

Therapeutic Horticulture: A Trauma-Informed Approach to Mental Well-Being within a Psychiatric Hospital

By Joe Munson, Ph.D., LMHC, QS

Photos by N. Gunaydin. Unsplash & S.Y. Tham

University of Florida UF Health Shands Psychiatric Hospital, located in Gainesville Florida, is committed to creating a Trauma-Informed behavioral health environment within the hospital. This commitment means (1) developing a trauma-informed workforce, including recruiting, hiring and retaining trauma-informed staff; (2) providing continuous training on evidenced based and emerging trauma-informed best practices; (3) developing competencies specific to trauma-informed care and providing trauma-informed supervision to all members of the workforce; (4) implementing trauma-informed policies; and (5) adapting the physical environment to promote safe and trauma-informed spaces. Creation of the trauma-informed behavioral health environment is based on key principles of safety, trustworthiness and transparency, collaboration, empowerment, peer support and will consider cultural, historical and gender issues (SAMHSA, 2014). UF Health Shands Psychiatric Hospital provides trauma-informed care for children over the age of 9 and adults of all ages who are dealing with psychiatric illnesses and addiction. In 2021, 3718 patients were treated at the Psychiatric Hospital, 77% (2,863) of whom were there primarily due to mental health related problems.

The intent of the therapeutic horticulture program was to improve mental well-being for psychiatric hospital patients through a holistic approach with the goal of promoting overall health and quality of life. Therapeutic horticulture (TH) is a process that uses plant-related activities to improve patient wellbeing through active and passive participation (AHTA, 2023; Relf, 2006). This process uses horticulture activities and nature interaction as a therapeutic modality to support program goals and has been documented as early as the 19th century by



Dr. Benjamin Rush, recognized as the “father” of American psychiatry. He was first to document the positive effect working in the garden had on individuals with mental illness (Williams, 2022). Suggested to have a role in overall stress reduction in adults and older adults, TH has also been shown to promote stress reduction in children as measured by a number of physiological criteria (Shao, Elsadek, & Liu, 2020). Horticultural activities have long-proven benefits for people experiencing mental health issues and has been associated with significant improvement in quality of life, well-being, social relations, and physical and cognitive outcomes (Nicholas et al., 2019). TH interventions for other patient groups have led to significant decreases in depression and anxiety (Chen, 2021; Cipriani et al., 2022; Gonzalez et al., 2010; Kim & Park, 2018; Lu et al., 2021; Pieters et al., 2018; Siu et al., 2020), as well as significant increases in mood and self-esteem, life satisfaction, and improved interpersonal relationships, and state body image (Waliczek, Zajicek, & Lineberger, 2005). TH interventions can facilitate these increases in well-being and can do so through low-cost, non-intrusive methods that are inherently meaningful and valued. Growing plants has purpose beyond oneself, helping individuals to connect with other people, build self-esteem and self-efficacy, and become more emotionally resilient.

The program at UF Health Shands Psychiatric Hospital aimed to improve the mental wellbeing of adult in-patient psychiatric patients by reducing symptoms of stress and anxiety, increasing positive social engagement with one another through opportunities for interaction and collaboration, as well as by



equipping patients with meaningful knowledge and skills that serve as healthy coping mechanisms to manage stress related to their specific admission reasons. In line with the trauma-informed approach, the program emphasized the empowerment of the patients and provided a safe and supportive environment for the patients to express themselves freely and creatively through horticulture and plant-related art. The 12-week program was conducted from February to May 2022 where experts in TH came on-site from Wilmot Botanical Gardens (at the University of Florida) to facilitate a 45-minute TH group with patients from the mood disorder unit and a 45-minute group with the thought disorder unit each week. They facilitated these groups with attendance and assistance from Peer Support Specialist staff. These are individuals who have personal experience with whole health recovery that includes their previous hospitalization that addressed wellness of both mind and body. The Peer Specialists were able to bring insight in the experience of being a patient here at the hospital while combating the stigma of mental illness. They provide a unique position to develop a relationship of trust to help facilitate an openness for therapeutic opportunities. Participation in TH groups were seen to foster both social interaction and cooperative activities. Patients reported the activities as enjoyable and relaxing, as well as perceiving the program as beneficial and feeling satisfaction in what they accomplished. During the 12 weeks of this program, services were provided to 168 patients with full data returned by 81 patients (data did not differ based on the diagnosis or unit of the patient). The results of the

project include 89% of patients endorsed an improvement in mood either during or after the TH groups, 83% of patients felt better about themselves either during or after the TH groups, and 90% of patients reported willingness to participate in other therapy activities in the future (on the unit or outpatient).

