Safer primary care: Caring for people with multiple conditions

Technical Series on Safer Primary Care
Preface

SAFER PRIMARY CARE

Health services throughout the world strive to support people to stay well and assist when they are unwell. Primary care services are at the heart of health care in many countries, providing an entry point into the health system, ongoing coordination and care and a person-focused approach for people and their families. Accessible and safe primary care is essential to ensure universal health coverage, which is a priority of the World Health Organization (WHO) and Member States.

Health services work hard to provide safe and good quality care, but sometimes people are inadvertently harmed. Unsafe health care has been recognized as a global challenge and much has been done to understand the causes, consequences and potential solutions. However much of this work has focused on hospital care. There is less understanding about what can be done to improve safety in primary care.

Yet safer primary care is a priority. Understanding the magnitude and nature of harm in primary care is important because most health care is offered in this setting. Every day, millions of people in developing, transitioning and developed countries use primary care services, so the potential to reduce harm is great. Good primary care may lead to fewer avoidable hospitalizations, but unsafe primary care contributes to morbidity which may need to be treated in hospital.

WHO has urged Member States to implement systems changes and practices to improve safety at all levels of health care. Recognising the paucity of accessible information about primary care, WHO set up a Safer Primary Care Expert Working Group. The Group has reviewed literature, prioritized areas in need of further research and compiled key learning. As part of this, WHO developed a Technical Series to promote good practice for safer primary care.
**AIM**

The overarching aim of the Technical Series is to provide a compendium of information about key issues that may affect safety in primary health care.

The specific objectives are to:

- raise awareness about the causes and consequences of unsafe primary care;
- provide accessible summaries about key issues to address when striving for safer primary care;
- help increase knowledge about how to design and deliver safer primary care.

The aim is not to propose a one size fits all approach. Primary care is organised in various ways in different countries, and indeed in different ways within countries. There can be a mix of larger primary care practices or group practices with shared resources and small practices with a tiny staff and few resources. Some countries have primary care operating within strong national support systems while in other countries primary care centres consist largely of independent private practices that are not linked or co-ordinated. The approach to improving safety in primary care needs to consider the applicability in each country and practice setting.

WHO hopes that Member States will each be able to take something useful from the Technical Series because the fundamental principles of improving person-centred care, supporting the workforce and enhancing care processes are helpful for all. Whether the Series provides a reminder about best practice or some specific practical tips to try, the aim is to give Member States a compendium of information to pick and choose from, as relevant for local contexts.
CONTENT

WHO recognizes that many interrelated aspects are important for safer primary care. These can be broadly divided into issues related to people using services; issues related to the workforce; care processes, and tools and technology. The Technical Series summarizes key topics related to all of these areas.

The Technical Series covers the following topics:

Issues related to patients
• Patient engagement

Issues related to the workforce
• Education and training
• Human factors

Care processes
• Administrative errors
• Diagnostic errors
• Medication errors
• Safety when caring for people with many conditions (multimorbidities)
• Safety when moving between different types of care

Tools and technology
• Electronic tools

INTENDED AUDIENCES

The Technical Series will be useful for many audiences, including:

• national health authorities and health systems planners responsible for developing systems for safety and quality;
• managers and staff working in primary care worldwide;
• international partners, experts and consultants helping to establish systems for health care safety and quality in developing countries.
REVIEW

Each monograph in the Technical Series sets out the nature of the issues and potential solutions based on research evidence and expert opinion. International experts kindly donated their time to author monographs or review and contribute to the work of others. More than ten experts were involved in authoring and reviewing every monograph. The authors of the material and other contributors are acknowledged at the end of this monograph.

It is anticipated that WHO will review the Technical Series in 2020 to assess the need for updating in line with new developments.

CALL TO ACTION

Primary care is the setting in which most health care is provided, yet it has hitherto received little attention in terms of improving safety. This may in part be explained by a misperception that primary care is less risky than hospital care. However the sheer number of people using primary care services means that the potential for harm is likely to be great. Unsafe practices in primary care may arise from misjudgments and misdiagnoses which are complex to think about and study, but no less important than more obvious harms. WHO is committed to grappling with these challenges head on. By highlighting potential safety issues in primary care and ways that Member States can address them, together we will widen the lens through which safety is viewed.

