Can a multifactorial geriatric assessment predict older adult's adherence to a fall prevention program?

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Abstract

Background

There is evidence in the literature of the effectiveness of multifactorial interventions in reducing the occurrence of falls in elderly residents in the community. However, low adherence to prevention programs is cited in the literature as a recurring problem, questioning the effectiveness and sustainability of these programs. The aim of this study is to compare subgroups of fallers with different levels of adherence to a multifactorial fall prevention program in terms of a broad range of sociodemographic, medical, disability, physical functioning, and psychological measures in a multifactorial geriatric assessment, and identify which of these measures explain optimal adherence.

Methods

A prospective study conducted with two hundred and fifty-seven community-dwelling people aged ≥ 60 years who participated in a multifactorial fall prevention program. All participants underwent assessments on sociodemographic, medical, disability, physical functioning, and psychological measures. The presence on weekly sessions over 12 weeks was used to ascertain adherence. Subgroups of participants with low, moderate and high adherence were determined by k-means cluster analysis, and were compared regarding variables of interest. A multivariate regression analysis was conducted to identify participants with an optimal adherence (median; ≥ 10 sessions).

Results

Participants with low (1 up to 4), moderate (5 up to 8) and high adherence (≥ 9 sessions) corresponded to 13.2%, 19.5% and 67.3%, respectively. Of all measures, only the low perceived risk of falling was able to discriminate subgroups of adherence. Multivariate regression analyses adjusted for covariates identified that older people with optimal adherence were less likely to be depressed and were more likely to present a higher score in a global cognition measure.

Conclusions

Implementation strategies should be undertaken to understand the views and beliefs of older people with low perceived risk of falling and offer person-centered rationale to increase engagement. Treating and closely monitoring older adults with depression early in the pathway of care for falls prevention so as to optimize enablers may promote adherence to programs.

Full Text

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Supplementary Tables

Due to technical limitations, tables 1, 2, 3 and 4 are only available as a download in the Supplemental Files section.

Supplementary Files

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- [Table1.xlsx](#)
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- [Table4.xlsx](#)
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