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Optimising medication management for polymedicated home-dwelling older adults with multiple chronic conditions

Background and objectives:

Current demographic transitions indicate that a significant proportion of old (over 65) and very old adults in the future will have crippling chronic diseases or unstable multimorbidity that requires several treatment components involving complex medication regimens. This frail population may experience health-related problems, hospitalisations or readmissions due to the acute symptoms of their illnesses, often resulting in medication-related problems (MRPs). Accurate management of their medication treatment is a real challenge for frail older adults with multiple chronic conditions (OAMCC), especially when living at home. The literature in this area currently focuses on health care professionals' perspectives, to which patients' and informal caregivers' perspectives and experiences are often secondary. Three main objectives will guide this project. The first is to carry out a retrospective analysis of patients' hospital records, their medication and environment-related factors in order to identify those that increase the risks of hospitalisation, emergency department (ED) visits, readmissions (notably due to MRPs), institutionalisation or early death among polymedicated, home-dwelling OAMCC, whether they are non-frail, frail or dependent. The second objective is to use a prospective qualitative study to explore the skills and strategies developed by the different profiles of home-dwelling OAMCC to manage polymedication within their social contexts and health trajectories, despite possible cognitive impairments and particularly after a recent hospitalisation. The third objective is to better understand the perspectives, roles and coordination of professional caregivers and non-professional/informal caregivers involved in the medication management of home-dwelling OAMCC.

Methods: A mixed methods study will

address the medication management of polymedicated, home-dwelling OAMCC. This will involve two major phases conducted sequentially over time: a quantitative data collection phase followed by a qualitative investigative phase. To fulfil the first objective, a quantitative phase will consist of retrospectively exploiting the last five years of electronic patient records from the Valais Hospital (N ≈ 50,000) in order to identify the different profiles—made up of medication and environment-related factors—of the polymedicated, home-dwelling OAMCC at risk of hospitalisation, ED visits, hospital readmission (notably for MRPs), institutionalisation or early death. To respond to our second and third objectives, a qualitative study will involve: a) obtaining and understanding the medication management practices and experiences of the identified profiles of OAMCC extracted from the hospital data, who will be interviewed at home (N ≈ 30) on two separate occasions; b) collecting and analysing the perspectives of the formal and informal caregivers involved in medication management at home in order to cross-reference perspectives about this important dimension of care at home.

Results and discussion: The research results will allow us to then develop an innovative, integrated model for supporting this frail population. Concrete, interprofessional recommendations will be established, integrating the retrospective analysis of the electronic data of hospitalised older patients, the direct perspectives of this population and those of the parties involved in the management of their medication treatment at home.

Conclusion: These recommendations will aim to support medication management and prevent potentially harmful consequences, including falls, acute confusion, rehospitalisation and/or institutionalisation, or early death.

PALAVRAS-CHAVE:

Polypharmacy; home dwelling older adults; multiples chronic conditions; medication management