

# SUMMARY

Implementing innovations in healthcare is a challenging task. Numerous studies have shown that a gap exists between evidence and nursing practice. To bridge this gap, it is important to implement innovations. This dissertation investigates how nursing staff can be supported in implementing innovations. It specifically focuses on innovations related to the promotion of functional activity among nursing home residents. Several studies were conducted 1) to provide insight into the extent to which nursing staff in the Netherlands promote functional activity among nursing home residents; 2) to provide insight into nursing staff-experienced barriers towards promoting functional activity among nursing home residents; and 3) to develop an instrument that nursing staff can use to implement innovations related to the promotion of functional activity. This section provides an overview of all the studies described in this dissertation.

**Chapter 1** provides a general introduction in which the concepts functional activity and nursing homes are introduced. Furthermore, it describes the Implementation of Change model of Grol and colleagues, a model that is used throughout this dissertation. The chapter ends with an overview of the outline of this dissertation and the main objectives.

To be able to map the extent to which nursing staff encourage functional activity and the related barriers and facilitators they perceive, a questionnaire was developed.

**Chapter 2** describes the stepwise approach that was used to develop and test the usability of the MAastricht Nurses Activities INventory (MAINTAIN)-behaviors and MAINTAIN-barriers. The MAINTAIN-behaviors targets nursing staff behavior to optimize and maintain functional activity, and includes 19 items covering activities of daily living, household activities, and miscellaneous activities such as encouraging informal caregivers not to take over activities from residents. MAINTAIN-barriers addresses the perceived barriers and facilitators related to this behavior and comprises 33 items covering barriers and facilitators related to the residents, the professionals, the social context, and the organizational and economic context. The usability study showed that the inventory was not difficult to complete, that items and response options were clear, and that the number of missing values was low.

**Chapter 3** presents the results of a cross-sectional study among the 368 nurses and certified nurse assistants from 41 nursing homes throughout the Netherlands that filled out the MAINTAIN-behaviors. It provides insight into the extent to which nursing staff perceive that they encourage functional activity among nursing home residents and the associations between these nursing behaviors and professional characteristics, contextual factors, and information-seeking behaviors. The results showed that nursing staff perceived that household activities were less often encouraged among residents than ADL or miscellaneous activities. The extent to which these activities were

encouraged differed for some of the professional characteristics, contextual factors, or information-seeking behaviors, but no consistent pattern of associations emerged.

**Chapter 4** further addresses the behavior of the nursing staff during residents' daily activities. It describes an observation study conducted in seven nursing homes in the southern part of the Netherlands, housing a total of 723 nursing home residents. In this study, nursing home residents were observed for one minute, five times a day. During these observations, residents' (in)activity and the role of the nursing staff during this activity ('taking over the activity,' 'giving support,' or 'supervision') were recorded. The study revealed that when nursing staff were involved in the observations, they mainly supported (51%) or took over residents' activities (45%); supervision was rarely observed (4%). The nurse observers indicated that a large part of the activities were taken over unnecessarily.

**Chapter 5** focuses on the barriers that nursing staff perceive to promoting functional activity, and the association between these barriers and nursing staff-perceived promotion of functional activity. In this cross-sectional study involving, again, the 368 nurses and certified nurse assistants from Chapter 3, the MAINTAIN-barriers was used to measure the experienced barriers and the MAINTAIN-behaviors was used to assess nursing staff-perceived behavior. Barriers related to the organizational and economic context were most often experienced among nursing staff – e.g., staffing level – while barriers on a professional level were least often experienced. Barriers related to the social context showed the strongest associations with nursing staff-perceived behavior – e.g., communication within the team. More importantly, the study showed that the barriers that were most often experienced among nursing staff were not necessarily the barriers that were most strongly associated with nursing staff-perceived encouragement of functional activity. Strategies aiming to improve functional activity among nursing home residents should take into account the extent to which barriers are experienced by nursing staff and the likelihood that a change will lead to a change in nursing staff behavior.

In order to remove existing barriers and ensure that nursing home staff encourage functional activity, strategies to sustainably change nursing practice are needed. However, overviews of implementation strategies are generally not very specific or detailed, they often lack practical guidance, and do not match the target group or the context in which they will be used. **Chapter 6** describes a study that used the World Café method to identify practical implementation activities aimed at improving functional activity among nursing home residents. In three consecutive rounds of 30 minutes each, 21 nursing home professionals discussed in small groups the practical translation of six implementation strategies (audit and feedback; education; local opinion leaders; local consensus processes; multidisciplinary collaborations; and disseminating the policy of the organization) into practical implementation activities. This resulted in 40 practical implementation activities, 23 preconditions in order for the activities to be successful, and 24 content-related remarks. The activities ranged from organizing a theme day for

the strategy 'expressing the policy of the organization,' to exchanging staff between wards for the strategy 'education.' The detailed activities described by the participants of the World café may support nursing home staff, and nurses in particular, in implementing innovations that are aimed at improving functional activity among nursing home residents in their daily nursing practices.

**Chapter 7** describes a mixed-methods study that aimed to evaluate the feasibility of the Translating Innovations into Practice (TIP)-toolbox. This toolbox guides nursing staff in six practical steps through the process of developing a structured and tailored implementation plan to sustainably implement an innovation. It contains several tools, including the MAINTAIN-questionnaires (Chapter 2) and an overview of the practical implementation activities that resulted from the World Café method (Chapter 6). In nine weeks, twelve registered nurses used the TIP-toolbox to develop an implementation plan for their ward. Data were collected via questionnaires, telephone interviews, participant observation, and focus group interviews. The results of this study showed that the participating registered nurses (RNs) conducted most steps of the TIP-toolbox according to plan; two RNs did not complete all steps. Both barriers to and facilitators in carrying out the steps were reported – e.g., use of difficult language in the toolbox (barrier) and support and collaboration (facilitators). Overall, the RNs were satisfied with the TIP-toolbox, but some regarded the toolbox as somewhat complex. To increase their satisfaction and reduce the complexity of the toolbox the participants made suggestions for improvements. Based on the rich data collected, we concluded that the TIP-toolbox seems a feasible instrument, although various adaptations are needed to further improve the toolbox and increase users' satisfaction.

The final chapter, **Chapter 8**, provides a summary and discussion of the main findings of this dissertation. It discusses several methodological and theoretical considerations of the conducted studies and, lastly, outlines the implications of the findings for practice, education, and future research.