

M.M. SINOË, J. VAN HOOFF, H.S.M. KORT. *Light conditions for older adults in the nursing home. Gerontechnology 2010;9(2):332; doi:10.4017/gt.2010.09.02.186.00* **Purpose** In the Netherlands 43% of nursing home residents have visual impairments¹. Visual impairments can be a result of the normal ageing process or specific diseases. Vision impairment can result in the loss of basic visual abilities: acuity, contrast sensitivity, or visual field². In 56% of the cases of low vision, treatment, or slow down, of further decline is possible¹. Still, 44% of people affected by low vision remain untreated. The impact of vision loss affects daily care and the design of the environment for older adults in the nursing home. Basic strategies for a healthy living environment for older adults with low vision include: (i) increasing illuminance levels, (ii) controlling brightness (glare) and luminance ratio, (iii) using clear and contrasting colours, (iv) arranging a convenient layout of spaces, and (v) clear acoustics^{2-4,6}. In this pilot study, an assessment was made of the light situation in nursing homes in the Netherlands. **Method** Light conditions were assessed in common spaces and corridors in three nursing homes using a Konica Minolta chromameter CL-200 to measure vertical (at the eye, gazing direction) and horizontal (for instance, table level) illuminance levels as well as colour temperature (T_c [K]). The results were compared to the minimum illumination levels as given in a guideline by the Dutch Society for Illumination (NSVV). **Results & Discussion** Results show that the illumination level in the nursing homes fell far below standard⁵ in over 90% of measurements (min-max 6-2,500 lx), with T_c levels of min-max 2,300-6,250 K. Light conditions in private rooms were better. Assuming that specific tasks are performed in common rooms, additional illumination is needed to perform (I)ADL tasks and for leisure. Light conditions in corridors vary according to the position in the corridor. Right below the luminaires conditions met the lower criteria, although levels decline sharply when stepping out of the direct flux. Such variation may go together with an increased risk for falls.

References

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Keywords: light conditions, nursing homes, older adults

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