

KEY POINT SUMMARY

OBJECTIVES

The purpose of the study was to investigate if daylight exposure is one of the factors that impact burnout among nurses.

DESIGN IMPLICATIONS

Design nursing work areas and staff break areas to provide access to daylight to nurses

Daylight Exposure and the Other Predictors of Burnout Among Nurses in a University Hospital

Alimoglua, M. K., Donmez, L. 2005 | International Journal of Nursing Studies Volume 42, Issue 5, Pages 549-555

Key Concepts/Context

Healthcare providers, especially nurses are at high risk for work stress and burnout. Burnout is defined by three dimensions: emotional exhaustion, depersonalization, and low personal accomplishment. Burnout has been reported as a major contributor to shortage of experienced nurses in the healthcare workforce. Research has shown that exposure to daylight has a positive and curative effect on mood disorders like depression. Given the similarity between mood disorders and burnout, the authors hypothesize that daylight exposure may have direct or indirect effects (via work related strain or job satisfaction) on burnout among nurses.

Methods

The study sample comprised of 141 female nurses working in Akdeniz University Hospital in Antalya, Turkey. All participants completed a personal data collection form, the Maslach Burnout Inventory (MBI), the Work Related Strain Inventory (WRSI), and Work Satisfaction Questionnaire (WSQ) to collect data about perceived burnout, work-related stress and job satisfaction in March 2003. Data about exposure to daylight was obtained using a survey question that asked, 'How many hours (including lunch time, rest intervals etc.) are you exposed to direct daylight during a typical work day?" For data analysis the respondents were grouped into two categories - those who were exposed to less than three hours of daylight and those who were exposed to at least three hours of daylight.

Findings

• Sixty-six nurses (46.8%) indicated that they were exposed to daylight less than three hours a day.





The Center for Health Design: Moving Healthcare Forward

The Center for Health Design advances best practices and empowers healthcare leaders with quality research providing the value of design in improving patient and performance outcomes in healthcare facility planning, design, and construction, optimizing the healthcare experience and contributing to superior patient, staff, and performance outcomes.

Learn more at www.healthdesign.org

- A higher proportion of nurses who worked in intensive care units, emergency department, operating rooms and those who worked night shifts were exposed to less than three hours of daylight during their work day
- Daylight exposure showed no direct effect on burnout, but it was indirectly effective via job satisfaction
- Exposure to daylight for at least three hours a day was related to less jobrelated strain and higher satisfaction at work.
- Other factors that affected burnout included suffering from sleep disorders, younger age, job related health problems, and educational level.
- The number of nurses under daylight exposure less than 3 hours a day was significantly high among those working in intensive care units, emergency and operating rooms.
- Suffering from sleep disorders and younger age were found to be predictors for all three parameters of burnout whereas job-related health problems and educational level were effective only on emotional exhaustion.

Limitations

- Though there was significant correlation among WRSI, WSQ and MBI score, the specific nature of the correlation is a matter of speculation. It is not established whether burnout causes dissatisfaction or a drop in satisfaction causes burnout.
- One of the limitations in the study is lack of data about personality characteristics or interpersonal relations of the participants which may also affect burnout.
- The environmental variable exposure to daylight was not objectively
 measured in this study. It is based entirely on nurses' perception of how many
 hours of daylight they are exposed to. The reliability of this data has not been
 established.
- Another limitation is due to the sample and the location of the study. By replicated the study in other locations and collecting data from nurses working in different types of settings within the hospital, the results can be better generalized.