Professor Debra de Silva and Chris Singh
Editors, WHO Technical Series on Safer Primary Care
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1 Introduction

1.1 SCOPE

People often live with many health conditions. Aging populations and the increase in long term conditions mean that the number of people with multiple health conditions is set to rise. This ‘multimorbidity’ has specific impacts on safety issues in primary care. In order to improve safety in primary care, it is essential to take into account care for people with many conditions. Multimorbidity is also more common in disadvantaged groups, thus contributing to health inequalities. This monograph provides an overview of the issues and some potential solutions for WHO Member States to consider.

The term ‘multimorbidity’ is used throughout to mean people with multiple health conditions. These are often long term health conditions which require complex and ongoing care.

1.2 APPROACH

To compile information for this monograph, WHO sought the advice of experts in the field recommended by the Safer Primary Care Expert Working Group and reviewed relevant research, published literature and educational curricula. International experts in delivering safe primary care provided feedback, practical suggestions about potential priorities for Member States and examples of things that have worked well around the world.
2 Importance

Patient safety incidents involve active events such as adverse drug events, intervention complications, infections and care failures (e.g. pressure ulcers) as well as precursors such as inappropriate prescribing, over or under use of drugs, medication non adherence, and delayed diagnosis. The manner in which the safety of the patient is maintained throughout their interactions with health care reflects the different challenges that occur as a function of the 'cradle-to-grave' health requirements. People with multiple health conditions pose a particular challenge to patient safety at all stages of the life course.

Patients with multimorbidity are at higher risk of safety issues for many reasons including:(1)

- polypharmacy, resulting in poor medication adherence, adverse drug-drug interactions and adverse drug-tissue interactions
- complex management regimens
- complex and demanding self management regimens and competing priorities
- greater need for good communication and patient centred care due to complex needs
- more frequent and complex interactions with health care services leading to greater susceptibility to failures of care delivery and co-ordination
- more vulnerability to safety issues due to poor health, advanced age, cognitive impairment, limited health literacy, and comorbidity of depression or anxiety

Patient safety can be approached from a systems perspective in which the interactions between elements of the system generate conditions that challenge the normal bounds of operation. The multiple interactions and treatments in multimorbidity have the potential to generate a range of significant patient safety challenges.

2.1 BURDEN OF MULTIMORBIDITY
Life expectancy has improved dramatically over recent decades. In nearly 60 countries, life expectancy now exceeds the age of 75 years. Childhood survival has also improved and more than one quarter of the world’s population are adolescents and young people, 86% of whom reside in low and middle income countries. However the numbers of people with or at risk of long term conditions such as diabetes, mental health issues, HIV/AIDS and cancer is also growing rapidly.

People living with a long term condition often have multiple rather than single conditions. Such multimorbidity is common and has been rising in prevalence over recent years. In one developed country, a large study found that more than 40% of the whole population (all ages included) had at least one long term condition and almost 25% of the entire population had more than one long term condition.

Recent work has shown high levels of multimorbidity in developing and transitioning countries too. This means that there is a potential global epidemic of problems associated with multimorbidity which may impact on patient safety.

People often have both physical and mental health issues simultaneously. A systematic review of 86 studies found that people with mixed mental and physical multimorbidity had the highest risk of active patient safety incidents and precursors of safety incidents.

