Multimorbidity: a priority for global health research

Overview and key messages

The Academy of Medical Sciences
Multimorbidity refers to the existence of multiple medical conditions in a single individual. The issue is a growing global health concern but the available evidence on its causes, impact, and treatment is currently inadequate.
Introduction

A growing number of people suffer from more than one serious long-term medical condition such as diabetes, arthritis or Alzheimer’s disease - a condition known as multimorbidity.

In wealthy countries, multimorbidity is the norm not the exception. At least 50 million people suffer in the European Union alone. Yet, it is also increasingly a problem in low- and middle-income countries meaning multimorbidity is a true global health challenge.

Despite the huge problems multimorbidity brings, there is surprisingly little research into its impact on patients, healthcare systems and society at large. This report pulls together what scientists and doctors know about this rising, but neglected problem, and what needs to be done to fill those gaps in knowledge to improve care and outcomes for patients.
What is the problem?

Studies show that multimorbidity is more common in older people, women and those who come from poorer backgrounds. However, it’s not just a problem for these groups – people across all ages and backgrounds can develop multimorbidity.

Patients suffering from more than one medical condition are at greater risk of disability and dying early, and also have a lower quality of life. Multimorbidity also affects the quality of life of the families and carers of patients affected. It can put a strain on overworked doctors and a financial burden on healthcare systems.

Multimorbidity is considered to be on the rise, in part because more people are living longer than ever before, although other causes are likely to be involved as well. Some clusters of medical conditions are more common than others. There is evidence that people who have both a mental and physical health condition do worse than those who just have physical health problems.

The gaps

While it is generally accepted that multimorbidity is an increasing global health challenge, there remain massive gaps in our knowledge. There is very little information about how many people - and which types of people - suffer from multimorbidity, which medical conditions occur together most commonly, and the toll that multimorbidity has on everyone’s health. There are big gaps in our understanding of how to prevent and treat multimorbidity, and how health systems across the world can best respond.

Although all medicines are rigorously tested, clinical trials for particular medical conditions don’t usually include patients suffering from other conditions - which means there isn’t a bank of good evidence showing how different medicines work together in patients suffering from multimorbidity.

Research into multimorbidity in younger adults and those living in low- and middle-income countries is particularly lacking.

All of these gaps are worsened by the fact that there isn’t even an agreed definition of multimorbidity among experts – this makes it difficult to draw what evidence is available together in a coherent way.

Without good evidence, it is difficult to develop sensible policies to tackle the problems multimorbidity brings.
Research on the causes of multimorbidity is sparse and there are many evidence gaps.
Next steps

We need an agreed definition of multimorbidity and a new, clear system for researchers and doctors to report it.

Our main policy report therefore proposes a definition and reporting system to be adopted by doctors and scientists internationally. This will help everyone be on the same page when they are talking about multimorbidity, leading to better data for researchers and to better research.

Importantly, more research is now urgently needed into the causes and burden of multimorbidity and into the best, most cost-effective ways to treat patients living with several medical conditions.

To fill these gaps, and help tackle this growing problem across the world, we are calling for more research into the following areas:

- The scale and nature of multimorbidity and how it is changing over time.
- Which clusters of conditions cause the biggest problems for patients.
- The causes of the most common clusters including links with sex, ethnicity, income and lifestyle.
- The best ways to prevent the patients developing multimorbidity, and whether this requires different approaches to just preventing individual conditions.
- How doctors can increase the benefits and reduce the risks of treatment for patients with multimorbidity.
- How to organise healthcare systems to deal with multimorbidity more effectively and how best to use digital technology in caring for patients.

In order to address the global challenge of multimorbidity, we must understand the problem better.
Further research is urgently required to better understand the growing challenge of multimorbidity and improve the care of patients across the globe.