

What is the evidence for the effect of health promotion, management, and maintenance interventions within the scope of occupational therapy on the occupational performance, quality of life, and health-care utilization for community dwelling older adults?

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Significance of Question

- Chronic diseases cause 70% of all deaths globally each year (WHO, 2017)
- In United States, 75% of adults 65+ have multiple chronic conditions (CDC, 2016)
- Multiple chronic conditions are associated with:
 - decreased HRQoL (Barile et al., 2013)
 - decreased occupational performance (Barstow et al., 2015)
 - increased healthcare spending (CDC, 2016)
- Considering high health care costs and poor outcomes of older adults living with multiple chronic conditions, ***OT has an important role*** (Leland, Fogelberg, Halle, Mroz, 2017)

Health management and maintenance

“Developing, managing, and maintaining routines for health and wellness promotion, such as physical fitness, nutrition, decreased health risk behaviors, and medication routines” (AOTA, 2014)

- Past systematic review found evidence to support the role of client-centered OT in improving occupational performance related to health management for older adults (Arbesman & Mosley, 2012)

Scope of Question

- Population: Older adults (65 +)
- Intervention
 - Activity/occupation-based
 - Focused on habits and/or routines
 - Health promotion
 - Health maintenance
 - Health management
- Outcomes
 - Quality of life
 - Occupational performance
 - Health care utilization

Inclusion Criteria

- Peer-reviewed scientific literature
- Published in English
- Intervention approaches within scope of OT
- Participants with an average age of 65 or older
- Participants living in the community

