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Using self-management to control seizures

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Introduction
Good lifestyle management has been shown to improve seizure control significantly. Benefits to almost 43% of patients have been reported from lifestyle interventions, a figure comparable to the introduction of new pharmacological agents (1-3). Education programs aimed at enhancing self-management behaviours for people with epilepsy may improve quality of life, seizure frequency and self-confidence, but they often do not feature in a comprehensive epilepsy treatment plan.

Aim
The aim of this study was to develop, deliver and evaluate the impact of an education intervention regarding lifestyle self-management in the control of seizures, health related quality of life (HRQoL), satisfaction with life and resilience for adults with epilepsy.

Method
A cohort with control study design was undertaken to evaluate the efficacy of the self-management education. Participants (n=60) were purposively sampled and allocated to the intervention (n=23) or a control condition (care as usual) (n=37). Baseline measures including medication adherence, resilience, HRQoL and satisfaction with life were taken on recruitment. Participants were also instructed to keep a seizure diary and these measures were repeated six months post intervention (time point 2).

The intervention
Self-management and Lifestyle Education for Adults Living with Epilepsy is a theory informed, evidence-based and peer-reviewed education package developed specifically for the purpose of this study. The framework of the education package was based on Self-determination Theory (SDT) (4) and divided into four education modules: Managing Epilepsy and Medical Care, Socialising on a Budget, Leading a Healthy Lifestyle and Emotional Self-management. Education facilitators included Clinical Nurse Specialists in neurosciences, who received prior training from the research team comprising background information and instructions on how to conduct the two-hour face-to-face group session.

The participating site
The participating sites were two large hospitals in Melbourne, Australia, [one public and one large private hospital].

Sample
Participants (n=60) meeting the inclusion criteria were recruited through the neurology wards and consulting clinics of neurologists. Due to being a pilot study no sample size calculations were undertaken.

Results
Sixty patients were analysed at time point 1 (post recruitment) (18 control; 12 intervention). Thirty five patients were analysed at time point 2 (18 control; 17 intervention) (see table 1 for demographic data). Little’s MCAR test showed no evidence that data was not missing at random (p=0.809); hence attrition bias is not expected.

At time point 2 (6 months after the education) findings suggested moderate correlations particularly between resilience and satisfaction with life scores (r=0.551; p<0.001), medication adherence and psychological quality of life (QoL) scores (r=0.546; p<0.001), and psychological QoL and satisfaction with life scores (r=0.518; p<0.001). The mean seizure occurrences between the control and intervention groups were 12.71 (SD 24.55) and 6.76 (SD 13.40) respectively post intervention. Although not statistically significant, a reduction in seizure frequency within the intervention group may be substantiated in a study with a larger sample size.

Conclusion
This study has provided encouragement to further explore how lifestyle self-management practices for people with epilepsy can improve their sense of well-being and increase their personal potential for controlling seizures through the recognition and management of seizure triggers.

References

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