




## Accessibility in Art Therapy: Keeping Embers of Expressions Alive

**Bani Malhotra**, PhD, ATR-BC

Postdoctoral Fellow, Board-Certified Art Therapist  
Department of Physical Medicine and Rehabilitation  
Virginia Commonwealth University, Richmond, VA  
[bani.malhotra@vcuhealth.org](mailto:bani.malhotra@vcuhealth.org) 

---

### ABSTRACT

Psychosocial challenges after a traumatic burn injury are significant, especially during the acute care stage, where patients experience painful procedures and increased physical and emotional impacts. Early psychosocial support is crucial to help patients cope. In collaboration with a multidisciplinary team, I developed and implemented art therapy intervention study with hospitalized adult burn patients as part of my doctoral dissertation research. In this educational comic, I visually render the intervention's unique features of including adaptive tools and modifications made for art engagement during art therapy. The goal is to raise awareness about accessibility and assistive technology solutions that facilitate artistic expression despite physical limitations and promote interdisciplinary collaboration in medicine to improve psychosocial functioning.

**Ethical Statement:** This study relating this comic was approved by the Crozer-Keystone Health System Institutional Review Board (IRB) (Approval number CKHS 22-030) with Drexel University as the relying IRB.

**Funding Statement:** This study supported by the Dean's PhD Student Research Award from College of Nursing and Health Professions at Drexel University.

**Acknowledgments:** The 3D printed accessibility tools were made in collaboration with Dr. Arun Ramakrishnan from Drexel University.

---

**Received:** December 28, 2024 **Accepted:** July 4, 2025 **Published:** August 13, 2025

**Competing Interests:** The author declares that they have no competing interests.

*Graphic Medicine Review* is a peer-reviewed open access journal. © 2025 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

See <https://creativecommons.org/licenses/by/4.0>.  ACCESS

## INTRODUCTION

Burn injuries have been described as traumatic, painful, and distressing experiences that can result in lifelong physical adjustments, disabilities, stigma, and rejection (Attoe & Pounds-Cornish, 2015). Burn injuries can be caused by heat, flame, chemicals, electricity, lightning, or radiation and require resource-intensive multidisciplinary care by providers with different expertise, typically provided in specialized centers (Burnett et al., 2017). When burn patients are hospitalized, they may experience the increased physical and psychosocial impact of injuries, including grief, anxiety, distress, depressive symptoms, and shifts in body functioning and identity (Rosenberg et al., 2018). Burn care is invasive and involves multiple surgeries over an extended period, adding to the distress. Painful treatments, isolation, and pre-existing mental health conditions further exacerbate an individual's ability to cope with the traumatic burn event, highlighting the importance of early psychosocial support as part of multidisciplinary inpatient care. Extant literature suggests that enhancing emotion regulation for hospitalized burn patients through distraction and reappraisal or reinterpretation of emotional events can foster positive emotions, optimism, expression, and gratitude, ultimately promoting growth after the adverse burn injury (Martin et al., 2017; Woolard et al., 2022).

