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Abstract Information

Abstract Title:

Accidental falls in elderly – A systematic review of preventive measures and an economic analysis

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Abstract:

Background Falls and subsequent injuries are a major cause of immobility, morbidity and mortality in elderly. This is an escalating public health problem due to people are becoming older. Older people are generally more fragile and thus more prone to falls and subsequent injuries. Many falls and related injuries could be avoided. This can be done through preventative measures that reduce the probability of incurring falls and subsequent injuries. There exist various measures that can be conducted at a certain cost. From a decision-maker's perspective, the question is: which interventions should be implemented, and what could be gained? There are limited resources available, and thus, it is important that the money invested in programs give high returns, i.e. the interventions should be cost-effective. Consequently, evaluations of the cost-effectiveness of different interventions are important to base decisions on. Systematic reviews of the cost-effectiveness of different interventions provide excellent overviews over the current state of knowledge, to the benefit of decision-makers. To provide this information and to facilitate the decision-making process a systematic review was conducted. The aim of this review was to systematically compile identified cost-effectiveness studies of accidental fall prevention interventions, to identify the most appropriate prevention methods; and to estimate the costs related to accidental falls in Sweden from a societal perspective. Method A systematic literature search was conducted to identify evidence of cost-effective accidental fall prevention interventions. Relevant databases were searched, and only reviews, meta-analyses and clinical guidelines were included. A second literature search was conducted to find the costs associated with falls and subsequent injuries. Additionally data was collected to enable an estimation of the societal cost associated with accidental falls in Sweden. Results The systematic review showed that although clinical results may be good many interventions lack an appropriate economic evaluation, which complicates any conclusions about how much could be saved if the intervention was implemented and at what cost. In general, more individually targeted interventions towards high-risk people shows better cost-effectiveness. The second literature review shows that the costs associated with accidental falls, in Sweden with nine million inhabitants, amounts to almost to US \$2 billions annually, of which approximately \$650 and \$ 1 200 millions are direct costs and costs associated with reduced quality of life, respectively. Conclusions Accidental falls among elderly are a major, and increasing, public health problem associated with large costs for society. Preventative measures could mitigate and avoid many falls and subsequent injuries. However, the evidence of how cost-effective different interventions are is limited.
