Publications on multimorbidity

(Updated on November 6, 2018)

INDEX
- Publications by subject
  1. THEORETICAL & REVIEW ARTICLES AND PROTOCOLS
  2. DEFINITION / CONCEPTUALISATION
  3. CLINICAL AND EPIDEMIOLOGICAL STUDIES
     3.1 Prevalence
     3.2 Aetiology
     3.3 Correlation with biological markers
     3.4 Interactions and patterns
     3.5 Socio-demographic, socio-economic, and psychosocial variables
     3.6 Variables related to hospitalisation
     3.7 Resource utilisation
     3.8 Quality of life and functional level
     3.9 Psychological distress, depression, cognition, mental illnesses
     3.10 Medication
     3.11 Social support
     3.12 Other clinical variables
     3.13 Generalisation of clinical trials / Guidelines
     3.14 Other subjects
  4. ECONOMIC STUDIES
  5. METHODS TO MEASURE MULTIMORBIDITY AND COMORBIDITY
  6. EDITORIALS / OPINION ARTICLES
  7. QUALITATIVE RESEARCH
  8. INTERVENTION IDEAS
  9. OTHERS
     9.1 Physical activity
     9.2 Continuity of care
     9.3 Self-care
     9.4 Medical errors / Medical education
– Publications by subject

1. THEORETICAL & REVIEW ARTICLES AND PROTOCOLS


Fitzgerald SP, Bean NG, Ruberu RP. A method of decision analysis quantifying the effects of age and comorbidities on the probability of deriving significant benefit from medical treatments. Journal of Comorbidity 2017;7:50–63.


Damery S, Flanagan S, Combes G. The effectiveness of interventions to achieve co-ordinated multidisciplinary care and reduce hospital use for people with chronic diseases: study protocol for a systematic review of reviews. Syst Rev. 2015;4:64.


Salive ME. Multimorbidity in Older Adults. Epidemiol Rev. Jan 31 2013.


Lupari M, Coates V, Adamson G, Crealey GE. We're just not getting it right'--how should we provide care to the older person with multi-morbid chronic conditions? *J Clin Nurs* 2011;20.


Iezzoni LI. Multiple Chronic Conditions and Disabilities: Implications for Health Services Research and Data Demands. Health Serv Res. 2010;45(5 Pt 2):1523-40.


**2. DEFINITION / CONCEPTUALISATION**


3. CLINICAL AND EPIDEMIOLOGICAL STUDIES

3.1 Prevalence


3.2 Aetiology


3.3 Correlation with biological markers


3.4 Interactions and patterns


Ng SK: A two-way clustering framework to identify disparities in multimorbidity patterns of mental and physical health conditions among Australians. Stat Med. 2015;34(26):3444-3460


McCarron M, Swinburne J, Burke E, McGlincsey E, Carroll R, McCallion P. Patterns of multimorbidity in an older population of persons with an intellectual disability: results


Wee, H.L., et al., The impact of diabetes mellitus and other chronic medical conditions on health-related Quality of Life: is the whole greater than the sum of its parts? Health & Quality of Life Outcomes, 2005. 3(1): p. 2.

3.5 Socio-demographic, socio-economic, and psychosocial variables


### 3.6 Variables related to hospitalization


Marengoni A et al. Poor mental and physical health differentially contributes to
disability in hospitalized geriatric patients of different ages. Int J Geriatr Psychiatry.

Beddhu, S., et al., A simple comorbidity scale predicts clinical outcomes and costs in

Beddhu, S., et al., The effects of comorbid conditions on the outcomes of patients
701.

Bergeron, E., et al., Comorbidity and age are both independent predictors of length of

van den Bos, G.A., The burden of chronic diseases in terms of disability, use of health

Buntinx, F., et al., Evaluation of Charlson's comorbidity index in elderly living in nursing

Christakis, N.A. and J.J. Escarce, Survival of Medicare patients after enrollment in
172-8.

Clough, R.A., et al., The effect of comorbid illness on mortality outcomes in cardiac

Ettinger, W.H., et al., Long-term physical functioning in persons with knee
osteoarthritis from NHANES. I: Effects of comorbid medical conditions. Journal of

Fan, V.S., et al., Validation of case-mix measures derived from self-reports of

Fillenbaum, G.G., et al., Comorbidity of five chronic health conditions in elderly
community residents: determinants and impact on mortality. Journals of Gerontology

Fried, L.P., et al., Risk factors for 5-year mortality in older adults: the Cardiovascular

Grau, L. and C. Kovner, Comorbidity, age, and hospital use among elderly Medicare

Gray, L.K., et al., Heterogeneity in older people: examining physiologic failure, age,

Greenfield, S., et al., The importance of co-existant disease in the occurrence of
postoperative complications and one-year recovery in patients undergoing total hip
141-54.

Holman, C.D., et al., A multipurpose comorbidity scoring system performed better than

Incalzi, R.A., et al., The interaction between age and comorbidity contributes to
predicting the mortality of geriatric patients in the acute-care hospital. J Intern Med,


3.7 Resource utilisation


van den Bussche, H., et al., Patterns of ambulatory medical care utilization in elderly patients with special reference to chronic diseases and multimorbidity - Results from a claims data based observational study in Germany. BMC Geriatrics, 2011. 11: p. 54.


3.8 Quality of life and functional level


Hodek JM, Ruhe AK, Greiner W. Relationship Between Health-Related Quality of Life and Multimorbidity. *Gesundheitswesen.* 2009 Sep 29. [Epub ahead of print]


3.9 Psychological distress, depression, and cognition


Thomeer MB. Multiple Chronic Conditions, Spouse's Depressive Symptoms, and Gender within Marriage. *J Health Soc Behav.* 2016;57:59-76.