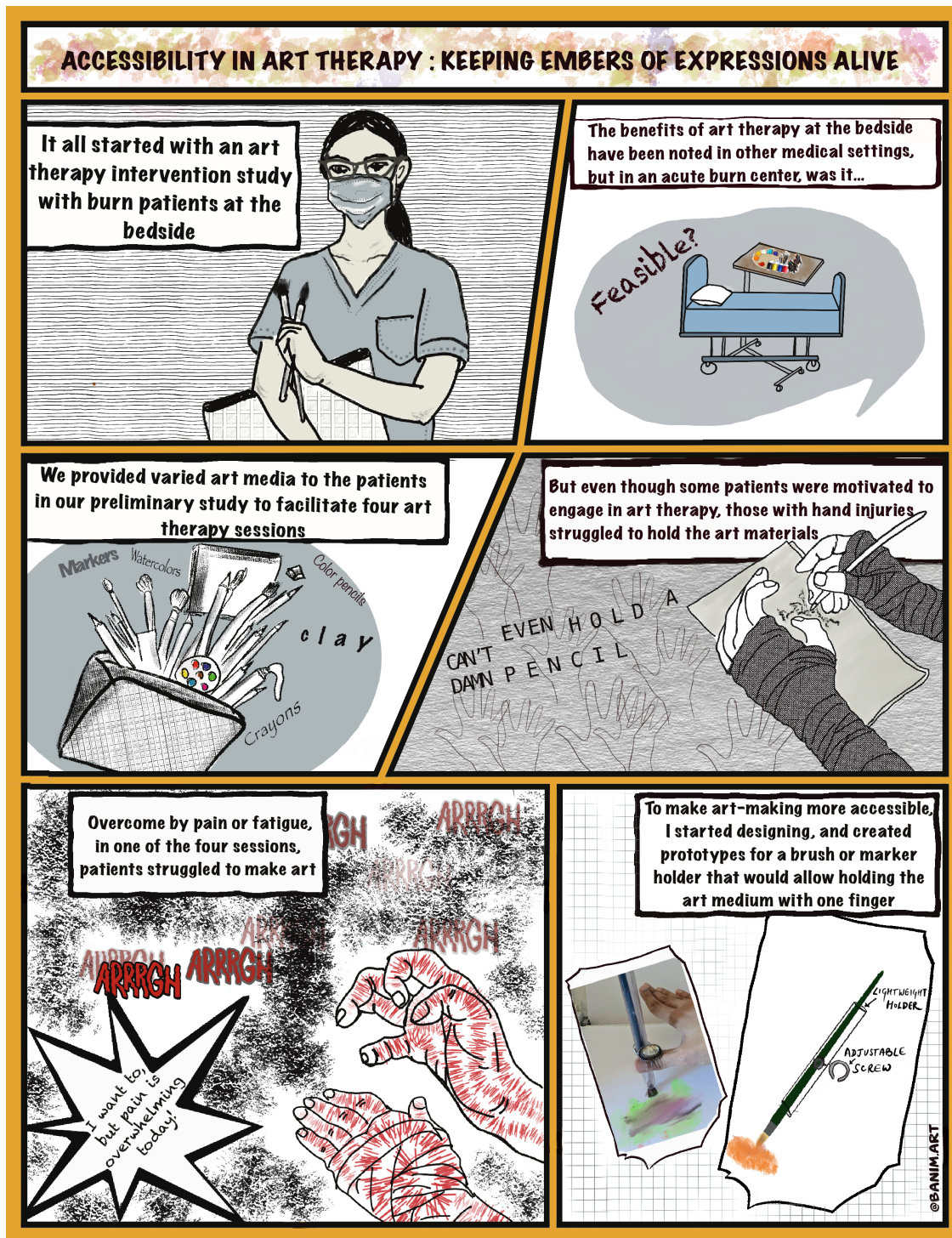
Art therapy, a mental health profession that combines the creative process with art engagement in the presence of a credentialed art therapist has been shown to be beneficial to assist patients coping with life-threatening burn injuries (Malhotra et al., 2022), but no empirically validated research exists examining its impact on burn survivors in recent years. Given the scarcity of psychosocial interventions for burn patients, particularly adults with burn injuries during hospitalization, an art therapy intervention was developed, implemented, and examined using a mixed methods approach as part of a doctoral dissertation research to improve emotion regulation and expression. The study was implemented at an inpatient burn center in northeast United States with the primary aim to assess the impact of 4 art therapy sessions on psychosocial functioning through standard outcome measures, patient artworks, and their experiences documented through post session feedback, an exit interview, and the art therapists' notes (Malhotra, 2023). Due to limited research on art therapy with burn patients, the doctoral research also included describing the four-session art therapy intervention protocol that would serve as a guide for service providers and a research tool for future studies (Malhotra et al., 2025); while also exploring healthcare providers' experiences and perspectives on art therapy in a burn center without prior art therapy programming (Malhotra & Kaimal, 2024).

