Research Ethics Committee of Casa de Saúde Santa Marcelina, under opinion No. 6,824,792 and CAAE No. 78629024.5.0000.0066.

## RESULTS AND DISCUSSION

A total of 58 participants took part in this study, and the results are presented in the following sequence: 1 – socioprofessional characteristics of the participants (**Table 1**); 2 – aspects inherent to the participants' work (**Table 2**); and 3 – aspects related to the massage therapy offered to the participants (**Table 3**).

Regarding the socioprofessional profile, most participants were female ( $n = 33/56.90\%$ ), with a mean age of 33.8 years, a median of 33.5 years, and a standard deviation of 9.9 years. The highest concentration was in the 30–39-year age group (39.66%). This scenario indicates that more than 75% of the participants were under 40 years of age, characterizing a predominantly young adult population, most of whom held the position of nursing assistant or nursing technician ( $n = 13/22.41\%$ ) (**Table 1**). Among the aspects inherent to the participants' work in this study (**Table 2**), a predominance was observed among those who reported going to work feeling tired ( $n = 25/43.10\%$ ), with psychological stress identified as the greatest challenge in their work routine ( $n = 29/50.0\%$ ). Most participants evaluated their work routine negatively ( $n = 30/51.72\%$ ) and stated that fatigue and/or stress negatively affect their work routine ( $n = 56/96.55\%$ ).

Regarding the aspects inherent to the

**Table 1.** Socioprofessional characteristics of the participants. São Paulo, SP, Brazil, 2025. (n = 58)

Variables	N	Relative frequency %
<b>Age group (years)</b>		
18 to 29	21	36,21
30 to 39	23	39,66
40 to 49	10	17,24
50 to 59	3	5,17
60 to 69	1	1,72
<b>Sex</b>		
Female	33	56,90
Male	25	43,10
<b>Position held</b>		
Specialist physician	8	13,79
Resident physician	1	1,72
Surgical technologist	4	6,90
Administrative staff	9	15,52
Nursing assistant/technician	13	22,41
Nurse	9	15,52
Clinical engineer	3	5,17
Others	11	18,97

massage therapy intervention offered to the participants in this study, Table 3 showed that all participants evaluated the intervention positively for the following variables (n = 58/100%): meeting expectations; being offered more frequently; positive impact on satisfaction in performing work activities; effectiveness in reducing stress and improving performance in the work environment; and likelihood of recommending it to others. Additionally, if they could choose a time, most participants would opt to take a break during the day (n = 36/62.07%), as the experience provided benefits mainly in the physical (n = 34/58.62%) and psychological (n = 16/27.59%) domains.

With regard to the socioprofessional profile, the characteristics related to gender and age group are consistent with other studies involving healthcare professionals in public hos-

pitals, which frequently show a predominantly female and relatively young workforce<sup>4,10</sup>.

Concern is noted regarding a significant proportion of healthcare workers who frequently report feeling tired; however, this is not an unknown phenomenon in the scientific literature, as publications indicate high levels of stress and fatigue among healthcare professionals, especially in hospital settings<sup>2,6</sup>.

The results related to the massage therapy intervention are particularly noteworthy. The unanimously positive evaluation observed in the previous section across multiple dimensions is consistent with prior studies on the benefits of massage therapy in the workplace<sup>2</sup>.

Participants' preference for taking a break during the day to receive massage therapy suggests that brief and regular interventions may constitute an effective strategy for

**Table 2.** Aspects inherent to the participants' work. São Paulo, SP, Brazil, 2025. (n = 58)

Variables	N	%
<b>How did you feel when coming to work today?</b>		
Tired	25	43,10
Willing	11	18,97
Stressed	4	6,90
Happy	12	20,69
Other feeling	3	5,17
Sad	3	5,17
<b>How do you feel about your work routine?</b>		
Very dissatisfied	5	8,62
Dissatisfied	25	43,10
Satisfied	28	48,28
<b>Do fatigue and/or stress negatively affect work performance?</b>		
Yes	56	96,55
No	2	3,45
<b>Greatest challenge in your work routine</b>		
Physical fatigue	23	39,66
Psychological stress	29	50,00
Relationship with coworkers	4	6,90
Relationship with patients	2	3,45

integrating massage therapy into the hospital environment. This finding aligns with research demonstrating that even short massage sessions can provide significant benefits for healthcare professionals<sup>4,7,8</sup>.

