



KEY POINT SUMMARY

OBJECTIVES

The aim of the study was to describe the effect of lighting, both natural and artificial, on perceptions of well-being in operating room nurses.

Operating room nurses' experiences of limited access to daylight in the workplace - a qualitative interview study

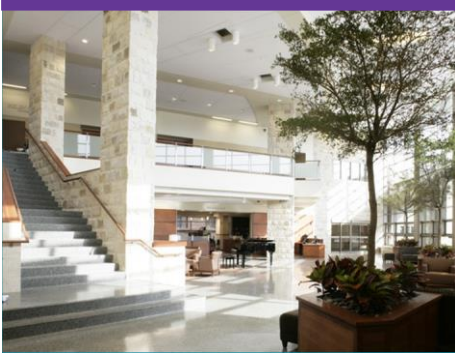
Golvani, J., Roos, L., Henricson, M., 2021 | BMC Nursing; Volume 20, Issue 1, Pages 227

Key Concepts/Context

Artificial light can result in headaches, fatigue, and decreased eyesight. Lack of natural daylight can cause vitamin D deficiency, sleep difficulty, and mood and memory changes, including depression. Surgical nurses spend long hours in windowless environments, under artificial lights, with few opportunities to go outside during work. Surgical nurses in this study perceived negative effects from artificial lighting and lack of windows. Findings demonstrate the importance of access to the outdoors and outdoor views for well-being.

Methods

This was a qualitative study conducted in a small hospital located in southern Sweden where operating rooms were located underground. Light courts allowed natural light to reach some areas; however, access to windows was limited to staff areas and a few corridors, but not available in any operating suites. Fifteen nurses participated in one of four small focus groups. Focus group questions were pilot tested prior to the focus group interviews, and researchers determined that one question would need to be rephrased to enhance study credibility. The focus groups were conducted using a semi-structured format with questions progressing from general to specific and follow-up questions posed when needed. The first and second authors conducted the focus groups, taking turns as moderator and observer. The observer took notes and documented facial expressions, body language, sighs, and tone of voice, whereas the moderator managed the flow of conversation and asked questions. The focus groups lasted between 30-60 minutes and were recorded. Focus group transcripts and notes from observers were read and reread multiple times before being coded. All three authors participated in content analysis of the interview data. The data were color-coded resulting in two generic categories with six sub-categories being identified.



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Findings

All participants were female with an average age of 44.5 years old and 14.5 years of working experience.

The first identified category was ‘difference in light,’ natural light versus artificial light. This category was broken down into three subcategories: sensation of light, having access to daylight, and working in darkness. Under the ‘sensation of light,’ nurses reported feeling differently when in light indoors versus outdoors. Outdoors provided a sense of relief. Indoors, the perception of time was lost due to artificial lighting. ‘Having access to daylight’ affected nurses’ mood and their general mental well-being. Nurses reported having more positive feelings, increased awareness, and energy when they had access to daylight. Not having daylight contributed to fatigue. Artificial light had a positive effect on alertness during on-call nights. ‘Working in darkness’ was perceived as stressful and demanded mental preparation leading to headaches, strained eyesight, and a general sense of ‘not feeling well.’

The second category was ‘contact with the outer world’. This category was also broken down into three subcategories: access to the surrounding world, the sensation of seclusion, and the ability to choose. ‘Access to the surrounding world’ had a positive effect on the nurses’ overall well-being. They felt connected to the environment with a decreased sense of feeling locked in. The ‘sensation of seclusion’ was evident with the lack of windows. Nurses found the lack of windows depressing although some “got used to it”. The ability to choose to sit near a window or look outside during breaks was essential to nurses feeling less isolated and experiencing a connection with the outside.

Limitations

This was a single-site study conducted after a long winter with limited daylight hours which could have impacted participant responses. The authors used a question guide they developed, but did not describe how they decided on the content of the questions. The researchers note that the focus groups were recorded, but did not specify if audio or video recording was used, which may have influenced participant disclosure.



Design Implications

Daylight is important for the well-being of the operating room staff. Windows need to be unobscured and in areas that are easy for staff to access during both meal breaks and shorter non-meal breaks.

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