To meaningfully facilitate art therapy, it was necessary to adapt and modify art activities so that burn patients could engage in or create art. Art therapy adaptation refers to changes in approaches or materials during sessions to better engage and support clients (Smith, 2017). This includes being sensitive to patients' needs, such as considering their post-surgery or post-procedure pain, fatigue, and any bandaging on their hands. It also involves finding ways to make sessions more engaging and understandable to help them overcome these physical and psychosocial barriers.

With patient needs in mind, I designed the four art therapy sessions to ensure that the methods, materials, and media were both accessible and easily adaptable. Furthermore, accounting for patient feedback during a feasibility study, I noted that in one of the four sessions, the patients were not inclined to actively create art during art therapy, but rather preferred to look at images or their own previous artworks (Malhotra et al., 2023). Addressing these concerns and allowing opportunities

for autonomy and participation, we included a receptive art therapy session with a choice to view a stimulus set of 15 famous artworks or to engage in guided visualization followed by tactile exploration. The complete intervention protocol with materials and media is available elsewhere (Malhotra et al., 2025).

Figure 1

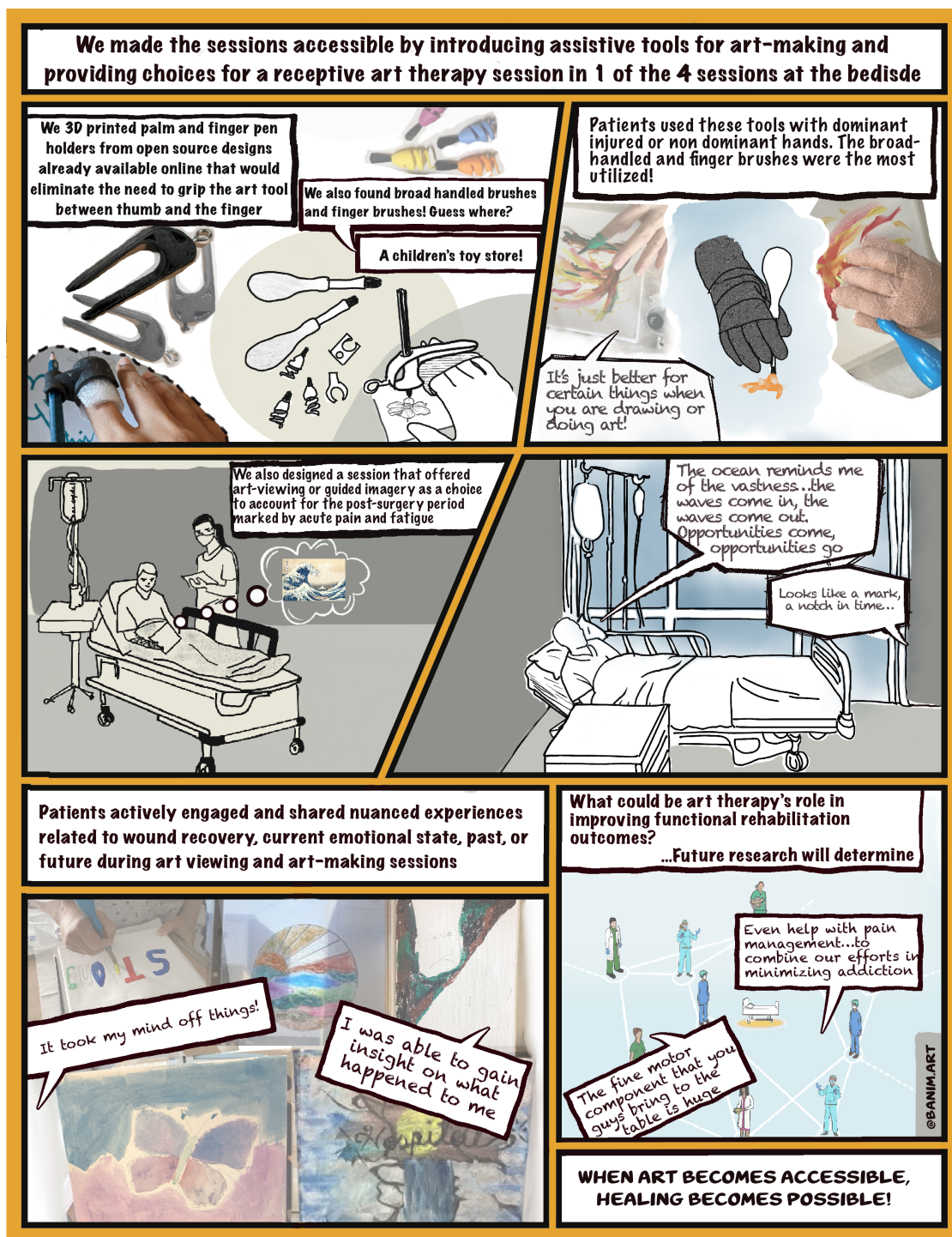




## PROCESS

My motivation to create this comic was to underscore that designing accessible psychosocial rehabilitation interventions are essential, not optional in delivering truly person-centered therapy. I designed an educational comic from my experience in this research as an art therapist-researcher to summarize and to educate the readers about simple, effective ways in which art therapy was offered to make it accessible with modifications based on no to low assistive technology (AT) solutions (Figure 1 and 2).

Figure 2





Assistive technology (AT) is defined as “any item, piece of equipment, software program, or product system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities” (Assistive Technology Industry Association, n.d.). AT helps enhance or maintain functional capabilities for a task that would otherwise be challenging and ranges from no technology solutions (accommodations), to low, middle, and high technology solutions (Cook & Polgar, 2008). The use of AT has been shown to enhance participation and engagement in art education (Coleman & Kramer, 2015). It helps create meaningful art experiences through various accommodations and modifications. These range from no technology (e.g. adjustments in art assessments or performance standards), to low technology (e.g. use of large-handles brushes and grip tools), to middle technology (e.g. battery-operated electronic devices for artmaking), and high technology (e.g. computerized software) solutions. Burn patients may experience temporary or lifelong disabilities due to their injuries, necessitating the use of AT not only during post-hospitalization rehabilitation but also as an active component of psychosocial recovery during acute care.

