

Effects of Exposure to Natural Elements on Patient Satisfaction in Long-Term Psychiatric Care Facilities in New York State

Author: Krista Macy

Prior to four years ago I knew little to nothing about inpatient, long-term mental health care in the United States. It was something that I had limited exposure to through dramatized films, television shows and books. That of course would change for me, as it does for many, after a loved one experienced an episode and was admitted to the psychiatric ward at Erie County Medical Center. I quickly realized that I had to confront all of the dehumanizing stereotypes that I unknowingly had about inpatient psychiatric care, also referred to as “institutionalization”. However, through my daily visits, it became apparent that the facility’s design did little to reassure me that this was a place for dignified healing and recovery, and instead reinforced the frightening environment popularized by the media.

In selecting a topic for this research project, I wanted to focus on an environment and population I was familiar with, if only from a visitor’s perspective, leading me to psychiatric care units in New York State. More specifically design features within these settings that I feel create a barrier to recovery for individuals with mental illness that require long-term care. Not surprisingly, this list was long, but I ultimately decided to investigate the effects of exposure to nature, or lack there of, on recovery time and patient satisfaction. This is somewhat of a backwards approach, as there is next to no exposure to nature in the psychiatric care unit at ECMC, but I feel that the barrier exists at least in part, due to the absence of these features in these specialized units.

Moreover, “exposure to nature” can mean a variety of things, many of which are inexpensive and easy to implement, important qualities to consider when looking at an environment as highly regulated as hospitals. For the purpose of this research project, nature is defined as any element of the natural environment (e.g. plants, water, air, and animals).

In 2016 there was an average of 2,470 persons admitted to inpatient psychiatric care facilities in New York State, exceeding the national average for state-operated psychiatric centers ¹. These adult patients admitted to long-term care will remain in treatment for an average of 400 days, leading to an immense burden on the financial resources available through the New York State Office of Mental Health ¹. There have been initiatives to promote outpatient care and community mental health services with the hopes of decreasing hospitalization rates, but there is still much that needs to be done to decrease length of hospitalization so that these limited resources are more effectively put to use for all New York residents suffering from mental illness. Advances in psychiatric pharmacology and other technologies have helped decrease hospitalization stays, but simple design features could be employed to further decrease these stays.

Modern day humans have a genetic predisposition to react positively and pay attention to nature such as trees, flowers, water and animals ². Exposure to nature can be accomplished through three general means: Direct contact, involving physical contact

with natural settings; Indirect contact, which is similar to direct but involves a more controlled, manmade natural setting; And by way of vicarious experiences occurring in the absence of any physical contact with natural elements this instead involves viewing nature images or videos ³. All of these types of contact with nature help to reduce stress, anxiety, irritability, and aggression to varying degrees, however direct and indirect experiences typically lead to the best results ⁴. Direct contact is most difficult to provide in a hospital setting in light of spatial constraints and safety and security concerns, so indirect and vicarious strategies will likely be used more often. Indirect contact can be facilitated through something as simple as providing windows with views. There have been studies that have shown a link between absence of windows in hospitals and increased rates of anxiety, depression and delirium relative to rates for similar units with windows ⁵. Conversely, studies have shown that when patients experience stress or anxiety, looking at natural scenes (real or representations) can significantly lower stress levels, blood pressure and heart rate in as little as five minutes ². The investigators of this research believe that a lack of windows providing views of nature can worsen patient outcomes and satisfaction by reducing amounts of positive stimulation and aggravating the negative effects of sensory deprivation often experienced in clinical settings ⁵.

Gardens have also been shown to provide emotional and physiological benefits for patients, visitors and staff members alike ⁶. Gardens in this setting will tend to alleviate stress most effectively when they contain green or relatively verdant foliage, flowers,

non-turbulent water, and compatible nature sounds ⁶. It is believed that when any individuals with limited access to the natural environment (e.g. psychiatric patients) is given the opportunity to contribute to the care taking of a garden, positive effects are mediated through “feelings of comfort and opportunities for individual mental, physical and spiritual renewal” ⁷.

The healing powers of animals dates back to the ancient Greeks, and continues to be recognized today. Therapy dogs are utilized for various patient groups at ECMC, but unfortunately, the psychiatric patients are not one of them. Ironically, the psychological and well-being benefits of animals include: reduced stress and anxiety; reduced loneliness and depression; improved self-esteem and self-worth; reduced aggression; and improved psycho-social interactions with others ⁷. These benefits are directly related to psychiatric treatment goals. Considering that these services are currently being provided in other areas in the hospital, it would stand to reason, that with proper supervision, this would be an easily implemented and successful therapeutic program for the psychiatric patients.

The amount of readily available evidence linking exposure to nature and improvements to mental health makes it difficult to understand the complete lack of natural elements in long-term psychiatric care units. With a system that is actively working towards shorter recovery times in an effort to decrease the stress on limited resources, it would

seem that utilizing these cost effective and easily implemented strategies would be more of a priority.

Going forward with my research, I plan to interview an individual (Person A) that has a diagnosed mental illness and has first hand experience with inpatient care at Erie County Medical Center. Through the interview I hope to gain an understanding as to what design features may have improved his stay and decreased his recovery time. The questions asked will allow him to comment on a wide range of design features, including but not limited to exposure to nature or nature imagery. By doing this, I'm hoping to better gauge how helpful he thinks this exposure would have been as compared to other possible design strategies. I would like to also understand more about how much he feels exposure to nature helps him day to day in managing his illness and minimizing its effects on daily life.

Although this research is designed to benefit the patients receiving long term psychiatric care, I plan to also interview a registered nurse that works in the same department that Person A received treatment. By doing this I'm hoping to get a better understanding of why some of the current design features are in place, and what if anything, would be possible to change or modify. Interviewing an employee will also give me the additional perspective as to how varying design elements in the space function for patients with different illnesses, as Person A can only speak to his own.

References

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