



## KEY POINT SUMMARY

### OBJECTIVES

The purpose of the study was to explore environmental design features that may enhance dignity for patients and staff in psychiatric seclusion units.

## Environmental transformations enhancing dignity in an acute psychiatric ward: Outcome of a user-driven service design project

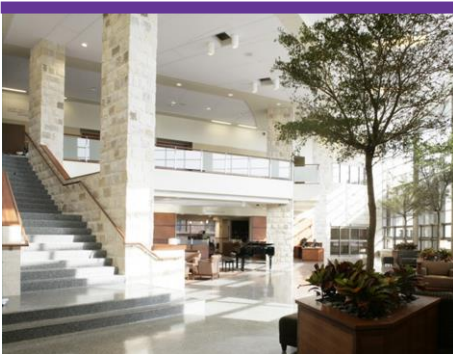
Faerden, A., Rosenqvist, C., Håkansson, M., Strøm-Gundersen, E., Stav, Å., Svartsund, J., Røssæg, T., Davik, N., Kvarstein, E., Pedersen, G., Dieset, I., Nyrud, A. Q., Weedon-Fekjær, H., Kistorp, K. M., 2022 | HERD: Health Environments Research & Design Journal. Pages in press

### Key Concepts/Context

Research shows that the concept of dignity within psychiatric health seclusion is reflected mainly in patient care delivery rather than the environmental components of a healthcare setting. Still common are sparsely furnished rooms, white paint, and limited access to natural light or views of the outdoors. While seclusion is criticized by multiple constituencies, it remains in clinical use, and the design of these settings requires improvement.

### Methods

This project took place in Norway. Personnel from two behavioral health seclusion units that had recently been renovated (Department of Acute Psychiatry at Lovisenberg Diaconal Hospital [DAP-LDH] and Attendo Paulus Nursing Home [APNH]) were invited to provide their perspectives for the redesign of a third unit (Department of Acute Psychiatry Oslo University Hospital [DAP-OUS]). Three groups including a core group, a working group, and a project group participated. The core group consisted of six persons from leadership, project management, service design, and facility users. The working group consisted of 20 people including the core group, architects, and additional healthcare workers and users. The project group consisted of the working group plus two health managers. Evaluations of one previously refurbished unit (DAP-LDH) and the about-to-be refurbished unit (DAP-OUS) took place in March 2015 such that staff were surveyed at the end of their shifts. The survey included questions such as, 'Do you feel that the physical environment in the seclusion ward has been supportive of your work as staff today?' Response options were in a 5-point Likert-type format (e.g., 1= not at all to 5= all the time). Additionally, six patients and family members



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from DAP-LDH were interviewed (pre-refurbishment) to understand patient and family needs. In November 2017, after DAP-OUS refurbishment, both DAP-LDH and DAP-OUS staff again filled out the survey. No patients were consented for the post-refurbishment data collection due to the severity of their respective conditions. Descriptive statistics were employed for analysis of the two sets of questionnaires.

## Findings

A total of 618 questionnaires were returned from 159 staff members in two different seclusion units (DAP-LDH and DAP-OUS). Age and enrollment status were similar at both sites. However, DAP-OUS had more female employees, higher education levels, and more experience than the sample from DAP-LDH.

The overarching takeaways from the staff at OUS surrounded the idea of a welcoming atmosphere of calmness and modern design which included contact with nature, noise reduction, privacy, and a smoker's room on the unit. The smoker's room on the unit was significant given the amount of debate across the groups early in the project; however, the room remained since the cessation of smoking would be impractical for patients in this facility. Nordic landscapes were placed on the walls in the corridor and wooden-like frames and structures were integrated to support privacy and connection with nature as a repeating pattern throughout the facility. Privacy and control were accounted for through most rooms having an en suite bathroom and flexible space. A common room permitted space for family interaction, therapy meetings, and dining.

The average score of the physical environment support for the patients residing at OUS increased from 2.57 in 2015 to 3.86 in 2017. A linear mixed model analysis showed a large, statistically significant increase in the score at DAP-OUS (1.38), with a large effect size. The average score of the physical environment support at DAP-OUS increased from 2.78 to 3.88 during the study duration, which also demonstrated a large and statistically significant increase in scores (1.19) and a large effect size. There was no significant change in the average score at DAP-LDS, which was used a control.

## Limitations

The questionnaire only included the nursing staff and had two questions which did not directly evaluate dignity, but proxies used to assume design changes associated with dignity. The Likert scale use further limited range of response, such as assessing health outcomes associated with seclusion (e.g., violence, days spent in seclusion, working conditions for staff). There was a limitation in the time duration between measures (2014 and 2017) among different sample populations, which may significantly limit the interpretability of the quantitative data analyses.



## Design Implications

Environmental design components, such as privacy, contact with nature, and a welcoming atmosphere may support acute psychiatric facility staff in their work and may also support dignity for mental health patients who are in seclusion areas.

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