To demonstrate a snapshot of AT in the art therapy study with burn patients in the comic, I relied on my personal experiences as an interventionist and on research data, including participants’ photographs while making art, and verbatims from audio recorded and transcribed participant responses. For the visual portrayal, I used a panel with a muted color palette to provide an undertone into the somber subject of burns. I employed color, repetition, and typography to accentuate subtle meanings and describe complex emotions, such as pain or the sudden transition in the loss of functionality, like using hands. To create authentic representations of hands, I used actual photographs of burn patients with bandaged hands to observe how they held art materials while making art in art therapy, collected as part of the research as seen in the background panels of Figure 2 of the comic. The graphic story demonstrates the process of observation and designing, to find solutions, including both store-bought tools (broad-handled and finger brushes) and the palm and finger pen-holder designs adapted from open-source three-dimensional printed assistive technology (Makers Making Change, n.d.) in collaboration with a biomedical engineer. By eliminating the need to grip the art tool between the thumb and finger, which can be painful or not viable, I highlight the availability of AT solutions that can enhance participation in art therapy, which can ultimately benefit functional mobility goals crucial to healing from burn injuries. Another creative adaptation represented in the panel includes the receptive session offered to the patients and their experiences when not actively making art.

## **PATIENT EXPERIENCE AND PROVIDERS’ PERSPECTIVES**

Throughout the four sessions of art therapy, patients used varied art media like collage, clay, paints, or digital art; and familiarity, accessibility, and novelty influenced their art media preferences. One patient remarked that they enjoyed painting because they, “never really got to paint before” while another preferred clay because “it gave my fingers something to do.” Regarding assistive tools, patients were inclined to use finger brushes and brushes with wide handles compared to 3D printed samples, regardless of the hand injury. This could be because patients found the brush tools easy to use and were actively encouraged by the providers to use their hands to grip to promote recovery rather than the tools that may prevent those movements, in the absence of any finger related amputations. Logistically, however, the finger brushes were difficult to procure. Additional research is required to investigate the nature of burn injuries, the utilization of assistive tools, and

their respective impacts. The use of assistive tools may especially be relevant for survivors during the rehabilitation stage-post-discharge to foster creative expression for burn survivors despite physical limitations.

