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Study on the Main Paths of Art Therapy in Alleviating Occupational Burnout Among Medical Staff

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Abstract: In contemporary medical service development, healing-oriented environmental design has gradually gained widespread attention across the healthcare industry. This humanistic design philosophy focuses on building inclusive spatial environments that support physical recovery, psychological stability, and positive social adaptation, further facilitating patients' clinical rehabilitation. Targeting the prevalent occupational burnout dilemma among frontline medical workers, this paper explores the core connotation, inherent characteristics, and practical value of art therapy intervention. It systematically analyzes multiple inducing factors of medical staff's job burnout from practical work scenarios. Based on multi-dimensional analysis, this study constructs a comprehensive intervention system covering emotional and physical regulation, cognitive reconstruction, attention training, and social support optimization. The research findings can provide feasible technical strategies and theoretical support for medical institutions to relieve medical staff's burnout and protect their physical and mental health. Additionally, it offers innovative practical ideas for improving the humanistic service system and optimizing occupational health management in modern hospitals.

Keywords: Art therapy; Frontline medical staff; Occupational burnout; Intervention path; Mental health management

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1. Introduction

With the continuous expansion of public medical demand and the continuous improvement of medical service standards, frontline clinical personnel are facing unprecedented work intensity and long-term psychological pressure. Relevant industry surveys show that nearly 68.3% of clinical nurses in China have obvious psychological stress reactions, while the positive detection rate of anxiety and depression symptoms exceeds 60%. Medical staff working in emergency departments, oncology departments, and intensive care units suffer more severe mental health challenges due to high-risk and high-load work attributes. Occupational burnout has become a common occupational psychological problem restricting the professional development of medical practitioners.

Traditional hospital mental health intervention mainly relies on offline psychological counseling and

mindfulness training. However, such single intervention modes have obvious limitations, including rigid activity forms and low staff willingness to participate, which cannot meet the long-term and individualized psychological adjustment needs of medical workers. As a non-pharmacological and experience-based psychological intervention method, art therapy realizes emotional release and psychological adjustment through multi-sensory interactive experience and non-verbal expression. It has unique advantages in alleviating chronic psychological fatigue and emotional exhaustion, showing great application potential in the field of medical staff's occupational health protection. In this context, exploring the practical paths and intervention effects of art therapy on medical staff's occupational burnout is of great practical significance for improving hospital humanistic management and maintaining the stability of medical talent teams.

2. Core connotation and essential characteristics of art therapy

Art therapy is a comprehensive psychological intervention method that integrates modern psychological theories and diverse artistic creation forms, including painting, music expression, dance movement, and horticultural design. Different from traditional verbal psychotherapy, this therapy takes artistic creation as the core carrier, providing a barrier-free, non-verbal expression channel for individuals with emotional repression and cognitive confusion. In the process of immersive artistic creation, human sensory organs can be fully stimulated, which helps regulate the secretion of dopamine, endorphins, and other pleasure neurotransmitters, and effectively improve the excitability of the autonomic nervous system.

The unique advantage of art therapy lies in its ability to avoid individual psychological defenses caused by verbal communication. In a relaxed and safe artistic atmosphere, participants can spontaneously project subconscious emotions and inner pressure into creative works, realizing natural emotional catharsis and self-cognitive integration. With the characteristics of free expression, immersive experience, and participatory interaction, art therapy can effectively improve the psychological state of individuals in high-intensity working environments. It has become an innovative and practical auxiliary means of mental health intervention for high-pressure professional groups [1].

3. Practical value of art therapy in relieving medical staff's occupational burnout

3.1. Non-verbal creation breaks emotional expression barriers

Emotional exhaustion is the most prominent core symptom of medical occupational burnout. Frontline medical staff are exposed to patients' pain, illness, and even death for a long time. Restricted by professional ethics and role norms, they cannot freely vent negative emotions in work scenarios, resulting in continuous accumulation of internal pressure and negative feelings. Traditional verbal communication is difficult to adapt to the emotional release needs of medical workers who are used to suppressing personal feelings.

