



Original scientific research

Application of Art Therapy in Reducing Stress and Burnout Symptoms among Emergency Healthcare Workers

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Abstract

This article describes the application of art therapy with emergency healthcare service professionals, who are exposed to chronic stress due to the nature of their work. Exposure to stressors on an everyday basis increases the risk of developing burnout symptoms, which are manifested by emotional exhaustion, feelings of cynicism or negativism (depersonalization), and reduced effectiveness accompanied by a diminished sense of personal accomplishment.

Art therapy is a psychotherapeutic modality that uses visual art media and techniques and can be beneficial for individuals and groups who have

experienced traumatic events or have been exposed to stressful situations over shorter or longer periods of time.

Keywords: arttherapy; burnout; emergencyhealthcareprofessionals; emergency medicine; chronic stress

Introduction and Literature Review

Physicians, nurses, and other healthcare professionals are exposed to chronic stress due to excessive working hours, sleep deprivation, work on weekends and holidays, the need for continuous professional development, and the limited time they are able to spend with their families. An additional burden arises from the very nature of their work, which requires a high level of responsibility, rapid and precise decision-making, and the performance of procedures upon which patients' health or lives often depend.

In the contemporary world, stress has become an unavoidable part of everyday life, and incertain professions, such as medicine, exposure to stress is exceptionally high. Unresolved stress affects not only physicians' personal well-being but also the safety and quality of patient care, as well as relationships within medical teams (Ho et al., 2019; Mateen et al., 2009).

Physicians frequently express dissatisfaction related to long working hours and

concerns about their inability to devote sufficient time to their children (Warde et al., 1999). Young physicians, particularly during specialization, are often physically and emotionally exhausted, and their mental health is significantly influenced by personality traits, the work environment, and the balance between professional and private life (Thomas, 2004). Healthcare professionals in Croatia, as well as in other countries, are therefore at increased risk of developing burnout syndrome.

The concept of burnout in the healthcare system was introduced in the late 1960s, as a way of addressing the emotional and psychological exhaustion of healthcare workers caring for patients in hospital settings. The term, coined in early 1970s by Herbert Freudenberger, described the consequences of prolonged stress in healthcare professions (1993) as a delayed response to chronic occupational stressors and encompassing three core dimensions: emotional exhaustion, a cy-

nical attitude toward work, and reduced professional efficacy. Together, these dimensions affect an individual's personal, professional, and social functioning (De Hert, 2020; Maslach et al., 2001).

The criteria defining burnout syndrome are not always clearly delineated, nor is there a unified consensus regarding key classification thresholds (Doulougeri et al., 2016). Burnout is associated with the number of working hours and, to some extent, with sleep duration: compared to a 40-hour workweek, the risk of burnout doubles at 60 hours, triples at 74 hours, and quadruples when weekly working hours reach 84 hours (Lin et al., 2021).

Among physicians in the United States, as many as 54.4% of doctors and one-third of nurses and medical technicians have experienced symptoms of burnout, particularly in emergency medicine, followed by family medicine and internal medicine (Shanafelt et al., 2016).

Physicians working in emergency healthcare are at the highest risk of burnout, and nearly half of them consider leaving the profession due to adverse working conditions (Heymann et al., 2024).

The consequences of burnout include a deterioration of professional standards, reduced self-care, decreased physician productivity, an increased risk of medical errors, and diminished quality of patient care (De Hert, 2020), ultimately, impairing the effectiveness of healthcare system (West et al., 2016; Reith, 2018; Spickard et al., 2004).

The prevalence of post-traumatic stress disorder (PTSD) symptoms is higher among healthcare professionals than in the general adult population, particularly in emergency healthcare services (EHS), psychiatry, and traumatology (D'Ettorre et al., 2020), due to frequent exposure to traumatic incidents (Van der Ploeg et al., 2003). Research indicates that as many as 87% of EHS have experienced some form of workplace violence perpetrated by patients or their relatives, while more than half reported multiple emotional consequences, particularly women (69% of women and 29% of men). One-third of respondents reported negative changes in lifestyle habits, such as increased smoking, dietary changes, sleep disturbances, and social isolation (Cannavò et al., 2019).

