

## EDITORIAL

# Light and noise nuisance ... deciphered yet underappreciated 'Rosetta Stone' of the modern ICU?

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Abstract

In everyday life, we take for granted that public authorities protect us from an unhealthy environment, including light and noise pollution. In recent years, about 1200 kilometres of noise barriers have been built alongside Dutch highways with costs approaching a billion euros.<sup>[1]</sup> Also, more than 50 cities in the Netherlands have successfully taken initiatives to reduce the artificial light pollution in the past six years, as our country is well known to rank among the literally most illuminated ones in the world.<sup>[2]</sup> These investments seem to be reasonable as adverse health effects from environmental light and noise pollution have long and widely been recognised.<sup>[3,4]</sup>

How these potentially detrimental effects of artificial light and distressing noise acting on the human body translate into the best possible care that we strive to provide within our modern ICU environment is an area of increasing professional awareness, interest and research.

Yet, we all realise that not only light and noise, but numerous physical and psychological stressors may negatively affect individual ICU patients. Also, the impact of these factors may vary considerably among individuals, which makes it even more difficult for caregivers to prioritise among apparently competing aspects of care in their daily practice.<sup>[5]</sup>

A comprehensive, narrative review by Koen Simons and colleagues in this issue of the Netherlands Journal of Critical Care provides us with up-to-date information on the 'impact of intensive care unit light and noise exposure on critically ill patients.'<sup>[6]</sup> Here, we gain more insights and learn how a multimodal approach to our ICU environment may aid to optimise light exposure and reduce noise. This may not only improve our patients' sleep and general wellbeing, but also reduce the incidence of delirium. The latter seems especially relevant since the pharmacological prevention of delirium has repeatedly been shown to be disappointing, as recently confirmed again in a large Dutch trial.<sup>[7]</sup> All this evidence sets the stage to further promote nonpharmacological interventions in the ICU to prevent delirium.<sup>[8]</sup>

Therefore, we should do our best to limit controllable stressors in the ICU in order to improve patient comfort and hopefully enhance the individual prognosis.<sup>[6]</sup> As our traditional focus on

the medical and technical aspects of critical care has led us to asymptotically reach current therapeutic optima; human factors and soft skills are no longer far in the horizon of the modern ICU.

References

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