

How large is the proportion of patients that show a significant improvement in health related quality of life after extended period of critical illness?

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Introduction

Sweden has several established quality registries and one of these is the Swedish Intensive care Registry (SIR), established in 2001. Beside clinical data it is of importance to include patient reported outcome measures (PROM) variables in such registries, amongst which health-related quality of life (HRQoL) is thought most important. Since 2009 SIR has used the HRQoL questionnaire, SF-36, and registering the patient perceived HRQoL data 2, 6 and 12 months after discharge from the Intensive care unit (ICU). Today almost all (n=87) ICUs in Sweden participate to the registry and the database can provide a larger population of patients with an extended ICU time, something which is difficult to attain.

Objective

The objective of the study was to evaluate whether and to what extent the patients with long duration of ICU time (>96 hours) is affected by intensive care short time (two months) after discharge from the ICU, and if there are any changes over time (up to 12 months). Significant improvement was defined as an improvement in all eight dimensions of SF-36.

Methods

HRQoL data (SF-36) from SIR where examined at 2, 6, and 12 months after discharge from the ICU. The changes in HRQoL over time were examined and divided in three groups: improvement (in all eight dimensions), impairment (in all eight dimensions) or both (a mix of improvement in some dimensions and impairment in some dimensions). To analyse the impact of background- and ICU-related factors, clinical data from the database where extracted.

Results

Data included 847 patients on all three occasions (mean age 62 years). Between 2 and 6 months 232 (27%) of the patients had improved, and 46 (5%) patients had impaired HRQoL. Six patients (0.7%) had unchanged HRQoL. Between 6 and 12 months 182 (22%) patients had improved and 86 (10%) of the patients had impaired HRQoL. For the patients with a mix of improvements and impairments (n=563) the most improved dimension between 2 and 6 months where physical function and the most impaired dimension were general health. Between 6 and 12 months the corresponding results were seen in vitality and mental health.

Conclusion

The results shows that for the patients with a length of stay >96 hours most of the patients (n=563, 66%) perceived a mix of improvements and impairments in their HRQoL up to 12 months after discharge from ICU. Interestingly approximately 25% of the patients showed improvement in all dimensions and this prevailed beyond 2 months and the way up to 12 months post ICU.