Dementia often manifests in populations of elderly people who are admitted to acute care facilities. The disorienting nature of hospital environments can exacerbate the condition of dementia, leading to challenging behavior from patients that can affect staff, other patients, and the patients themselves. Previous studies have found that personalized labels and signs, such as photographic portraits of residents themselves, are effective environmental markers in long-term healthcare facilities.

Participants who were either above the age of 65 or above the age of 60 and exhibiting cognitive impairment were interviewed in their patient rooms between their 3rd and 5th days of residency at an urban acute care hospital. Cognitive impairment was assessed at the beginning of the study using the 4-item abbreviated mental test (AMT4) and patients showing cognitive impairment also underwent a mini mental state examination (MMSE). Images shown to participants were judged under three categories: familiarity (familiar or unfamiliar), type of shot (close-up or wide shot), and picture content (nature, animal, or urban). 12 different 8.3 x 11.7-inch images were shown one at a time for about 10 seconds, each of them being realistic photos captured by a professional photographer. Patients were then asked to briefly describe the images, give their impressions of the images, and then recall the images.

OBJECTIVES

To identify categories of pictures that are preferred and easily remembered by older patients, particularly patients with cognitive impairment.

DESIGN IMPLICATIONS

Signage and decorative imaging around acute care facilities, particularly in facilities housing individuals with cognitive impairments, should be chosen with consideration of how familiar the patients might be with the images themselves. This could include pictures of nearby buildings or plants, or possibly things from the patient’s personal history. These considerations could have a positive impact on patient comfort.

Investigation of eligible picture categories for use as environmental cues in dementia-sensitive environments

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Key Concepts/Context

Dementia often manifests in populations of elderly people who are admitted to acute care facilities. The disorienting nature of hospital environments can exacerbate the condition of dementia, leading to challenging behavior from patients that can affect staff, other patients, and the patients themselves. Previous studies have found that personalized labels and signs, such as photographic portraits of residents themselves, are effective environmental markers in long-term healthcare facilities.

Methods

Participants who were either above the age of 65 or above the age of 60 and exhibiting cognitive impairment were interviewed in their patient rooms between their 3rd and 5th days of residency at an urban acute care hospital. Cognitive impairment was assessed at the beginning of the study using the 4-item abbreviated mental test (AMT4) and patients showing cognitive impairment also underwent a mini mental state examination (MMSE). Images shown to participants were judged under three categories: familiarity (familiar or unfamiliar), type of shot (close-up or wide shot), and picture content (nature, animal, or urban). 12 different 8.3 x 11.7-inch images were shown one at a time for about 10 seconds, each of them being realistic photos captured by a professional photographer. Patients were then asked to briefly describe the images, give their impressions of the images, and then recall the images.
Findings

A total of 37 participants were involved in the study, with an average age of 78 years. Three-quarters of all images were properly identified by cognitively impaired patients, while almost all images were correctly identified by patients without cognitive impairments. Cognitively impaired patients generally felt more positively towards images that were familiar to them when compared to the reactions of patients without cognitive impairments. Patients who were not considered cognitively impaired were able to recall familiar images and images that were close-up shots more frequently than their counterparts. Pictures with urban content were recalled much more frequently among patients with cognitive impairments. Generally, for all patients, familiar pictures were received more positively and were recalled more frequently.

Limitations

Detailed information regarding the cognitive impairments of patients was not gathered among the relatively small sample size of participants. Additionally, as only one facility was involved in the study, the implications of the research might not be universally applicable. The authors note that there may have also been a "social desirability bias" among participants, especially those with dementia.