Eleven of the twelve patients chose to engage in viewing art for the receptive session, while one chose to engage in guided imagery. The varied artworks, diverse in style and content, ranging from landscapes to portraits garnered dialogue, engagement, and reflection on a wide range of emotional experiences (Malhotra et al., 2025). For instance, the highest frequency of the chosen artwork by the patients, Time Existence Memory by Seok Cheol Ji fostered remembrance of relaxing time spent near waters, and thoughts about potential opportunities, choices, and legacies left behind. By engaging in art therapy, art effectively served as a diversion from pessimistic or ruminating thoughts. In their artworks, the patients focused on imagery related to emotional supports, nature, significant others, goals, memories, personal attributes, stressors and trauma imagery related to the burn incident. A glimpse into the patients' creative expressions appears in the second-last panel of Figure 2. Overall, the study presented encouraging evidence on psychotherapeutic benefits of art therapy in symptom management of distress, pain, and mood across the four sessions (Malhotra, 2023).

Many patients and providers underscored art therapy's unique capacities in fostering physical engagement, especially when patients are unmotivated to engage in physical therapy. The distinct role of a range of providers in a multidisciplinary burn team provided opportunities for sustained art therapy programming, recruitment, and referrals during the study. For instance, noticing obstacles in patients' readiness and motivation to engage in rehabilitation activities, physical and occupational therapists advocated and encouraged the use of art therapy. Others emphasized psychosocial support to cope with the trauma, and positive engagement from otherwise distressing hospital and wound recovery experiences. Providers noted that the patients anticipated art therapy sessions that encouraged them to sit up, move, and use their hands through the creative process. In our article that examines the perceptions of the multidisciplinary burn team on art therapy, we document in detail how the providers perceived the viscosity of art therapy coupled with physical activity as a necessary "emotional outlet" for burn patients (Malhotra & Kaimal, 2024). As one provider noted:

Since I focused a lot on hands in the burn unit, I think the fine motor components that you guys bring into the table is huge because I can give them all these gadgets and all these things to like use, but it's like they're not motivated to do it, but that they do something like drawing or painting and stuff like that...they find fun and creative.

The providers' engagement was also pivotal in making adaptations in art therapy. For example, inspired by a patient's love for stained-glass art, a physical therapist encouraged her to engage in art therapy that motivated use of her injured hands and arms, which was crucial for her wound healing process. To accommodate this art-form, I included the materials that mimicked the stained-glass effect using colored white-board markers on a transparency sheet. Future research can explore art therapy's impact on rehabilitation outcomes like range of motion, posture, hand function, and balance in burn patients, emphasizing a multidisciplinary approach to address the various needs.

I intended this graphic medicine comic to provide helpful information serving various educational purposes (McNicol, 2016). It demonstrates the successful application of art therapy intervention

research with burn patients at the bedside and raises awareness about the use of AT in psychosocial interventions involving art engagement in medical settings. Such an educational comic can also be shared with patients to demonstrate medical narratives and to provide information (Williams, 2012). For instance, it can offer comfort and understanding to patients who may have reservations about participating due to functional limitations in their hands. It can also be helpful for multidisciplinary burn teams in deciding how to adapt specific art therapy sessions. For example, they can decide on using tools in artmaking or how to facilitate a receptive session in future integrative practice or research.

## CONCLUSION

This educational comic visually renders the application of art therapy intervention with burn patients at the bedside, showcasing accessible ways to foster creative expression despite physical limitations. Future research and practice using graphic medicine narratives can provide essential health information for developing intervention protocols, while also providing insights into patients' lived experiences with burns, and engagement with psychosocial interventions and assistive technology.