In both hospital-based and pre-hospital emergency medical settings, physicians and nurses are confronted with fatalities and highly stressful emergency medical procedures, underscoring the importance of understanding experiences of burnout syndrome and PTSD among medical professionals.

Art Therapy as Support for Healthcare Professionals

From a mental health perspective, physicians are often reluctant to seek support. However, research conducted with healthcare professionals indicates the effectiveness of certain strategies in coping with unwanted emotions and stressful events (Alvares et al., 2020).

Many artists are familiar with the calming effects of creative activity, which can contribute to short-term reductions in anxiety and stress (Abbott et al., 2013; Dalebroux et al., 2008). In a therapeutic context, visual expression enables the articulation of memories that encompass both cognitive and emotional elements and symbolically opens new perspectives for understanding the relationship between the self and the world (Fernández-Cao et al., 2020).

Art therapy has proven to be particularly effective for individuals who have experienced trauma, including healthcare professionals exposed to high levels of stress and PTSD. One theoretical explanation suggests that visual creation facilitates the reconsolidation of traumatic memories, whereby traumatic material stored in verbal and visual-perceptual forms is reintegrated into a coherent narrative (Brewin et al., 2019; Maddox et al., 2024). Empirical studies confirm that following the implementation of art therapy protocols, approximately half of adults with trauma histories demonstrate a significant reduction in symptoms of psychological trauma and depression (Schouten et al., 2015). Group art therapy is especially beneficial as it fosters a sense of belonging and provides a safe space for the expression of traumatic experiences, thereby enhancing quality of life and promoting social connectedness (Schnitzer et al., 2021; Maddox et al., 2024).

Art therapy has been shown to be an effective tool for the identification, expression, and transformation of trauma-related emotions and demonstrates consistently positive therapeutic outcomes for individuals experiencing PTSD (Wang et al., 2025). Attitudes among healthcare professionals toward the inclusion of visual and artistic activities within healthcare institutions are predominantly positive, highlighting the importance of their collaboration in the implementation of new creative programs (Wilson et al., 2016).

Art therapy, as a psychotherapeutic modality that utilizes visual expression and nonverbal communication, can be delivered in both individual and group formats. It is widely applicable within medical settings, both in public health institutions and among patients receiving inpatient or outpatient care. Research indicates that art therapy can significantly reduce symptoms of stress (Tjasink et al., 2023; Tjasink et al., 2025) and workplace frustration, increase work effectiveness and professional engagement, and improve the physical and mental well-being of healthcare professionals (Hsu et al., 2021). Art therapy provides space for emotional support and stress reduction, facilitates improved communication, and enhances team dynamics (Jantke et al., 2024).

Chronic psychosocial stress and burnout represent serious challenges for healthcare professionals and healthcare

systems worldwide. Art therapy, as an innovative and empirically supported approach, is increasingly recognized both in the general population and among healthcare professionals, and can play a significant role in the prevention and mitigation of stress- and burnout-related consequences, as well as in strengthening the emotional resilience of healthcare professionals. The promotion and integration of art therapy into healthcare systems constitute an important step toward safeguarding the mental health and well-being of those who care for others on a daily basis.

Methodology

This qualitative case study examines the application of art therapy among emergency healthcare service (EHS) professionals who are at increased risk of developing burnout syndrome due to a highly stressful work environment. New insights were derived from the lived experiences and subjective accounts of participants, as well as from the observations of the art therapist.

The author conducted the research while working as an external associate at the Institute of Emergency Medicine of Krapina – Zagorje County, Croatia and in a specialized family medicine practice. At the same time, the author was specializing Art Therapy at the Creative Therapies Program, as part of which she conducted the clinical practice in EHS

described in this paper. Twenty-five years of professional experience across various sites and positions within EHS granted the author an in-depth knowledge of the specific challenges in her entire field of work.

Due to shift work, frequent schedule changes, and interruptions caused by emergency calls, it was not possible to organize continuous, strictly time-structured group art therapy sessions for the same group of participants. Instead, the timing, duration, and scheduling of the sessions were adapted to the participants' work schedules.

