Letter to the Editor

A Research Group from the European General Practice Research Network (EGPRN) Explores the Concept of Multimorbidity for Further Research into Long-Term Care

The concept of multimorbidity was first published in 1976 in Germany and remained almost entirely restricted to German publications for 14 years. Between 1976 and 1990 only 72 articles had multimorbidity in their text of which 66 were written in German. In 1990, the concept began its internationalization through research. It was an addition to the concept of comorbidity. Comorbidity was defined as any disease or risk factors that could interact with one main disease with the effect of making it worse. Multimorbidity has been defined by the World Health Organization (WHO) as people being affected by two or more chronic conditions. The intention of WHO was to look at all conditions in one individual that could impact on that individual’s global health status. However, the word “condition” was not sufficiently clear for practical purposes (for instance, whether hypertension, which is medicated may be considered a “condition” in this sense) and could lead to numerous interpretations.

Multimorbidity is a very interesting and challenging concept for family medicine and for long-term care given the increasing prevalence of chronic illness in an ageing population across Europe and all developed countries. It is closely related to a global or comprehensive vision of the patient, which is a core competency of family medicine as defined, for instance, by the World Organization of National Colleges, Academies and Academic Associations of Family Physicians (WONCA). Multimorbidity is a global functional patient centered view that could help modeling and restructuring health care with a view to provide greater support for the patient: a new health care challenge. It is also a very interesting concept when applied to patients as it gives an overview of all the factors that could lead to frailty. Frailty is a new concept formulated to help physicians to identify decompensating patients especially in long-term care. Its link with multimorbidity has already been discussed.

The European General Practice Research Network (EGPRN) is committed to concepts that could advance research in primary care throughout Europe. It has defined a research agenda especially designed for methodologic and instrumental research with development of primary care epidemiology with respect to patient oriented health. A clear definition of the concept of multimorbidity (ie, understandable and usable for further collaborative epidemiologic research) is an important aim for such a network. It will help researchers in family medicine investigate the complexity of patients’ conditions and their overall impact on patient health. This definition of multimorbidity could be an additional tool for practicing family physicians (FPs) working to identify frail patients with the intention of preventing decompensation.

A research team including eight European national research groups all active within EGPRN has created a research community to clarify the multimorbidity concept for family medicine throughout Europe. Their first hypothesis was that academic researchers should have defined what constituted a multimorbid patient within their research using clear inclusion criteria and that a review of the scientific literature could then lead the way to a clearer definition. Their second hypothesis was that FPs could use a concept of multimorbidity that differs from those of other specialists. They are justified in doing so because they appear to be more in line with the patient’s expectations about chronic illnesses like depression. Qualitative research throughout Europe could then lead to the identification of new concepts of multimorbidity. Their third hypothesis was that current databases in family medicine were not designed to record multimorbidity and that a new ICPC code or code combination should be established for the implementation of multimorbidity in databases. These databases could then lead to quantitative research into multimorbidity and especially its links with frailty. Quality assessment in family medicine with regards to long-term care will be one final task for the research team now that the link between quality assessment in family medicine and multimorbidity is being highlighted.

A step-by-step methodology was and will be used by the EGPRN research team. The constitution of a multinational research team, which emerged from the EGPRN, started in Zurich (Switzerland) during the EGPRN meeting in October 2010. It was composed of researchers from Belgium (University of Antwerp), France (University of Brest), Germany (University of Hannover and Gottingen), Greece (Association of Greek GPs- ELEGEIA), Italy (Association of Italian GPs), Poland (University of Torun), Spain (University of Barcelona and Vigo), and The Netherlands (Free University of Amsterdam). In October 2011 during the EGPRN meeting in Krakow (Poland), researchers from Bosnia (University of Sarajevo) and Croatia (University of Zagreb) joined the team. They were followed during the EGPRN meeting in Spring 2012 in Ljubljana (Slovenia) by researchers from Bulgaria (University of Plovdiv).

To achieve the research goals the European team will undertake the following tasks in succession:

1. A systematic review of relevant literature according to the PRISMA Guidelines for systematic review. The research question will be: “what are the definitions of and criteria for multimorbidity found in scientific medical literature?” The
outcome of the first part of the research will be the emergence of an exhaustive definition of multimorbidity drawn from scientific literature.

(2) A translation of that exhaustive definition into all the languages represented within the team, with a forward backward translation using a Delphi procedure.17

(3) A qualitative research throughout Europe, using semi-structured interviews and focus groups, to find the added value by FPs in the concept of multimorbidity. Analysis of the data will be undertaken in two ways: a grounded theory analysis and a deductive analysis from the translated definition of multimorbidity.

(4) Then an ICPC code will be put forward to the ICPC committee of the WONCA for further implementation into databases.

These implementations will then be used for further epidemiologic collaborative research throughout Europe, which, in turn, will guide the international research team in the design of further studies to investigate the links between multimorbidity and frailty. At this stage, the research team will test the usefulness of multimorbidity as a quality assessment tool in medical decision making for frail patients. Multimorbidity will then be able to help European researchers and medical teams modeling and restructuring health care centered on the patients who use it.

References