Gallo JJ, Hwang S, Joo JH, Bogner HR, Morales KH, Bruce ML et al: Multimorbidity, Depression, and Mortality in Primary Care: Randomized Clinical Trial of an Evidence-Based Depression Care Management Program on Mortality Risk. *J Gen Intern Med.* 2015.


3.10 Medication


Richardson, K., et al., Variation over time in the association between polypharmacy and mortality in the older population. Drugs Aging, 2011. 28: p.:547-60.


3.11 Social support


3.12 Other clinical variables


Woo J, Leung J. Multi-morbidity, dependency, and frailty singly or in combination have different impact on health outcomes. *Age (Dordr).* Apr 2014;36(2):923-931.


Landi F et al. Disability, more than multimorbidity, was predictive of mortality among older persons aged 80 years and older. J Clin Epidemiol. 2010. 63(7):752-9.


3.13 Generalisation of clinical trials / Guidelines


Rothwell, P.M., External validity of randomised controlled trials: "to whom do the results of this trial apply?" *Lancet,* 2005. 365: p. 82-93.


### 3.14 Other subjects


Adams ML. Differences Between Younger and Older US Adults With Multiple Chronic Conditions. Prev Chronic Dis. 2017;14:E76.


Tetzlaff J, Muschik D, Epping J, Eberhard S, Geyer S. Expansion or compression of multimorbidity? 10-year development of life years spent in multimorbidity based on


Chan CL, You HJ, Huang HT, Ting HW. Using an integrated COC index and multilevel measurements to verify the care outcome of patients with multiple chronic conditions. *BMC Health Serv Res.* 2012;12:405.


Wong A, Boshuizen HC, Schellevis FG, Kommer GJ, Polder JJ. Longitudinal administrative data can be used to examine multimorbidity, provided false discoveries are controlled for. J Clin Epidemiol 2011;64(10):1109-17.


4. ECONOMIC STUDIES


5. METHODS TO MEASURE MULTIMORBIDITY AND COMORBIDITY


Holzhausen M, Fuchs J, Busch M, et al. Operationalizing multimorbidity and autonomy for health services research in aging populations--the OMAHA study. BMC Health Serv Res 2011;11:47.


Charlson, M., et al., Validation of a combined comorbidity index.


Katz, J.N., et al., Can comorbidity be measured by questionnaire rather than medical record review? Medical Care., 1996. **34**: p. 73-84.


Ware JE, Bayliss MS, Rogers WH, Kosinski M, Tarlov AR. Differences in 4- year health outcomes for elderly and poor, chronically ill patients treated in HMO and fee-for-service systems. Results from the Medical Outcomes Study. JAMA 1996; 276(13):1039-1047.


6. EDITORIALS / OPINION ARTICLES


Oliver D. David Oliver: A manifesto for multimorbidity. *BMJ* 2018;360:k1044. doi: 10.1136/bmj.k1044


Wise J. Patients with multimorbidity need longer GP consultations, says RCGP. BMJ. 2016;355:i5961.


Gunn J. Designing care for people with mixed mental and physical multimorbidity. *BMJ.* 2015;**350**:h712.


Tinetti ME, Basu J. Research on multiple chronic conditions: where we are and where we need to go. *Med Care*. Mar 2014;**52** Suppl 3:S3-6.


Roland M, Paddison C. Better management of patients with multimorbidity. BMJ. 2013;346:f2510


Rudland S, Macey N. Value of a well organised team approach in primary care in managing patients with multimorbidity. BMJ. 2013;346:f3555.


Haggerty JL. Ordering the chaos for patients with multimorbidity. *BMJ.* 2012;345:e5915.


Hawkes N. Better training is needed to deal with increasing multimorbidity. *BMJ.* 2012;344:e3336.


Shepherd DJ. We need a system that accounts for multimorbidity at practice level. BMJ. 2012;345:e5464.

Kamerow D. How can we treat multiple chronic conditions? BMJ. 2012;344:e1487.


7. QUALITATIVE RESEARCH


Fredericksen RJ, Gibbons L, Brown S, et al. Medication understanding among patients living with multiple chronic conditions: Implications for patient-reported measures of


van Dongen JJ, de Wit M, Smeets HW, Stoffers E, van Bokhoven MA, Daniels R. "They Are Talking About Me, but Not with Me": A Focus Group Study to Explore the Patient Perspective on Interprofessional Team Meetings in Primary Care. Patient. 2017.


Slightam CA, Brandt K, Jenchura EC, Lewis ET, Asch SM, Zulman DM. "I had to change so much in my life to live with my new limitations": Multimorbid patients' descriptions of their most bothersome chronic conditions. Chronic Illn. 2017;1742395317699448.


8. INTERVENTION IDEAS


Braithwaite RS, Fiellin D, Justice AC. The payoff time: a flexible framework to help clinicians decide when patients with comorbid disease are not likely to benefit from practice guidelines. Med Care. 2009 Jun;47(6):610-7.


9. OTHERS

9.1 Physical activity


Loprinzi PD. Multimorbidity, cognitive function, and physical activity. *Age (Dordr).* 2016;38:8.


Loprinzi PD. Sedentary behavior and medical multimorbidity. Physiol Behav. Nov 1 2015;151:395-397.


9.2 Continuity of care


DuGoff EH. Continuity of Care in Older Adults With Multiple Chronic Conditions: How Well Do Administrative Measures Correspond With Patient Experiences? J Healthc Qual. 2017.


9.3 Self-care


### 9.4 Medical errors / Medical Education