Over a three-month period, group sessions were conducted in small, open-format groups, with variable meeting locations, meeting length, and meeting frequency (ranging from one to three times a week). This flexibility made it possible for a research process to take the form of a series of art therapy encounters, reflecting the demanding and unpredictable nature of EHS work. Sessions occasionally lasted uninterrupted for the full 90 minutes. However, more often they were interrupted by emergency calls, postponed, shortened, or left incomplete.

The following research questions were formulated:

1. Can art therapy be implemented within the healthcare system, specifically among EHS professionals, and if so, in what manner and under what conditions can such an art therapy program be delivered?

2. Can the application of art therapy contribute to the reduction of burnout symptoms among EHS professionals?

The following hypotheses were proposed:

- **H1:** Art therapy workshops can be organized within the working conditions of EHS professionals.
- **H2:** Art therapy can help reduce symptoms of burnout among EHS professionals.

Aim and Purpose of the Study

The aim of this study was to explore and understand the experiences, meanings, and therapeutic fact or perceived by EHS professionals during their participation in group art therapy, as well as to examine the potential of art therapy in reducing stress and burnout symptoms.

The purpose of the study was to introduce art therapy to EHS professionals and, through their personal experiences and the observations of the art therapist, to examine the organizational and ethical conditions under which art therapy can be sustainably implemented in such a work environment.

Prior to participation in the art therapy workshops, EHS professionals were informed about the nature and objectives of art therapy, possible modes of participation, and potential benefits. This approach aimed to reduce initial uncertainty, clarify that no prior knowledge of artistic techniques was

required, and establish a safe therapeutic framework.

An additional purpose of the study was to present art therapy to EHS professionals and to observe the possibilities for its application and implementation within the health care system, specifically among healthcare professionals who, due to the nature of their work, are in increased risk of developing burnout symptoms.

Setting

The Institute of Emergency Medicine of Krapina-Zagorje County in Croatia is organized with one central headquarters and seven regional units. The locations where the art therapy workshops were conducted varied and were often improvised, most commonly taking place in staff rest areas.

Over the three-month period, one to three art therapy workshops were held weekly, amounting to approximately thirty sessions in total. The schedule of the workshops was highly dynamic and adapted to participants' working hours. The number of participants in each group varied, ranging from a minimum of two to a maximum of six participants, including physicians, nurses/medical technicians, and drivers employed in EHS.

This paper presents an overview of participants' experiences of art therapy sessions, the therapeutic factors highlighted by the participants themselves, and the organizational advantages and challenges

encountered during the introduction of art therapy into the EHS work schedule.

Materials

The selection of materials was adapted to spatial conditions and time constraints. For practical reasons, large formats were not used. Colored pencils and markers were most commonly employed, while tempera and acrylic paints, as well as technique of collage were used less frequently.

Preparation

Prior to the commencement of the art therapy workshop cycle, participants were provided with a brief psychoeducational component on art therapy with a focus on stress. The structure and general objectives of the art therapy sessions were discussed and it was explained that participation did not require prior knowledge of artistic techniques or talent for visual expression.

A discussion regarding workplace was held, the main stressors were identified, and their impact on quality of life and work performance. In addition, the potential benefits of art therapy were presented. As a response, participants exchanged personal experiences and attitudes toward art therapy.

Strengths

- Healthcare professionals demonstrated readiness and

interest in participating in art therapy workshops.

- The possibility of conducting both group and individual art therapy sessions opened shared themes and personal processes related to working under conditions of exposure to specific workplace stressors. In this paper only a

Limitations

- Due to shift work schedules and frequent changes in the composition of EMS Team 1 members, it was not possible to organize art therapy workshops at a desirable frequency and duration with a consistent group of participants.
- Spatial conditions and participant availability often required improvisation, which limited the standardization of protocols and the ability to conduct comparative outcome measurements.

Therapeutic Guidelines, Prognoses, and Goals

- Providing education about art therapy and offering participants their first experience of art therapy workshops.
- Encouraging participation among individuals who have no prior

experience in visual techniques, while prioritizing the therapeutic process and subjective experience over aesthetic quality.

- Using art therapy to facilitate emotional expression in response to workplace stress and potential traumatic experiences.
- Promoting non verbal expression through visual artwork and creating space for the expression and verbalization of experiences during or after the workshop.

