

# Restorative elements of nature in a residential rehabilitation centre

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## Introduction

Residential rehabilitation, although meant to be restorative in a sense, may also be demanding, as the patients have to undergo a challenging program and there is relatively little room for privacy. Contact with nature has long been believed to serve therapeutic goals, and studies with hospital patients have reported beneficial outcomes of contact with nature (e.g., Park & Mattson, 2009; Ulrich, 1984). The present study examined whether natural elements like indoor plants and a green window view can affect health and well-being among patients at a residential rehabilitation centre.

## Method

A quasi-experimental study was conducted to assess effects of an indoor plant intervention on coronary and pulmonary patients (N=282), admitted in groups for a 4-week program over a 2-year period. The intervention involved the addition of 28 pots of plants for the second year. Effects of window view from the patient rooms were assessed among the same group of patients. Patients were quasi-randomly allocated to patient rooms. Window views fell into three categories; panoramic, with an unobstructed view onto mountain scenery, and partially blocked- or blocked views, where the views to the surrounding landscape were blocked to some extent by nearby buildings. The outcome measures were self-reported health (SF-12), well-being and current emotion, as well as satisfaction with the environment and behavior related to use of the patient rooms. Questionnaires were filled in two weeks before arrival, on arrival, after 2 weeks, and at the end of the program.

## Results

Self-reported physical and mental health improved over the time spent at the centre, though not more so among patients who received the plant intervention. Subjective well-being did, however, increase more in patients who went through their program after the intervention with plants, although the effect was only apparent in the pulmonary patients. Patients reported more satisfaction with indoor plants and the interior in general after the intervention. Changes in self-reported health were modified by window view and gender together. A blocked window view appears to have had a negative effect on mental health among men but not among women. Also, those who had a panoramic window view chose to stay more in the room when they wanted to withdraw and be alone.

## Discussion

Although the plants were introduced in relatively modest amounts to the common areas and were a minor part of the interior in general, some beneficial effects were found. Also, the type of window view from patient rooms seems to have benefited mental health for some patients, and to have affected the use of private rooms for privacy and restoration.

## References

- Park, S.H., & Mattson, R.H. (2009). Therapeutic influences of plants in hospital rooms on surgical recovery. *HortScience*, 44, 102-105.
- Ulrich, R.S. (1984). View through a window may influence recovery from surgery. *Science*, 224, 420-421.