The results addressing the aspects in which massage therapy had the greatest impact on participants corroborate the scientific consensus in the literature, as studies show that therapeutic massage can effectively reduce muscle pain, relieve tension, and promote relaxation, in addition to improving emotional well-being and reducing levels of anxiety and depression<sup>4,7,8</sup>.

The unanimous positive evaluation and high likelihood of recommendation suggest that massage therapy may be a well-accepted

and potentially effective intervention for improving work quality and well-being among healthcare professionals in public hospitals. The implementation of workplace massage therapy programs may represent a valuable strategy for addressing occupational stress and improving job satisfaction<sup>2,7,10</sup>.

As limitations of this study, due to its small scale, being conducted in only two hospitals and without a control group, the results cannot be generalized to other contexts. In addition, the responses were self-reported, which may imply individual perception bias. Longitudinal and multicenter studies are recommended to further strengthen the evidence on the effects of massage therapy on occupational health.

**Table 3.** Aspects inherent to the massage therapy offered to the participants. São Paulo, SP, Brazil, 2025. (n = 58)

Variables	N	%
<b>Did the massage therapy meet your expectations?</b>		
Yes	55	95,00
Partially	3	5,00
<b>How did you feel after the intervention?</b>		
Very relaxed	36	62,07
Relaxed	22	37,93
<b>How do you evaluate the organization of the intervention?</b>		
Excellent	47	81,03
Good	11	18,97
<b>Would you like the intervention to be offered more frequently?</b>		
Yes	58	100,00
<b>Does massage therapy positively impact your satisfaction in performing work activities?</b>		
Yes	58	100,00
<b>In which aspect did massage therapy provide a positive experience?</b>		
Emotional	6	10,34
Physical	34	58,62
Psychological	16	27,59
Other	2	3,45
<b>Was massage therapy effective in reducing stress and improving your performance in the work environment?</b>		
Yes	58	100,00
<b>How likely are you to recommend the intervention to others?</b>		
High	10	17,24
Very high	48	82,76
<b>If you had the opportunity to receive massage therapy at work, at which time of day would you choose?</b>		
Before starting work	13	22,41
After the end of the workday	9	15,52
A break during the day	36	62,07

The expansion of I PICS within the Brazilian public healthcare system still faces significant structural and financial barriers. The main challenge lies in the absence of specific and sustainable funding to support their consolidation, which limits the effectiveness of public policies aimed at promoting comprehensive health. Since the establishment of the National Policy on Integrative and Complementary Practices, conceptual and regulatory advances have been observed; however, these have not been matched by corresponding budget allocations or financial incentives capable of fostering the expansion of these practices within healthcare services.

This budgetary constraint restricts the continuous and structured incorporation of Integrative and Complementary Health Practices, such as massage therapy, into the hospital setting, preventing their potential benefits – including the reduction of occupational stress, increased professional satisfaction, and improvement in quality of care – from being fully realized. The lack of consistent investment compromises not only the expansion of these practices but also their sustainable integration into occupational health and worker well-being promotion policies, thereby reinforcing the need for governmental strategies that prioritize the funding and institutionalization of PICS, recognizing them as essential components for the humanization and quality of care within the Brazilian Unified Health System.

## AUTHOR CONTRIBUTIONS

LEVM carried out the study conception and design, data analysis, and manuscript drafting. DY, AMT, and GPC performed data collection, statistical analysis, and critical revision of the manuscript. PMSS and ECDM provided technical support, conducted the literature review, and performed the final revision of the text. All authors read and approved the final version of the manuscript and agree to take responsibility for its content.

## ACKNOWLEDGEMENTS

The authors thank DG Perioperative Medicine for the support and contribution to this study. We also thank Dr. Daniel Garcia Junior for his suggestions and technical support. This research did not receive any funding.

## CONFLICT OF INTEREST

We wish to confirm that there are no known conflicts of interest associated with this publication and that no significant financial support has influenced its results.

## DECLARATION REGARDING THE USE OF GENERATIVE AI

The authors declare that generative artificial intelligence tools (such as ChatGPT, Grammarly, Deepseek, etc.) were not used in the manuscript. However, the editorial board made the decision to utilize ChatGPT, an AI language model developed by OpenAI, for the translation of this manuscript from the original language, Portuguese, to English.

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