Participants

The groups most commonly consisted of three members of an out-of-hospital EMS Team 1: a physician/emergency medicine specialist, a nurse/medical technician or bachelor-level nurse, and an emergency vehicle driver. The number of participants increased when members of an additional team joined, or decreased when individuals were unable or unwilling to participate.

Participants ranged in age from 25 to 55 years. Some teams had worked together for an extended period, while in others one or more members had only recently begun working together.

Organization of Emergency Healthcare Services

In Croatia, EHS are provided to patients both in hospitals, within Integrated Emergency Hospital Admission Units

(IEHAUs), and as out-of-hospital EHS delivered by mobile emergency teams. However, emergency healthcare is also provided at several county-level branches of the Institutes of Emergency Medicine. The transport of patients and injured persons is also conducted by air, using specially organized helicopter EHS units. EHS operate continuously, 24 hours a day, 365 days a year.

EHS of the Institute of Emergency Medicine of Krapina-Zagorje County are organized through **T1 emergency medical teams**, consisting of physician/emergency medicine specialist, a nurse/medical technician, and an emergency medical vehicle driver. **T2 emergency medical teams** consist of two medical technicians and/or bachelor-level nurses, one of whom operates the emergency vehicle during interventions.

The medical dispatch and call-receiving unit is staffed by two nurses/medical technicians or bachelor-level nurses. A **dispatcher** is a specially trained nurse/medical technician and/or bachelor-level nurse, and in some cases a physician/emergency medicine specialist, who, during a telephone call at the dispatch center, communicates with the patient or another person present at the site of accident. Based on this information, the dispatcher determines the priority of response and dispatches an emergency medical team to the scene.

EHS professionals work in 12-hour shifts that follow a cyclical pattern: a day

shift is followed by a night shift the next day, after which a 48-hour rest period is provided. Work schedules are subject to frequent changes. Although continuity of work within the same team is considered optimal, team members and service areas are sometimes rotated.

The Process

The following chapter presents the group process with Team 1, consisting of a physician/emergency medicine specialist, a nurse/medical technician or bachelor-level nurse, and an emergency medical vehicle driver.

Group Art Therapy Process

The physician/emergency medicine specialist, nurse/medical technician or bachelor-level nurse, and emergency medical vehicle driver engaged in creative expression through visual art media and processed their experiences within a work environment characterized by a high level of occupational stressors.

Participants had no clear understanding of what art therapy was, they associated visual art activity primarily with relaxation and expected it to be "relaxing." Participants repeatedly noted that the last time they had drawn was during art education at school, remembering negative experiences and expressed the belief they "could not draw", hence the mere idea of drawing evoked resistance.

During the initial discussions, participants generally agreed that art therapy could potentially help reduce symptoms of stress and burnout. At the same time, most did not perceive the stressors of their workplace as having a significant negative impact on them personally and believed that they were coping successfully with occupational stress.

At the beginning of the process, it was necessary to build trust, reduce tension, stimulate curiosity and interest in participating in the art therapy process, encourage spontaneous interaction among participants, and facilitate nonverbal expression through visual art-making.

A small number of staff members chose not to participate actively in the workshops but remained present in the space and observed others, which is also considered a form of participation at the level of group dynamics. In subsequent sessions, participants engaged more readily in group tasks, and initial discomfort gradually diminished. They expressed themselves through visual artworks, which served as starting points for reflection on work-related experiences, emotions, and interpersonal relationships, later shared verbally. Each art therapy session was unique and tailored to the participants, their current circumstances, and the immediate therapeutic goals.

The examples presented below illustrate selected segments of the group art therapy process with EMS professionals and do not provide insight into the en-

tire therapeutic process. In accordance with ethical principles and respect for participant confidentiality, only selected examples are presented, while certain elements are intentionally omitted.

Scribble

One of the proposed group interventions was the scribble technique. Participants engaged in spontaneous, repetitive movements without conscious planning or reflection. Through rapid and free scribbling, various shapes emerged, inhibitions gradually decreased, and space opened for self-reflection, while stressful experiences became accessible at a somatic level.

The choice of technique was free; however, most participants used colored pencils. Precision, participants decided, was not important, and artworks were created on tables, chairs, or any other availab-

le flat surface. Participants were focused, often using their non-dominant hand, occasionally communicating with group members.