The prevalence of multimorbidity increases substantially with age. However the absolute number of people with multimorbidity has been found to be higher in those younger than 65 years due to the age distribution of the population. This is especially true in areas of high deprivation. Thus a life course approach to multimorbidity and the challenges it poses to safety in primary care is vitally important.
One study found that above the age of 55 years, multimorbidity was most likely to comprise people with multiple physical health conditions. In younger age groups, multimorbidity was most likely to involve mixed physical and mental health conditions. This was two to three times more common in the most deprived compared with the least deprived groups. Depression and pain featured in the top five conditions across all age groups.\(^{(12)}\)

Female gender is also a well recognised determinant of multimorbidity.\(^{(5)}\) As well as differences in the number of conditions between people of different genders, there are also differences in disease clusters between men and women. In particular, cardio metabolic disorders have been found to be less prevalent in women but mechanical and psychogeriatric diseases are more prevalent.\(^{(13)}\)
3 Potential solutions

3.1 SYSTEMS BASED APPROACH

Multimorbidity is associated with socioeconomic deprivation. A study in one developed country found that those living in the most deprived areas suffer more multimorbidity and this develops 10 to 15 years younger than in the least deprived decile of the population.(7) This highlights the importance of a systems approach to safer primary care for people with more than one condition. Unless a whole systems approach is used to deal with the interactions between multimorbidity and the social, political and economic drivers of deprivation, then safety improvement interventions will fail to address the problem at multiple levels.

People with multiple conditions may have higher overall vulnerability to diseases and less resistance to acute health threats (for example, higher susceptibility to infections). The interacting influences lead to a complex pattern in the use of health services. Multimorbidity leads to an increased likelihood of referrals between different providers of health care. This can increase costs and mean that care is fragmented, thus compromising patient safety through poor integration of care and poor communication and coordination.(14)

Practical solutions include raising awareness amongst policy makers and healthcare providers that mutimorbidity is the norm, not the exception amongst people with long term conditions, and is socially patterned. Thus policies are required that tackle the social determinants of health and provide universal coverage for comprehensive health care.

Providers and the public need to be aware of the relationships between different conditions, demographic characteristics and other aspects of the system to help advocate and lobby for equity in health and health care.
3.2 PRIMARY CARE COVERAGE

Managing people with multiple conditions safely and effectively in primary care depends on a well organised and strong primary care system. Countries with strong primary care systems have been found to deliver safer and more cost effective care. However a pervasive problem in primary care systems around the world is the continuing existence of the ‘inverse care law’. This states that ‘the availability of good medical care tends to vary inversely with the need for it in the population served.’(15) This is most obvious within health care systems that are largely privately run for profit, requiring out of pocket fees.(16) However it also affects systems that offer universal coverage within a national health service because primary care services are often not distributed according to the health need of the local population, but according to population size.(17)

People who live in poorer areas often have worse access to safe and high quality care, including longer waiting times to see a primary care provider and shorter consultation length.(18) Primary care providers in deprived areas have also been found to be more stressed due to the greater demand and clinical complexity of patients. Burnout of health care staff is more common under such circumstances and poses a threat to patient safety.(19)

The inverse care law results from policy decisions by governments. Thus there is a role for both policy makers and health care providers to be active advocates of the need for change. In one developed country for example, primary care doctors working in the 100 most deprived areas formed a pressure group which has been active in documenting the problems they and their patients face, including issues surrounding patient safety.(20)

Strengthening primary care by providing universal health care coverage is an important step, but countries must also be mindful of the inverse care law and the needs of complex patients with multimorbidity.

People with multiple conditions need specialist care in an episodic fashion, but their overall health care needs are likely to be best met by generalists who combine a community base and comprehensive clinical skills with ‘interpretive medicine’, integrating multiple sources of knowledge with individual needs assessment.(21)
Thus, to improve safety, comprehensive primary care systems which support generalism could be put at the heart of managing people with multimorbidity. Given the high risk of patient safety problems in multimorbid patients, safety should be a core focus.

From this perspective, primary care providers need to be trained as ‘expert generalists’ and take a tailored, patient centred care approach to people with multiple conditions. Postgraduate training should include awareness of the safety issues. There is also a need to embed multimorbidity within medical education at undergraduate level, and within health care training in general.

