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Spiritual support in end stage heart failure (ESHF): a randomised controlled feasibility study

Linda Ross[1], Jackie Austin[2], Paul Jarvis[1], Sara Pickett[3]

[1]University of South Wales, School of Care Sciences, Faculty of Life Sciences & Education, Pontypridd, UK
[2]Aneurin Bevan University Health Board (ABUHB), Clinical Research & Innovation Centre, Newport, UK
[3]Swansea Centre for Health Economics, Swansea University, UK

Background

There is evidence of a positive association between the spiritual part of life and mental (anxiety, depression, quality of life) and physical health[1]. Spiritual care is important, featuring within healthcare policy and guidance internationally[2], nationally[3] and locally[4], especially at end of life[5]. People with ESHF experience significant spiritual needs (e.g. for hope and to make sense of their illness, life and the future including their death and what may lie beyond) alongside the physical and emotional challenges of their illness, and spiritual support would be valued[6]. Further research is needed to determine if spiritual support (SS) enhances spiritual wellbeing (SWB) and/or quality of life (QOL) and mitigates against depression and anxiety in ESHF, but information is needed to inform the design of such a study.

Primary Aim

To make recommendations on the feasibility/design of an RCT to investigate the effect of SS on SWB, anxiety, depression and QOL in ESHF patients (NYHA IIIb/IV) .

Secondary Aim

To investigate the effect and cost effectiveness of SS on the above outcomes if the sample size is sufficient, or to identify trends if not.

University of South Wales, Treforest Campus, Pontypridd

Method

Prospective random allocation over 18 months of all consenting eligible ESHF patients (NHHA IIIb/IV) in ABUHB (n=47 from 133 eligible) to receive standard care only (control group, n=25) or standard care plus SS (experimental group, n=22). SS (average 1 hour discussion using a purpose designed Spiritual Enquiry Tool) was provided by trained volunteers in patients' homes at 2 monthly intervals over 6 months (4 visits). Measures of SWB (WHO-SRPB), anxiety/ depression (HAD), QOL (EQ5D) were completed at 0, 2, 4, 6 months by both groups. Purpose designed questionnaires captured health service resource use, potential confounding factors (changes in circumstances, symptoms, medication) at 2, 4 and 6 months, demographic details at baseline and satisfaction with SS at month 6 (intervention group).

Analysis

Descriptive statistics and Repeated Measures ANOVA to explore within and between group differences. We used standard methods for the economic analysis.

Selected Primary Results

- Uptake was 35% (n=47) and 32% (n=15) dropped out (9 at baseline, 3 at month 2, 3 at month 4), mainly due to death.
- Recruitment and data collection took longer than expected: 18 months to recruit 47 patients and 2 years to collect data instead of the anticipated 9 months to recruit 65 patients and 15 months to collect data. The main reasons for this were co-morbidity and mortality. Inclusion of a research nurse/administrator is recommended.
- Considerable effort was needed from the research team to recruit and support patients throughout the study.
- The measures were suitable, however a shorter simpler measure of spiritual wellbeing (e.g. FACIT-Sp) and an additional QOL measure (e.g. Kansas City) may be worth considering.
- Two of the 8 volunteers dropped out because of lack of transport and illness.

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- SS was valued by those receiving it.
- Nurses lacked confidence in initiating end of life conversations; training is recommended.

Secondary results

- Spiritual wellbeing was negatively correlated with anxiety (Rho ranging from -.306 to -.385, $p < 0.01$) and depression (Rho ranging from -.342 to -.648, $p < 0.05$).
- No significant effect of spiritual support on SWB, anxiety/ depression or QOL was found. The study was limited by its small sample size but the following trends were identified and are worthy of further exploration:
  - Positive effect of SS on QOL (+4 in intervention group, -8 in control group) and anxiety (-1.2 in intervention group and +0.8 in control group) at 0-2 months but not on depression or SWB.
  - Negative effect (increased depression +.9) of withdrawal of SS from experimental group at study end (months 4-6).
  - Lower health resource cost per experimental patient (£204) over the study period; SS may be cost effective if rolled out to more patients within routine care.

Conclusion

An RCT is feasible but must be properly resourced and recruited to in order to obtain statistically and clinically significant results.

References

1 Koenig H, King D, Carson V (2012) Handbook of religion and health. OUP, New York
2 World Health Organisation (2002) WHOQOL-SRPB Field Test Instrument. WHO, Geneva
3 Department of Health (2009) Religion or belief. A practical guide for the NHS. London, Crown
4 Welsh Government (2015) Health and Care Standards. Crown
5 https://www.nice.org.uk/guidance/gid-cgwave0799/documents/draft-scope-2
6 Ross L, Austin J (2013) Spiritual needs and support preferences of people with end stage heart failure and their carers. Journal of Nursing Management, 23, 1, 87-95