Upon completion, under the guidance of the art therapist, lines and shapes in the drawings were observed collectively (Figure 1). In sharing, the drawing became an auxiliary means for expressing emotions that would have been difficult to communicate through words alone. The art therapy process provided an opportunity for a temporary shift of focus away from work-related stressors.

This therapeutic intervention was well received and described by participants as relaxing and “fun,” accompanied by a pronounced sense of relief as an outcome of the activity. Most participants used one to three colors, predominantly employing linear elements. A lack of shapes such as symbols, dots, or circles was observed (Figure 2).

Figure 1

No title



Figure 2

No title



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Emotion Wheel

The Emotion Wheel is a visual representation of experienced emotions presented in the form of therapeutic guidance, allowing freedom within the theme. Each suggestion was presented as a starting point for creation rather than an instruction. Using drawing techniques and materials (paper, colored pencils or markers), participants drew a circle divided into segments of varying sizes and assign them emotions of their own choosing. The identified emotions were then associated with colors perceived as appropriate by the participant. In this way, greater insight into currently present emotions was achieved, and emotional regulation and support was facilitated.

Figure 3 presents the emotion wheel created by an EMS vehicle driver, divided into twelve segments, each colored in selected hues and labeled with the corresponding emotions. At the encouragement of the art therapist, the participant reflected on his current emotional state as related to that particular workday—tasks already completed and those still awaiting him. Moving clockwise from the twelve o'clock position, the following emotions were recorded: fatigue, confusion, relaxation, anxiety, irritability, calmness, inadequacy, anger, guilt, melancholy, fulfillment, and satisfaction.

The discussion, together with the art-making process, proved to be an effective way of increasing awareness of current emotional states. “Image and word toge-

ther reveal more than either one alone” (McNiff, 1992). In this case, the emotion wheel was divided into a relatively large number of segments, each associated with a distinct emotion, with clear and subtly separated boundaries between colors. Positive emotions (relaxation, calmness, fulfillment, satisfaction) were represented to a slightly lesser extent than neutral and negatively toned emotions. The largest segment of the circle was assigned to relaxation, depicted in a neutral gray color, while fulfillment and satisfaction were grouped together in blue and yellow and positioned adjacent to the prominent fatigue and confusion at the top of the drawing.

Figure 3

No title

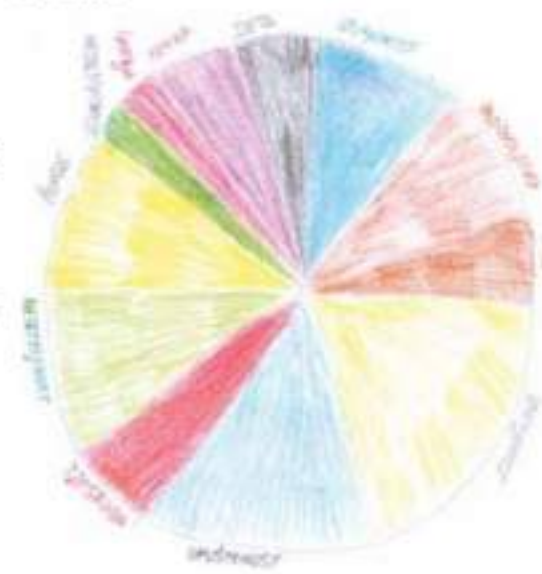


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Art therapy provided a nonverbal mode of emotional expression, creating a certain distance from the problem itself and allowing subconscious material to safely emerge. At the same time, the creative process facilitated emotional regulation. Figures 4 and 5 present examples of a narrower range of emotions, which may indicate individual differences in the experience and expression of emotions, depending on participants' needs at the moment of engagement. The first artwork was created using felt-tip pens and is characterized by diagonal filling with lines within the circular space. A sense of strength and speed in hand movement is evident, accompanied by subtle variations in the intensity of filling across the segments of the circle. The three selected emotions — happiness, anger, and satisfaction — are arranged in such a way that happiness (yellow) occupies three-quarters of the circle. Anger is indicated by red, occupies a smaller area, and is

enclosed by the emotions of happiness and satisfaction (green).

