ACOUSTICS2008/3481 Eliminating environmental stressors in hospitals: managing noise through different interventions

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There is growing body of knowledge of over 1,000 scientific studies which provide evidence that patients experience positive health outcomes in an environment that incorporates natural light, elements of nature, soothing colours, meaningful and varying stimuli, peaceful sounds, pleasant views and a sense of beauty. This paper reviews the research, its practical applications in order to enhance acoustics comfort and quality of care in healthcare settings. Healthcare planners can carry out small-scale, medium- and large-scale evidence-based design interventions. Small-scale interventions which minimise cost maximise impact on acoustic comfort can be implemented relatively quickly and easily e.g. provision of rubbish bins with a damping system to close lids slowly, dimming lights on the wards etc. Control measures include strategies to reduce noise levels in healthcare facilities with or without physical environmental alterations including specification of appropriate absorbent materials (e.g. acoustic ceiling tiles). Medium-scale interventions e.g. inpatient or nursing unit design involve consideration of the shape, geometry and other characteristics of a room in order to deal with background noise, speech intelligibility and other elements which promote acoustic comfort. Large-scale interventions involve large capital works notably entire hospital complexes, assemblies of departments/specialties but have evidence extrapolated from the small- and medium-scale interventions.