3.3 GUIDELINES FOR MULTIMORBIDITY

Clinical guidelines review and summarise evidence about the most effective treatments for specific conditions, providing recommendations for use. However guidelines are almost always focused on single conditions. For instance, there are individual guidelines for diabetes, asthma, stroke and so on. Guidelines rarely take into account multimorbidity.(22) The randomised trials on which guidelines are based very often exclude people with multiple conditions from taking part. The socio-economic characteristics of participants in the trials is rarely reported, making it difficult for primary care providers to use the evidence for their diverse mix of patients.(23) The potential for interactions between medications and between conditions makes the application of single disease based clinical guidelines potentially hazardous for people with multiple conditions.(24)

A recent Cochrane review of interventions specifically for people with multimorbidity found only ten randomised trials published worldwide.(25)

A solution is for policy makers and research funding bodies to prioritize randomised trials and other studies that focus on people with multimorbidity, including studies on safety in primary care. There is a need for guidelines to consider multimorbidity.

Health care providers need to personalise and tailor care to the needs of individual patients, combining the best evidence with clinical knowledge and judgement and using shared decision making.(26)

4 Practical next steps
The aging population, less healthy lifestyles and an increasing incidence of long term conditions mean that multimorbidity is on the rise. This trend is a major health care challenge facing developing and developed countries.

In order to safely manage people with multiple conditions, primary care teams need to be well trained, resourced and organised. Care needs to be proactive and anticipatory, taking a life course approach and including preventive care for those at risk of developing multiple conditions.

In addition, primary care systems need to be better integrated with other parts of health, education and social care systems. Primary care should be ‘community facing’ and link directly with local community assets, thus contributing to individual and community resilience and social capital.

Strategies that Member States could consider prioritising to address safer care for people with multimorbidity include:(27)

1. **Making changes at a policy level**
   - integrating policies on the social determinants of health with equity of primary care so as to overcome the inverse care law;
   - prioritising the development of strong primary care within universal health care coverage. This requires workforce planning and education at undergraduate and postgraduate level on generalism and the management of multimorbidity;
   - prioritising research into safely managing people with multiple conditions in primary care;
2. Taking a systems approach

- developing systems for enhanced communication across different health care system levels and better supporting integrated care across the primary and secondary, health and social care sectors;
- thinking holistically about care. Conditions cannot be understood outside the context of the person who suffers from them. It is necessary to consider each patient’s co-existing physical conditions as well as their mental health and social circumstances. This will help to identify specific safety issues e.g. lack of medication adherence because the patient is unemployed and cannot afford to buy drugs;
- integrating the work of doctors, practice nurses, and other members of the multidisciplinary team in managing people with multiple conditions. This may include doing shared annual reviews;
- avoiding reliance on single condition clinical guidelines which do not take into account people with multiple conditions;

3. Identifying people in need of extra support

- having a means of identifying people with multiple conditions at each primary care practice. Electronic medical records systems can assist with this. In the absence of electronic records, well maintained paper based records and registers are essential, including medication and specific safety concerns;
- further prioritising the diagnosis and treatment of mental health conditions. Depression is particularly common in multimorbidity, is often under-recognised and is associated with poor outcomes; People with combined mental and physical health mutimorbidities are at the highest risk of safety incidents;
- considering longer consultations for people with multiple conditions, either by always offering them more time or allowing more flexibility in the appointment system;
4. Prioritising continuity of care
   • increasing training about and opportunities for practising effective consultation skills;
   • enhancing the extent to which people see the same provider or providers that have shared information;
   • improving the coordination of care by ensuring that each patient has a health care provider who is clearly responsible for their care;
   • promoting self management to help people with multiple conditions take responsibility for their wellbeing and safety;

5. Simplifying treatment regimens
   • tackling polypharmacy by simplifying treatment regimes, using medication aids to promote adherence, ensuring that patients understand their treatments and stopping prescriptions of treatments of limited value.
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- David Bates, Harvard University, USA

Technical series editors and writers
- Debra de Silva, The Evidence Centre, UK
- Chris Singh, The Evidence Centre, New Zealand

Multimorbidity monograph: key authors
- Stewart Mercer, University of Glasgow, UK
- Denis Fischbacher-Smith, University of Glasgow, UK
- John Furler, University of Melbourne, Australia
- Lena Sanci, University of Melbourne, Australia
- Keith Moffat, University of Glasgow, UK
- Debra de Silva, The Evidence Centre, UK
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