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CONFERENCE ABSTRACT

Models of care for persons with multimorbidity- A systematic review of randomized controlled trials

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Nina Kamstrup-Larsen^{1,2}, Christian Eriksen³, Hanne Birke³, Sofie Holding⁴, Nermin Ghith⁵,
John Andersen², Anne Frølich^{1,2}

1: Innovation and Research Centre for Multimorbidity, Slagelse hospital, Region Zealand, Denmark

2: Section of General Practice, Faculty of Health and Medical Sciences, University of Copenhagen

3: Center for Clinical Research and Prevention, Bispebjerg and Frederiksberg Hospital

4: Juliane Marie Centre, Rigshospitalet and DanTrials ApS, Zero Phase 1 Unit, Bispebjerg and Frederiksberg Hospital

5: Research Group for Genomic Epidemiology, National Food Institute, Technical University of Denmark

Introduction: Organizational care models have been developed for providing coherent and integrated care for patients with single chronic conditions and multimorbidity. The most notable models being the Chronic Care Model, the SELFIE model, and the World Health Organization model of integrated, people-centered care. These models provide approaches to improve the integration of care and increase patient-centeredness. Unfortunately, only few models have been adequately evaluated for effectiveness among populations with multimorbidity. Knowledge about the existing models of care is important to identify possible new collaborations to achieve integrated care.

Methods: The objective of this study was to categorize and examine the effectiveness of care models for persons with multimorbidity in primary care, community care, and hospitals. We systematically searched PubMed, Embase, and CENTRAL in May 2020. Inclusion criteria: 1) participants aged ≥ 18 years with multimorbidity; 2) mentioning multimorbidity or two or more specific chronic conditions in the title or abstract; 3) randomized controlled design; 4) outcome measures: health-related quality of life (HRQoL), mental health, or mortality. We used The Foundation Framework for Development and Reporting New Models of Care for Multimorbidity to categorize the care models and the PRISMA-guideline for reporting.

Results: We included 31 studies, in which 10,096 participants with multimorbidity were included. Regarding specific model elements in the care models, self-management support (26/31) and mental health focus (23/31) were the most used Clinical Focus across settings. Organization of Care Delivery were mostly covering scheduled chronic appointments (18/31), case management (17/31), and collaborative care (17/31). Support for Model Delivery mostly consisted of telephone management (20/31) and education of professionals (16/31). HRQoL was reported as the primary outcome in 13 studies, mental health in 18 studies, and mortality in four studies. Twenty-one of the care models showed significant improvement in the primary outcome.

Conclusions: Although 21 of the 31 care models were effective, the variations in populations, model elements, settings, and outcome measures made it difficult to conclude on effectiveness. More research is needed in the area of effectiveness of care models for persons with multimorbidity – including the conceptualization of clinically meaningful definitions of multimorbidity.

Implications for applicability/transferability, sustainability, and limitations: Due to the heterogeneity of the included studies, we used a narrative nature of our synthesis; this makes it difficult to conclude the potential effects of models of care. We addressed this by discussing the findings and limitations of the studies in each category when forming conclusions.