Search Results

Number of Abstracts
Reviewed=**1449**



Number of Articles for Full
Review=**154**



Number of Articles Identified for Relevance to
Focused Question = **38**

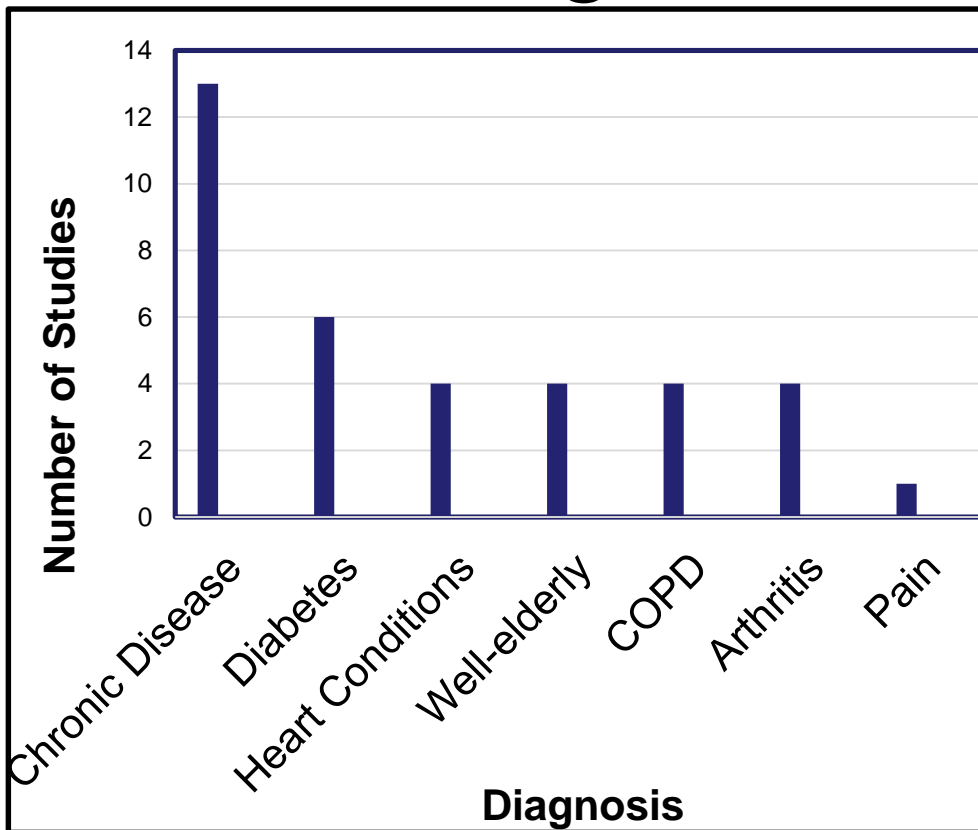
Level of Evidence

Level of Evidence	Study Design	Number of Articles Included
I	Randomized controlled trials	20
II	Two-groups, nonrandomized studies	6
III	One group, nonrandomized (e.g., pretest/posttest)	12
	Total articles	38

Location



Participant Characteristics: Diagnoses and Age



Age	Number of Studies
65-74	24
75-84	11
85+	1

Interventionist

Interventionist	Number of Studies
OT	5
Health Professional Team (including OT)	2
Health Professional + peer	4
Health Professional	6
Peer/Lay	7
Nurse	7
Unknown	5

13 of the studies included OT either as primary interventionist, as part of a team, or at times was an OT (e.g., OT or PT or nurse).

Outcome Measures

- **Quality of Life (QoL)**
 - primarily included SF-36 or diagnosis specific QoL measures (e.g., St. George's Respiratory Questionnaire)
- **Occupational Performance**
 - varied greatly including COPM, social function assessments, ADL / IADL scales, etc.
- **Health Care Utilization**
 - number of days in hospital, number of admissions, number of visits to ER, number of visits to primary care physician, etc.

Key Features of Health Promotion Programs

CDSMP / mCDSMP

- Problem solving
- Skill mastery
- Group process
- Psychoeducational
- Goal setting
- Coping
- Peer Leader**
- Heterogeneous condition groups**

Additional features

- CBT features
- Diaries/journaling
- Energy conservation

All interventions

- Participatory/interactive
- Addressed habits or routines

Definitions of strength of evidence

- **Strong:** consistent results from at least 2 RCTs
- **Moderate:** consistent results from 1 RCT or >2 studies of lower levels of evidence
- **Limited:** few studies of low level of evidence
- **Mixed:** some studies supported intervention, others did not
- **Insufficient:** not enough studies or of too low quality to make any clear statement

(Adapted from U.S. Preventive Services Task Force, 2012)

Findings: Strength of Evidence

Occupational Performance

- CDSMP/mCDSMP -**strong**
- Other groups -**strong**
- Individual -**strong**
- Groups and Individual -moderate

Quality of Life

- CDSMP/mCDSMP -moderate
- Other groups -**strong**
- Individual -mixed
- Groups and Individual -mixed

Health Care Utilization

- CDSMP/mCDSMP -insufficient
- Other groups -insufficient
- Individual -mixed
- Groups and Individual -insufficient

Limitations

- Variety of interventions (e.g., group vs. individual, in person vs. telephone) limits synthesis of results
- Variety of mechanisms of action (e.g., peer leader, goal setting) make it difficult to determine what is key finding that is driving the change
- Variety of outcome measures limits comparison of studies
- Generalization may be limited due to all studies occurring in middle and high income countries

Bottom Line for Occupational Therapy

- Addressing health management through occupation-based programs (group or individual) is effective in improving occupational performance for all older adults (not diagnosis specific).
- Individual programs make more of a difference in decreasing health care utilization than group programs.
- Consider mechanisms of action to facilitate change:
 - Goal setting
 - Coping techniques to deal with frustration, fatigue, pain, etc.
 - Problem solving
 - Skill mastery / practice
- Studies took place throughout the world, demonstrating potential application in multiple health care systems.

Future Research

- Heterogeneous vs. homogeneous condition groupings
- Peer leader vs. health professional leader vs. both
- Telephone or virtual interventions vs. face to face interventions
- Effectiveness of intervention component vs. combination of components

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Key Reference:

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