Red was used by almost all participants to express strong emotions such as anxiety and anger, but also passion. Other colors acquired different connotations: yellow expressed happiness but also confusion, jealousy, or calmness, while green symbolized happiness and satisfaction for some participants, and irritability and a sense of inadequacy for others.

The process of visual emotional expression allows for emotional externalization and awareness, making art therapy an effective tool for understanding and regulating stress-related states.

Stress and Art Therapy

Art therapy can support the understanding of experienced stressful events. Non-verbal expression prior to verbal discussion facilitates the processing of stress.

Figure 4
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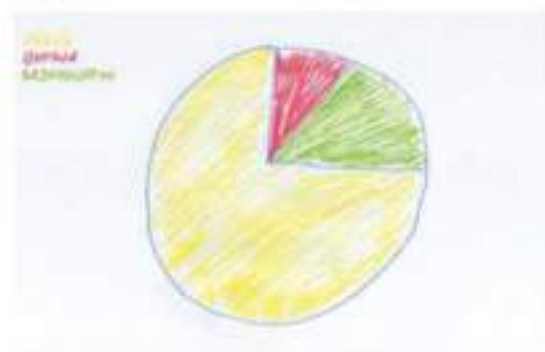
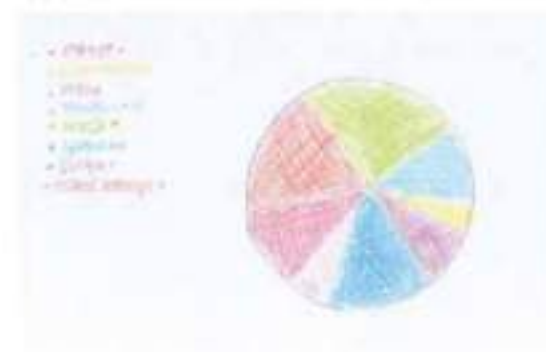


Figure 5
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The focus is on fostering resilience and inner strength and developing strategies for coping successfully with stressful challenges.

It was important to provide a safe space in which participants felt comfortable expressing themselves spontaneously. Participants were invited to depict a work-related event they experienced as particularly stressful. At the end of the process, participants discussed their artworks, gaining deeper insight into their own patterns of thought and emotion.

Figure 6 illustrates the lived experience of responding to an emergency call. The anticipation during the journey to the scene, often without knowing how complex or demanding the intervention would be, was consistently described as a highly stressful event, which can be traumatizing regardless of the participant's knowledge, skills, and prior experience. The motifs in the driver's drawings frequent-

ly included the ambulance vehicle, patients, and the road.

Figures 7 and 8 show drawings created on a body-outline template, in which the art therapy process encourages awareness of bodily sensations and their transformation into colors, lines, and shapes. This approach provides focus, enhances concentration and attention, can help reduce negative emotions, and offers insight into the perception of psychosomatic effects on one's body. Using various techniques, participants can depict their physical and emotional states, as well as areas where they feel

Figure 7
No title



Figure 6
No title



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Figure 8
No title

stress, either within or outside the body outline. After completing the artwork, discussion with the art therapist focused on the colors and shapes used, as well as on the emotions that were given form through this visual language.

In this task, participants described their feelings when responding to an emergency call and marked intense bodily sensations on the body outline, which they described as a "feeling," "tightness," or "pulsing" in specific areas of the body. In this way, the drawing becomes a bridge between bodily experience and emotional

transfer

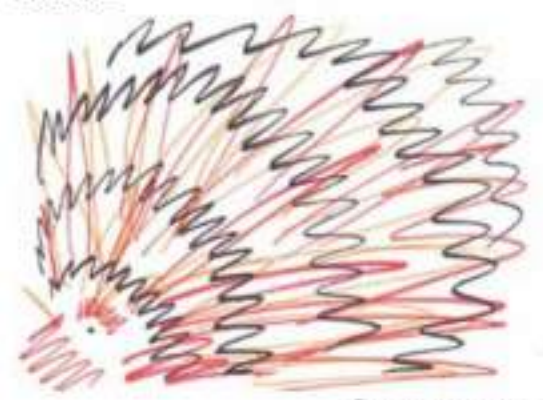
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Figure 9
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awareness, facilitating the recognition and subsequent verbalization of stress reactions.

