

Spouses' long-term support to midlife stroke survivors Consequences in a health economic perspective

Akademisk avhandling

Som för avläggande av medicine doktorsexamen vid Sahlgrenska akademien, Göteborgs universitet kommer att offentlig försvaras i hörsal Arvid Carlsson, Medicinargatan 3, Göteborg, den 28 april 2017, klockan 9.00

av Josefine Persson

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Avhandlingen baseras på följande delarbeten

- I. Persson J, Holmegaard L, Karlberg I, Redfors P, Jood K, Jern C, Blomstrand C, Forsberg-Wärleby G. Spouses of stroke survivors report reduced health-related quality of life even in long-term follow-up – Results from Sahlgrenska Academy Study on Ischemic Stroke.
Stroke 2015;46;2584-2590.
- II. Persson J, Aronsson M, Holmegaard L, Redfors P, Stenlöf K, Jood K, Jern C, Blomstrand C, Forsberg-Wärleby G, Levin L-Å. Long-term QALY-weights among spouses of dependent and independent midlife stroke survivors.
Submitted manuscript.
- III. Persson J, Levin L-Å, Holmegaard L, Redfors P, Svensson M, Jood K, Jern C, Blomstrand C, Forsberg-Wärleby G. Long-term cost of spouses' informal support for dependent midlife stroke survivors.
Brain and Behavior 2017, *accepted for publication.*
- IV. Persson J, Levin L-Å, Holmegaard L, Redfors P, Jood K, Jern C, Blomstrand C, Forsberg-Wärleby G. Stroke survivors' long-term QALY-weights in relation to their spouses' QALY-weights and informal support: a cross-sectional study.
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ABSTRACT

Spouses of midlife stroke survivors often experience demands on family roles and professional life due to the impact of stroke, however knowledge concerning spouses' support and the long-term consequences for their own health is limited. Hence, the overall aim of this thesis was to describe the long-term effects health related quality of life (HRQoL) of spouses of midlife stroke survivors' and the annual cost of the informal support provided. Data were collected from the study population at the seven-year follow-up of the Sahlgrenska Academy Study on Ischemic Stroke (SAHLSIS). Cohabitant dyads of 248 stroke survivors aged <70 at stroke onset and 245 controls were included in this study. HRQoL was assessed by the SF-36, and the preference-based health state values were assessed with the SF-6D. The time spent on informal support was assessed with a study specific time-diary. Spouses of dependent and independent stroke survivors were categorised according to their scores on the modified Rankin Scale (mRS).

Findings showed that spouses of dependent stroke survivors reported poorer physical, general and mental health in comparison to the spouses of independent stroke survivors and spouses of controls. The spouses' physical health was negatively related to their own age and the global disability of the stroke survivor, and the spouses' mental health was negatively related to the partners' global disability, level of depression and cognitive dysfunction as well as if the spouses experienced lack of social support. The dyads of stroke survivors and spouses reported similar role emotional and mental health, but poorer in comparison to the dyads of controls. Spouses of dependent stroke survivors reported nearly 15 hours of informal support per day, which corresponds to an estimated annual cost of €25,000. Spouses of independent stroke survivors reported less than one hour of informal support per day, which corresponds to an estimated annual cost of €1,000.

In conclusion, spouses of dependent midlife stroke survivors, reported lowered HRQoL and provides more informal support. Thus, to include the spouses' consequences in economic evaluations of healthcare interventions that seeks to reduce the dependency of stroke survivors could capture more of the total effects in dyads of stroke survivors.

Keywords: Stroke, Spouses, Health-related quality of life, Quality-adjusted life-years, Informal support, Time-diary, Cost analysis, Opportunity cost.