Art therapy relies on non-verbal creative modes such as hand-painted coloring, clay modeling, and music improvisation to build a neutral and judgment-free emotional output platform. In the process of free creation, medical staff can convert unspeakable psychological pressure and negative emotions into intuitive artistic works. This low-threshold emotional regulation mode does not require professional artistic skills or standardized creation standards, which fully adapts to the fragmented rest time and special psychological state of clinical workers. It effectively makes up for the deficiency of traditional emotional intervention methods and provides a sustainable way for medical staff's daily emotional management.

3.2. Multi-sensory interaction improves long-term intervention effectiveness

At present, many hospitals have launched mindfulness decompression and psychological relaxation activities for staff, but most of them face the problems of low participation rates and poor long-term adherence. Rigid and repetitive training content will increase additional cognitive burden for overworked medical staff, resulting in limited sustainable intervention effects. Unlike single psychological training, art therapy integrates multi-dimensional sensory experiences such as vision, hearing, and touch into psychological adjustment.

Diversified artistic creation can activate the right brain's imagery processing function, reduce the rational thinking pressure of the left brain, and enable medical staff to achieve psychological relaxation and pressure relief in the process of enjoying aesthetic experience. Relevant comparative studies have confirmed that mental health intervention integrated with artistic activities can effectively increase staff participation rate by about 20%, and significantly improve activity satisfaction and full-cycle completion rate. The flexible and interesting intervention form of art therapy solves the bottleneck of poor adherence to traditional mental health training, laying a foundation for long-term and normalized occupational psychological intervention.

3.3. Holistic intervention realizes synchronous physical and mental regulation

Occupational burnout is a complex psychosomatic syndrome, which involves not only emotional exhaustion and cognitive apathy at the psychological level, but also physiological abnormalities such as increased cortisol levels and decreased heart rate variability. Single psychological counseling or physical relaxation cannot fully improve the comprehensive burnout state of medical staff. Art therapy has multi-dimensional intervention attributes, which can act on the physical, psychological, cognitive, and social levels simultaneously.

The physical movement and sensory stimulation in artistic creation can regulate the autonomic nerve balance of the human body; visual aesthetic experience such as color and graphics can optimize the emotional processing mechanism of the limbic system; group creation and interactive communication can rebuild individual social support resources. This holistic intervention mode realizes the coordinated improvement of physical state and psychological emotion. Compared with traditional single-target intervention methods, art therapy has more stable and lasting practical effects in alleviating medical staff's occupational burnout [2].

4. Analysis of inducing factors of medical staff's occupational burnout

4.1. Long-term high-intensity work causes psychosomatic depletion

Most frontline medical posts in China are characterized by long working hours, frequent shifts, and heavy task volume. Medical staff in emergency, critical care, and oncology departments are in a state of high tension and high workload for a long time. Long-term external work pressure will overactivate the human hypothalamic-pituitary-adrenal axis, resulting in continuous high secretion of stress hormones. Long-term physical exertion and mental tension will directly lead to physical fatigue and emotional depletion.

In addition, medical staff need to maintain professional and gentle service attitudes in doctor-patient communication for a long time, which generates a large amount of emotional labor. Frequent exposure to patients' painful conditions and end-of-life scenes is also likely to trigger compassion fatigue. The dual consumption of physical energy and emotional resources is the primary cause of continuous deterioration of occupational burnout.

4.2. Cognitive deviation leads to loss of professional self-value

The public has extremely high moral and professional expectations for medical workers. Combined with their own professional pursuit and sense of mission, medical staff often form strict self-requirements and perfectionist working standards. In the face of intractable clinical diseases, uncontrollable treatment results, and complex doctor-patient contradictions, medical practitioners are prone to self-denial and professional self-doubt, which reduces professional self-efficacy.

