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## POSTER ABSTRACT

# BE-EMPOWERed program: Belgian study Enhancing the uptake and the Effectiveness of a Multifactorial fall Prevention intervention in older community-dwelling persons.

23rd International Conference on Integrated Care, Antwerp, Flanders, 22-24 May 2023

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**Background:** 24 to 40% community-dwelling older persons (65+) fall annually, of which 21 to 45% fall recurrently. There is evidence for the use of a multifactorial fall prevention intervention. However, recent pragmatic trials, conclude that there is no effect on rate of falls. A possible explanation for these differences in results is the poor implementation of recommendations. This project aims to enhance the uptake and the effectiveness of a multifactorial fall prevention intervention in older community-dwelling persons in Flanders, Belgium.

**Methods:** The BE-EMPOWERed project consists of three phases: 1) preparation, 2) development and 3) evaluation. The preparation phase is completed and it consisted of several sub studies: [1] a systematic review on implementation strategies, [2] a systematic review on influencing factors and [3] a qualitative study analyzing the context of the community setting.

Both reviews are registered in PROSPERO (CRD42020187450, CRD42022295988). Searches were performed in five databases and mapped following PRISMA guidelines. The Mixed Method Appraisal Tool was used to assess methodological quality. The implementation strategies were described following the recommendations for specifying and reporting implementation strategies and the Taxonomy of Behavioral Change Methods. For the review on influencing factors, the determinants were categorized using 'The Integrated Checklist of Determinants of practice' (TICD checklist).

The contextual analysis consisted of semi-structured interviews and focus group interviews with healthcare professionals, local policy makers and older persons. The TICD checklist was used to obtain more insights into the context. The interviews were verbatim transcribed, analyzed using the Qualitative Analysis Guide of Leuven and coded in NVivo.

**Results:** In the systematic review on implementation strategies fifteen studies were included, describing more than 38 implementation strategies. The most frequently used strategies at the level of the older person were tailoring, personalize risk, active learning and participation. At the level of the environment, technical assistance, peer education, participatory problem solving, forming coalitions and increasing stakeholders influence were most often described.

The review on influencing factors consisted of 25 studies. In total, 37 barriers and 32 facilitators were identified. Most frequently mentioned factors were availability of necessary resources, knowledge and motivation, compatibility with current practice and professional interaction.

The results of the contextual analysis showed the need to integrate a multifactorial fall prevention intervention into the life of the older persons, to increase awareness and knowledge, to create a shared vision and responsibility, to implement a multifactorial fall prevention intervention into an organized structure and to increase collaboration and communication.

Based on the insights of the systematic reviews and contextual analysis the BE-EMPOWERed program is currently being developed. The BE-EMPOWERed program will consist of implementation strategies at different levels of the context (e.g. group program for older persons, training and support of group leaders, workshops for healthcare professionals and implementation plan for local policy makers). In 2023 this program will be pilot tested in one primary care area in Flanders.

**Conclusion:** Understanding the existing structures, norms, policies and other determinants allowed us to identify potential barriers and to proactively tailor the implementation strategies and the intervention.