Figure 9 illustrates the experience of coping with a verbally aggressive patient, from arrival at the scene, through the intervention, to departure, representing a daily source of stress in emergency medical work. Unwanted and unpleasant sounds of verbal aggression were visualized in the drawing a cross the stages of the patient's arrival and departure. At the onset of the event, the participant experienced saturated tension, while at the end, a sense of relief was felt, with the dynamic shift clearly expressed in the composition of the drawing. Rendered in pencil and monochromatic, the drawing depicts dense lines that disperse diagonally from one corner, gradually thinning, symbolizing the release of tension. This visual representation de-

Figure 10
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monstrate show art therapy enables the nonverbal expression of a stressful event that was difficult to convey in words.

Figures 10 and 11 visualize the sound of the phone during a call to the Medical Dispatch Unit for an emergency intervention. The physician described the call as a "moment of great discomfort and stress," which she attempted to express through colors, lines, and shapes. The creative expression allowed for clearer articulation and understanding of her own feelings.

In **Figure 10**, the physician depicted the sound as noise resembling "loud waves that prick like needles," with the drawing resembling a spiny hedgehog.

Figure 11 visually interprets the beginning of the emergency intervention, showing a visible gradation of discomfort diminishing, as the large gray clouds are minimized and transformed into new forms with the addition of yellow and red. This gradual transition emphasizes how

Figure 11
No title

art therapy can transform intense emotional reactions into a comprehensible visual narrative.

Within the group art therapy process, each participant chose to present their own individual experience of a real event from emergency medical practice. Although the participants often experienced stressful interventions together, no two or more participants chose the same event simultaneously.

The focus in all groups was on the individual experience of the stressful intervention, along with a description of emotions and concerns at that moment. Additionally, the body outline exercises helped participants become aware of physiological reactions to stress and strategies to regulate these symptoms.

Initially, all participants believed that the stressors of their work did not affect their functioning; however, the nonverbal expression in the art therapy sessions

revealed themes of exhaustion, concern about the outcomes of emergency interventions, and awareness of the need for self-care and proactive measures to prevent burnout.

Discussion

Burnout is the experience of physical, emotional, and mental exhaustion caused by prolonged engagement in emotionally demanding situations (Mateen & Dorji, 2009). It can affect both the physical and psychological well-being of physicians, which in turn may influence patient safety and the quality of care (Lu et al., 2015; Martin, 2018).

Positive motivating factors or job satisfaction, such as recognition for a job well done, responsibility for others, career advancement, and salary increases, can play an important role in the ultimate outcomes of exposure to workplace stressors (Kumar, 2007). Some factors are protective, such as engagement in activities outside of work and the workplace (Garfinkel et al., 2001). Academic work has been negatively correlated with depersonalization and emotional exhaustion, suggesting that personality traits associated with academic interests may have a protective effect against the development of burnout (Kumar, 2007; Agius et al., 1996).

There are numerous workplace stressors that can contribute to healthcare professionals' experience of burnout, ma-

king burnout among physicians a global problem. EHS professionals are more exposed to stress compared to other healthcare workers and are at higher risk of burnout, with emergency physicians being particularly susceptible to burnout compared to physicians of other specialties or other health care professionals working in emergency medicine (Zhang et al., 2020). The prevalence of burnout in EHS professionals overall exceeds 60% (Shanafelt et al., 2012). Family support, often limited due to the working hours of medical staff, plays an important protective role against burnout (Jyothindran et al., 2021).

It has long been recognized in medicine that artistic activities have positive effects on both patients and healthcare staff when implemented in healthcare settings. Art provides a significant medium in which illness and health, medical interventions, and treatment become deliberate and visible (Biernoff et al., 2024).

Most healthcare professionals believe that engagement in visual art activities positively influences patients' health and well-being, which can in turn affect stress levels, mood, pain perception, and sleep quality. Artistic activities may improve communication between medical staff and patients and can reduce stress, improve mood, enhance work outcomes, and decrease burnout among healthcare professionals (Wilson et al., 2016).

Currently, most health care workers are still familiarizing themselves with art

therapy. Art therapy is often conflated — both in the general population and within health care systems — with general art activities. One of the aims of this study was to present art therapy within a healthcare context in a precise and accurate manner. None of the participants in these art therapy workshops had previously participated in an art therapy session. Some participants initially envisioned art therapy as “art as therapy.” All participants expressed concern about their ability to participate, because of their lack of artistic talent and knowledge of art techniques.