Depersonalization is a typical negative cognitive state in the process of burnout development. To avoid continuous psychological impact, medical staff will separate personal emotions from clinical work and adopt indifferent and alienated working attitudes. Long-term cognitive dissonance and value confusion will gradually weaken their recognition of professional significance, resulting in the loss of sense of achievement and self-value in work.

4.3. Long-term attention overload induces chronic cognitive fatigue

Clinical diagnosis, surgical operation, nursing observation, and emergency rescue work require high concentration and continuous attention input. Medical staff need to keep a highly focused working state for a long time to ensure medical safety. Frequent shift changes and irregular overtime work disrupt normal biological rhythms, making it difficult for cognitive attention to be effectively recovered and adjusted.

Long-term high-intensity attention consumption will lead to the decline of prefrontal cortex executive function, resulting in scattered attention, slow responses, and reduced work efficiency. This chronic cognitive fatigue not only affects the quality of medical services, but also makes medical staff unable to relax in their spare time completely. The continuous accumulation of mental fatigue further aggravates emotional burnout and negative working mentality [3].

4.4. Insufficient social support weakens occupational belonging

Medical work has strong professionalism and independence, and shift work mode limits in-depth emotional communication between colleagues. Daily peer interaction is mostly work-oriented, lacking effective emotional comfort and experience sharing. At the organizational level, some hospitals have imperfect humanistic care mechanisms, single performance assessment methods, and narrow promotion channels, which make it difficult for medical staff to obtain sufficient organizational recognition and a sense of belonging.

In addition, the tense doctor-patient relationship and complex public opinion environment further increase occupational pressure. The lack of effective social support and emotional buffer mechanisms makes negative emotions accumulate for a long time, which reduces medical staff's professional identity and organizational loyalty, and finally accelerates the deterioration of occupational burnout.

5. Multi-dimensional intervention paths of art therapy for alleviating medical burnout

5.1. Physical-emotional intervention: Realize efficient stress relief and emotional catharsis

Autonomic nervous system balance is the key to maintaining individual emotional stability. The multi-sensory stimulation produced in artistic creation can directly act on the human neuroendocrine system,

effectively reducing physical tension and emotional exhaustion. Hospitals can set up fixed art relaxation corners in staff rest areas, equipped with simple and easy-to-operate art supplies such as watercolor paints, colored pencils, clay, and origami materials. Medical staff can use fragmented rest time such as shift intervals and lunch breaks for 15 to 20 minutes of free creation.

This creation mode does not pursue professional skills or perfect works, but takes free color matching and casual creation as the carrier to realize instant emotional relaxation. For departments with heavy work pressure, hospitals can organize monthly group painting catharsis activities, using large canvases and acrylic pigments for unrestricted doodle creation. The combination of physical movement and color expression can effectively release accumulated physical tension and inner anxiety. Conditional medical institutions can be equipped with biofeedback equipment to monitor real-time changes in heart rate variability during creation, helping medical staff intuitively perceive the regulatory effect of art therapy and cultivate independent emotional adjustment ability.

5.2. Cognitive reconstruction intervention: Improve self-recognition and professional acceptance

Art creation has a natural psychological projection function, which can help individuals externalize subconscious confusion and negative cognition, so as to realize self-exploration and cognitive optimization. Hospitals can launch an 8-week structured group art therapy program, with professional art therapists providing weekly 90-minute targeted guidance.

The whole intervention is divided into three progressive stages. In the initial stage, participants complete free creation themed on professional identity perception and freely express work-related emotions, puzzles, and expectations through pictures and colors. Through group sharing and professional guidance, medical staff can identify their implicit cognitive biases and negative emotional tendencies. In the middle stage, participants modify and optimize their initial works by adjusting color matching, adding graphic elements, and changing layout, so as to experience cognitive transformation and perspective switching. In the later stage, combined with hand-made binding and text recording, participants sort out their professional growth experience, realize self-acceptance, and reconstruct positive cognition.

In the whole process, therapists maintain a neutral and non-judgmental attitude, guide participants to complete inner reflection independently, and gradually correct negative cognitive modes such as perfectionism and self-denial, so as to alleviate depersonalization symptoms caused by long-term work pressure [4].

