CONFEERENCE ABSTRACT

Getting to know the needs of people with multimorbidity better: implications for new models of care

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Introduction: Many countries face a rapid increase in the number of inhabitants living with multiple chronic conditions. At the same time, models of care that have been implemented in western countries seem to under-perform in terms of quality and outcomes, when it comes to multimorbidity management. People with multimorbidity often receive fragmented care, because of the disease-specific organisation of many health services. In addition, the segregation of health and social care in many countries obstruct the delivery of integrated care. Moreover, multimorbidity is accountable for high costs, which could be attributed to the high needs of multimorbid patients, but also to inefficiency in care delivery.

To develop effective and sustainable care that meet the needs of people with multimorbidity, it is essential to get a better understanding of what care is needed by whom. This would allow the development of care models and the allocation of resources to better fit the needs of various subpopulations of people with multimorbidity. For instance, some people may be best served by primary care, whereas others may (also) need specialist care, home care or social care. For this purpose, we aimed to gain insight in patient characteristics that determine multimorbid patients’ needs for care.

Methods: We analyzed data of 542 people with multimorbidity participating in a nationwide panel study in the Netherlands. All participants had been diagnosed with two or more chronic diseases, as registered by their general practitioners. To identify subgroups with different health-related needs, we conducted cluster analysis based on participants’ scores on the RAND-36. Subsequently, bivariate analyses (ANOVAs, Chi-square tests) were conducted to describe the subgroups and to test for between-group differences.

Results: Three subgroups of multimorbid patients could be distinguished: a subgroup of almost half of the participants, who had high scores on all eight RAND-36 scales; a second group (27%) with somewhat lower scores on most scales but experiencing in particular more problems with physical functioning than the first group; and a third group (24%) with low scores on all scales but experiencing in particular huge limitations in role functioning due to both physical and emotional problems.
In the last two groups significantly more people had been diagnosed with musculoskeletal diseases (P <0.05). The three groups also differed with regard to illness duration (P <.001) and the number of chronic diseases they had been diagnosed with (P <.05). Remarkably, the three groups did not differ in age, but they differed in many other aspects, such as in education level and social deprivation. For instance, half of the people in the third group had a low education level, whereas the proportions low educated people in the other two groups were much lower (P <.001).

**Discussion:** Our results show that not all people with multimorbidity are ‘high-need patients’, but substantial subgroups with high or specific health-related needs exist. These people may be most in need for person-centered, integrated care, including social care and community services.

Koivuniemi and Simonen (2011) developed a ‘clientship’ model, based on combining the medical complexity of patients’ condition and the resources they have at their disposal to cope with their condition, resulting in four clientship profiles: 1. self-management clientship (medical problem not complex, good resources); 2. co-operation clientship (medical problem complex, good resources); 3. community clientship (medical problem not complex, poor resources); 4. network clientship (medical problem complex, poor resources). This typology could guide the development of care models at a local or regional level, which could be used as a basis for multimorbid patients’ individualised care plans. The results of our study show which characteristics and resources of patients should be taken into account, when developing profiles of multimorbid patients with specific needs for integrated care.

**Conclusion:** People with multimorbidity are not all high-need patients, but a substantial proportion have needs that ask for more comprehensive, person-centred models of care. These people cannot be identified by the complexity of their medical condition alone; sociodemographic characteristics as well as patients’ personal resources should also be taken into account.

**Limitations and suggestions for future research:** Although we conducted similar analyses using another measuring instrument to assess the health-related needs of people with multimorbidity (EQ-6D) previously (Hopman et al., 2016), it is necessary to repeat our analyses with other samples from other countries, to assess the external validity of our results.

**Keywords:** multimorbidity; needs; care model; integrated care