In the initial discussion, most participants reported not feeling chronically stressed or experiencing symptoms of burnout. They believed that their work allowed them a more meaningful engagement with their patients. They were satisfied with the rhythm of their work and the relatively lower administrative burden, which is more pronounced in other medical fields.

Regardless of stress intensity, participants' perception of stressful events varied. They reported that the most stressful period was the anticipation of arriving at the scene of an emergency, with the greatest stressors being pediatric cases as well as life-threatening emergencies.

All participants who voluntarily decided to engage in the art therapy sessions responded positively to the art therapy process and facilitation. Despite initial hesitation and reservation, most expres-

sed satisfaction with participation. Early concerns regarding artistic expression dissipated, and participants quickly and easily embraced nonverbal expression. A certain number of participants initially wanted to observe rather than actively participate. There were no participants who withdrew from the process. Throughout the workshops, participants shared experiences of chronic fatigue, concerns present during emergency interventions, and recognition of the need to learn strategies for coping with stress. Nonverbal expression provided an alternative, more effective pathway to accessing emotions related to frequently repressed trauma.

All participants initially felt confident in their ability to cope with workplace challenges and did not perceive themselves to be at risk of burnout. Through the art therapy process, many underlying emotions and reflections related to the stressors of working in emergency medicine were brought to the surface. The risk of burnout became both possible and tangible, providing a direction for further consideration of tools and strategies that could help mitigate the impact of stress in this highly demanding work environment.

Workshop Outcomes

Art therapy was successful in achieving a Art therapy proved effective in providing a mental break from high levels of occupational stress and allowed par-

ticipants to process and identify emotions related to stressful events. All participants reported positive experiences from participating in the art therapy workshops, quickly overcoming initial reservations. Art therapy facilitated an awareness of the risk of developing burnout symptoms.

Limitations

One of the main limitations is the relatively low level of familiarity among healthcare professionals with art therapy as a psychotherapeutic technique, which may influence their decision to participate in workshops. The absence of a standard workschedule, long working hours, and fieldwork across multiple locations make it difficult to organize workshops at predetermined times and maintain continuity.

Guidelines

Art therapy is applicable for working with individuals and groups exposed to workplace stressors and at risk of developing burnout. Promoting its benefits and implementing art therapy within the healthcare system among healthcare professionals appears desirable for future practice of art therapists. Ideally, a dedicated space for art therapy should be established, accessible throughout working hours, with an art therapist who can adapt to the demands of the healthcare

system, shift schedules, and emergency situations. Continuous availability of art therapy would facilitate acceptance of both individual and group art therapy, especially after shared traumatic experiences.

Conclusion

Art therapy is a young but growing discipline that is still gaining recognition among the general population and healthcare professionals. Healthcare workers are exposed to stress due to the nature of their work, which can lead to burnout, and certain medical fields, particularly emergency medicine, are at higher risk.

Art therapy, as a psychotherapeutic technique, has proven effective as both an independent intervention and an adjunct to various psychotherapeutic approaches. It can be applied individually or in groups, without age limitations. Group settings help reduce feelings of isolation, foster empathy, and promote understanding of others' experiences, while individual sessions allow for continuity, deeper processing, and the creation of a safe, confidential space where clients can freely express themselves through the visual language. The therapist can closely monitor subtle changes in expression, symbolism, and emotional reactions, adjusting interventions in real time.

Art therapy is applicable across most medical disciplines, both for patients and

for healthcare professionals at risk of burnout. This first series of workshops in Croatia, conducted among EHS staff, demonstrated that initial hesitation can be replaced by satisfaction and a strong recommendation of art therapy as an effective tool for stress reduction and burnout prevention.

Through engagement with art materials, participants were able to express their stories and experiences, revealing positive

outcomes of the process. Working with materials and movement contributed to nervous system regulation, provided a break from daily tasks, while group workshops fostered a sense of community and awareness of the importance of self-care. Art therapy workshops not only introduced participants to art therapy but also encouraged reflection on its role in the healthcare system and public health, particularly in the prevention of burnout.

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