5.3. Behavioral attention intervention: Integrate art experience and mindfulness training

Aiming at the chronic cognitive fatigue and attention overload of medical staff, this study constructs an art-integrated mindfulness intervention model to realize effective attention diversion and mental relaxation. The 8-week systematic training course includes diversified interactive projects. In the first stage, breathing awareness training is combined with line drawing, guiding medical staff to anchor their attention on real-time sensory experience through synchronous breathing and creation, so as to break the state of mental tension and scattered attention.

In the middle stage, diversified artistic forms such as mandala coloring, clay modeling, and torn-paper collage are introduced to carry out targeted mindfulness training. Mandala coloring focuses on improving visual concentration, clay modeling releases inner suppressed pressure through tactile experience, and collage

creation helps abandon a rigid control mindset. In the later deepening stage, natural scene creation and mindful walking are added. Medical staff collect natural materials in the hospital green space and complete landscape art creation, integrating natural perception and aesthetic experience into psychological adjustment.

Meanwhile, supporting home practice materials and an online check-in mechanism are equipped to form a closed-loop training mode combining centralized teaching and daily independent practice, which continuously optimizes medical staff's attention regulation ability and psychological resilience.

5.4. Social organizational intervention: Build inclusive interactive atmosphere and social support

Perfect social support is a key buffer against occupational burnout. Group art therapy takes collaborative creation as the carrier to build an equal and relaxed interpersonal communication platform for medical staff, breaking the hierarchical role boundary in daily work. Hospitals can take departments and teams as units to carry out regular collective art activities such as collaborative mural painting, team choir training, situational drama experience, and shared horticultural creation every month.

In the process of large-scale collaborative mural creation, each participant independently completes local graphic creation, and finally forms a complete artistic work through natural integration. This equal cooperative mode can effectively narrow the psychological distance between colleagues and enhance team cohesion. Choir training and situational drama can promote emotional resonance and mutual understanding through voice expression and role experience. Public horticultural creation enables medical staff to participate in landscape planning and maintenance together, cultivating a sense of collective honor and professional belonging in long-term interactive practice. The normalized group art interaction can effectively optimize the workplace interpersonal atmosphere, improve medical staff's social support level, and fundamentally alleviate burnout symptoms caused by emotional isolation.

6. Conclusion

With the unique advantages of non-verbal emotional expression, multi-sensory immersive experience, and group interactive participation, art therapy can effectively act on the emotional state, cognitive mode, attention quality, and social relationships of medical staff. It forms a multi-dimensional and systematic intervention system to improve occupational burnout. The four intervention paths of physical-emotional regulation, cognitive reconstruction, attention behavioral training, and social support optimization are mutually coordinated and complementary, which can comprehensively improve the psychosomatic state of frontline medical workers.

As a humanistic and low-threshold psychological intervention method, art therapy is suitable for normalized promotion in hospital occupational health management. Subsequent research can further enrich intervention forms, design differentiated schemes for different departments and job groups, and explore online-offline integrated intervention modes. Long-term follow-up investigation and effect evaluation can be carried out to continuously optimize the practical system of art therapy, so as to provide lasting guarantee for the physical and mental health of medical staff and the stable development of medical teams.

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References

[1] He Y, 2024, A Brief Analysis of Healing Environment Concepts in Hospital Environmental Culture Construction. Jiangsu Health Management, 35(12): 1767–1770.

[2] Song P, Yang Y, Zeng J, 2024, Construction and Application of Daytime Chemotherapy Centers Guided by Healing Environment Theories. Nursing and Rehabilitation Journal, 23(11): 76–80.

[3] Du Z, Lin B, Chen Z, 2022, Application Research of Healing Sculptures in Medical Landscape Design. Sculpture, 2022(4): 62–63.

[4] Bian Y, Shang R, Wang F, 2022, Research on Healing Environment Design in Medical Institutions. Journal of Xingtai Vocational and Technical College, 39(1): 90–94.