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Comprehensive geriatric assessment and appropriate prescription

Appropriate prescribing (expected outcome outweighs the possible negative outcomes) in frail elderly is challenging because of lack of evidence. Frail elderly are not included in medication trials. There is a wide range of health status in the elderly (from fit to frail), that makes individualized prescribing decisions necessary. Application of guide-lines is therefore difficult.

Described strategies to improve quality of prescribing are divided by process and outcome measures. Both measures can be explicit (criterion based) or implicit (judgement based.) Depending on the process, most frequently used methods are inappropriate medication-lists, the Medication Appropriateness Index and varying criteria for underuse of drugs. A new development is the drug burden index.

Reasons why a CGA can improve prescription are the additional expertise of each team member; recognition of atypical adverse drug events; discoveries of age related diseases, which are often not treated; knowledge of geriatric pharmacotherapy and the holistic view that overcomes the problems of fragmentation of care, assessing functional aspects of drug use and adapts treatment choices to realistic goals of care after shared decision making.

Evidence for improving quality of prescribing in elderly in a setting of a CGA is found in six different randomised trials. Patient settings, aspects of appropriate prescribing and methods were different, which makes a comparison difficult. All studies but one had a pharmacist in the team with an importance that ranged from a consulting part in decision making to patient counselling. All studies but one found a more appropriate prescription after intervention, mostly on subjects of appropriate prescription. Only one study found a significant health outcome; less serious adverse drug reactions after intervention. There are no data that show prevention of unnecessary hospital admissions, improvement in quality of life, a better survival or reduction in healthcare costs after optimising drug therapy in the elderly. Studies seem to be underpowered.

More research for the impact of a CGA on appropriate prescribing in frail elderly is needed and also about the effect of optimising drug use on health outcomes and costs. Successful strategies should be implemented in geriatric (outpatient) units.

References:

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