

Depression, anxiety and quality of life in stroke survivors and their family caregivers: a pilot study using an actor/partner interdependence model

ABSTRACT

Background: Depression and anxiety are common in stroke survivors as well as their family caregivers. However, it is not known whether each person's emotional distress contributes to their partner's quality of life (QOL). **Objective:** This study aimed to examine the effect of depression and anxiety on QOL in stroke survivor-caregiver dyads using dyadic analysis technique - the Actor-Partner Interdependence Model (APIM). **Methods:** This was a cross-sectional pilot study with a total of 30 participating dyads (30 stroke survivors and 30 family caregivers) from Hospital Rehabilitasi Cheras, Kuala Lumpur, Malaysia. This pilot study was conducted over a period of 3 months, between December 2014 and February 2015. Depression and anxiety were assessed using the Hospital Anxiety and Depression Scale (HADS). QOL was assessed using the Short Form-12 Health Survey (SF-12). All analyses were carried out using IBM SPSS version 22. Dyadic data were analysed using multilevel modelling (MLM). **Results:** Depression was uniquely associated with an individual's own QOL. Survivors and caregivers with higher depression had poorer physical component summary (PCS) scores and mental component summary (MCS) scores. Stroke survivor's depression exerted a significant actor effect on their PCS ($b=-1.42$, $p=0.001$) and MCS ($b=-1.52$, $p<0.001$). Caregiver's depression exerted a significant actor effect on their PCS ($b=-2.53$, $p<0.001$) and MCS ($b=-1.51$, $p=0.004$). Caregivers' anxiety negatively influenced their own MCS ($b=-0.58$, $p=0.031$). Furthermore, depression exerted a significant partner effect on PCS in stroke survivors ($b=-1.19$, $p=0.003$). Caregivers' depression was also related to their stroke survivors' poorer QOL, particularly PCS. **Conclusion:** The findings suggest that depression affects the QOL of both stroke survivors and caregivers, not only emotionally but also physically. This dyadic study also has evidence pointing to depression in caregivers and its association with stroke survivors' physical QOL.

Keyword: Malaysia; Quality of life; Stroke; Anxiety; Depression; Caregivers