## REFERENCES

- Assistive Technology Industry Association, (n.d.). *What is AT?*. Retrieved from <https://www.atia.org/home/at-resources/what-is-at/>
- Attoe, C., & Pounds-Cornish, E. (2015). Psychosocial adjustment following burns: An integrative literature review. *Burns*, 41(7), 1375–1384. <https://doi.org/10.1016/j.burns.2015.02.020>
- Burnett, E., Gawaziuk, J. P., Shek, K., & Logsetty, S. (2017). Healthcare resource utilization associated with burns and necrotizing fasciitis: a single-center comparative analysis. *Journal of Burn Care & Research*, 38(6), e886–e891. <https://doi.org/10.1097/BCR.0000000000000513>
- Coleman, M. B., & Cramer, E. S. (2015). Creating meaningful art experiences with assistive technology for students with physical, visual, severe, and multiple disabilities. *Art Education*, 68(2), 6-13. <https://doi.org/10.1080/00043125.2015.11519308>
- Cook, A. M., Polgar, J. M., & Hussey, S. M. (2008). *Cook & Hussey's assistive technologies: Principles and practice* (3rd ed.). St. Louis: Mosby Elsevier.
- Housen, A., & Yenawine, P. (2001). *Visual thinking strategies: Understanding the basics*. VUE: Visual Understanding in Education.
- McNicol, S. (2017). The potential of educational comics as a health information medium. *Health Information & Libraries Journal*, 34(1), 20-31. <https://doi.org/10.1111/hir.12145>
- Makers Making Change, (n.d.). Assistive Devices. Retrieved from <https://www.makersmakingchange.com/s/category/assistive-devices/>
- Malhotra, B. (2023). A Mixed Methods Art Therapy Study Examining Psychosocial Outcomes with Adult Hospitalized Burn Patients (Doctoral dissertation, Drexel University). <https://doi.org/10.17918/00001934>
- Malhotra, B., Anand, S. A., & Kaimal, G. (2022). Art therapy in burn cases: A review and case examples. *Annals of Plastic Surgery*, 88(2 Suppl 2), S120–S127. <https://doi.org/10.1097/SAP.00000000000003103>
- Malhotra, B., Haith Jr, L. R., Stair-Buchmann, M., & Kaimal, G. (2023). "Through the fire and flames, we carry on:" Art Therapy Small N Feasibility Study With Adult Burn Patients in an Acute Care Setting. *Journal of Burn Care & Research*, 44(3), 631-640. <https://doi.org/10.1093/jbcr/irac113>



- Malhotra, B., & Kaimal, G. Art therapy as a bridge to expand burn care beyond surgery: Providers' perspectives in an inpatient burn center. *The Arts in Psychotherapy*, 91, 102220.  
<https://doi.org/10.1016/j.aip.2024.102220>
- Malhotra, B., Czamanski-Cohen, J., Haith, L.R., Shewokis, P.A., Minjung, S., & Kaimal, G. (2025). Art therapy intervention protocol for research with adult burn patients in inpatient settings. *Art Therapy*. Advanced online publication. 1-11. <https://doi.org/10.1080/07421656.2024.2442132>
- Martin, L., Byrnes, M., McGarry, S., Rea, S., & Wood, F. (2017). Posttraumatic growth after burn in adults: An integrative literature review. *Burns*, 43(3), 459-470.  
<https://doi.org/10.1016/j.burns.2016.09.021>
- Rosenberg, L., Rosenberg, M., Rimmer, R. B., & Fauerbach, J. A. (2018). Psychosocial recovery and reintegration of patients with burn injuries. In D. N. Herndon (Ed.), *Total Burn Care* (5th ed., pp. 709–720). Elsevier.
- Smith, E. (2017). *Art Therapy with Older Adults: Adaptive Tools and Adaptations in Times of Transition*. (Publication No. 10746165) Hofstra University]. Proquest.
- Williams, I. C. (2012). Graphic medicine: comics as medical narrative. *Medical Humanities*, 38(1), 21-27.  
<https://doi.org/10.1136/medhum-2011-010093>
- Woolard, A., Bullman, I., Allahham, A., Long, T., Milroy, H., Wood, F., & Martin, L. (2022). Resilience and posttraumatic growth after burn: a review of barriers, enablers, and interventions to improve psychological recovery. *European Burn Journal*, 3(1), 89–121.  
<https://doi.org/10.3390/ebj3010009>