The therapeutic horticulture program delivered at UF Health Shands Psychiatric Hospital is one of many programs and services addressing the health needs in the health provider's catchment area. Primarily Alachua County (52.7%), the hospital also serves neighboring counties within North Central Florida (30.4%), with the remaining 16.9% of patients coming from across the state of Florida. Alachua County is a mix of both urban (city of Gainesville) and rural communities. The Florida Department of Health (DOH) reports that in 2019 there were 266,649 people living in Alachua County; where 70.8% of population is composed of people aged 15-64, with the predominate age range of 25-44-year-olds making up 26.6% of the population. Florida DOH also reports that 69.9% of the Alachua County

population is composed of racial demographic of White, 20.6% as Black, and 9.6% as Other. Socioeconomic factors indicate that 21.8% of individuals earn below the poverty level, 6.1% are unemployed, and 90.8% of individuals have health insurance. The economic status of the population is represented by 36.7% having commercial insurance and 63.3% having either Medicaid/Medicare or being fully indigent without any coverage.

- American Horticultural Therapy Association. (2023). Definitions and positions. <https://www.ahta.org/ahta-definitions-and-positions>
- Chen, H. (2021). The effect of horticultural therapy in depression intervention. *Journal of Landscape Research*, 13(6), 13-22.
- Cipriani, J., Benz, A., Holmgren, A. et al. (2022). A systematic review of the effects of horticultural therapy on persons with mental health conditions. *Occupational Therapy Mental Health*, 33(1), 47-69.
- Gonzalez, M. T., Hartig, T., Patil, G. G., Martinsen, E. W., & Kirkevold, M. (2010). Therapeutic horticulture in clinical depression: A prospective study of active components. *Journal of Advanced Nursing*, 66(9), 2002-2013. <https://doi.org/10.1111/j.1365-2648.2010.05383.x>
- Kim K.H, & Park S.A. (2018). Horticultural therapy program for middle-aged women's depression, anxiety, and self-identify. *Complementary Therapies in Medicine*, 39, 154-159. doi.org/10.1016/j.ctim.2018.06.008
- Lu, S., Zhao, Y., Liu, J., Xu, F. & Wang, Z. (2021). Effectiveness of horticultural therapy in people with schizophrenia: A systematic review and meta-analysis. *Int J Environ Res Public Health*. 18(3):964. doi: 10.3390/ijerph18030964
- Nicholas, S. O., Giang, A. T., & Yap, P. L. K. (2019). The effectiveness of horticultural therapy on older adults: A systematic review. *Journal of the American Medical Directors Association*, 20(10). <https://doi.org/10.1016/j.jamda.2019.06.021>
- Pieters, H.C, Ayala, L., Schneider, A., Wicks, N., Levine-Dickman, A. & Clinton, S. (2018). Gardening on a psychiatric inpatient unit: Cultivating recovery. *Archives of Psychiatric Nursing*, 33(1), 57-64. doi: 10.1016/j.apnu.2018.10.001
- Relf, P.D. (2006). Theoretical models for research and program development in agriculture and health care: Avoiding random acts of research. In: Hassink, J. & Van Dijk, M. (Eds.), *Farming for Health: Green-care Farming Across Europe and the United States of America* (pp.1-20). Springer, Dordrecht. https://doi.org/10.1007/1-4020-4541-7_1
- SAMHSA. (2014). SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach. https://ncsacw.acf.hhs.gov/userfiles/files/SAMHSA_Trauma.pdf
- Shao, Y., Elsadek, M., & Liu, B. (2020). Horticultural activity: Its contribution to stress recovery and wellbeing for children. *International Journal of Environmental Research and Public Health*, 17(4), 1229. <https://doi.org/10.3390/ijerph17041229>
- Siu, A.M.H., Kam, M. & Mok I. (2020). Horticultural therapy program for people with mental illness: A mixed-method evaluation. *International Journal Environ Res Public Health*, 17(3), 711. doi:10.3390/ijerph17030711
- Waliczek, T. M., Zajicek, J. M., & Lineberger, R. D. (2005). The influence of gardening activities on consumer perceptions of life satisfaction. *HortScience*, 40(5), 1360-1365. <https://doi.org/10.21273/hortsci.40.5.1360>
- Williams, S. (2022). *History of horticultural therapy*. American Horticultural Therapy Association. <https://www.ahta.org/history-of-horticultural-therapy>

Dr. Joe Munson, Ph.D., LMHC, QS, is the Director of Clinical Services at UF Health's Psychiatric Hospital where he oversees clinical operations and serves as a member of the leadership team. Dr. Munson has over 20 years' experience specializing in Crisis Intervention, Suicide Prevention, Diagnosis and Assessment of Mental Health disorders, in-patient treatment of mental illness, addiction recovery treatment, peer recovery services, and Non-Profit Management. Notably, he is published in the Routledge International Handbook of Clinical Suicide Research for his research on Post-Traumatic Growth in Survivors of Suicide.