

Preparing the 21st century global healthcare workforce

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To meet the growing global demands of caring for the increasing numbers of patients with chronic conditions, we need to develop a new approach to training

Chronic conditions currently account for more than half of the global disease burden and are a primary challenge for 21st century healthcare systems.¹ This is a dramatic shift from the health concerns of the 20th century, when acute infectious diseases were the primary focus in every country. While the world is experiencing a rapid transition from acute diseases to chronic health problems, training of the healthcare workforce, however, relies on early 20th century models that emphasise diagnosis and treatment of acute diseases. Educational leaders, health professional bodies, and the World Health Organization recognise such models as inadequate for health workers caring for a growing population of patients with health problems that persist across decades or lifetimes.²⁻⁵ Training should be restructured to include a new set of core competencies (knowledge, skills, abilities, personal qualities, experience, or other characteristics)—new “tricks” that prepare 21st century health workers to manage today’s most prevalent health problems.

The workforce is not prepared

The global crisis in the healthcare workforce has attracted much attention in recent years.⁶⁻¹⁰ There is a global imbalance of human resources for health and, in particular, a shortage of healthcare workers in developing countries.¹¹

Clearly, the scarcity of healthcare workers is cause for concern. Unchecked migration of the workforce from rural to urban areas and from poor to wealthy countries has dire consequences for the health of those living in abandoned communities. The sole focus on the quantity of healthcare workers, however, has obscured a second but equally troubling issue: the quality of the training and preparation of the workforce. There is an obvious mismatch between the most prevalent health problems (that is, chronic conditions) and the preparation of the workforce to deal with them. Acute medical problems will always require the attention of healthcare providers, but a training model focused exclusively on treating acute symptoms becomes more inadequate by the year.

Caring for patients with chronic conditions is different from caring for patients with episodic illnesses. Effective care for patients with ongoing health problems requires treatment that is continuous across settings and across types of providers; care for chronic conditions needs to be coordinated over time. Healthcare workers need to collaborate with each other and with patients to develop treatment plans, goals, and implementation strategies that centre on the needs, values, and preferences of patients and their families. Self management skills and behaviours to prevent complications need to be supported by a workforce that understands the fundamental differences between episodic illness that is identified and cured and chronic conditions that require management across years. The

reality, however, is that patients consult multiple providers who lack coordination among themselves and across settings, resulting in care that is, at best, expensive, confusing, and conflicting and, at worst, harmful to patients.³

In addition to diagnosis and treatment of acute illness and injury, today’s healthcare workers need a core set of competencies that will yield better outcomes for patients with chronic conditions. A workforce for the 21st century must emphasise management over cure and long term over episodic care.

A different set of competencies

A recent review by WHO listed five core competencies for delivering effective health care for patients with chronic conditions (box 1).¹² Determination of the competencies included a review of the literature on educational reform for healthcare providers and health care for chronic conditions. In addition, WHO examined published standards and discipline-specific competencies of various professional organisations. Throughout the process, the emphasis was on the identification of workforce competencies that addressed the needs of patients and their families. WHO identified and described common competencies across various professional groups (including family physicians, nurses, pharmacists, dentists, and allied health workers) in a draft document. International professional councils, educational leaders, patients’ advocacy groups, and experts in the care of patients with chronic conditions reviewed the draft and made suggestions resulting in a final list of core competencies that apply to everyone caring for patients with chronic conditions.

Patient centred care—Understanding the experience of illness from the patient’s perspective captures the essence of patient centred care. This type of care is responsive to and respectful of the needs, values, differences, and preferences of the patient. It includes additional components: coordinating continuous and timely care; relieving pain and emotional suffering; listening and communicating; providing education and information; sharing decision making and management; preventing disease, disabilities, and impairments; and promoting wellness and healthy behaviour.

Partnering—Partnering is the ability to join with patients, other providers, and communities for effective



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Box 1: The five basic competencies

- Patient centred care
- Partnering
- Quality improvement
- Information and communication technology
- Public health perspective



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How will countries such as Malawi cope with HIV and AIDS and other chronic conditions? Life expectancy has dropped to just 39 years

care of patients with chronic conditions. The workforce needs skills that allow them to share power and involve patients in all aspects of decision making in their health care. They need the ability to work in teams and collaborate with other providers: those who care for the patient across time, in different settings, from different disciplines, and for different diseases that might coexist in the same patient. This competency necessitates strong communication skills, including the ability to negotiate, share decisions, collectively solve problems, establish goals, implement action, identify strengths and weaknesses, clarify roles and responsibilities, and evaluate progress. Partnering with communities will help to redistribute responsibility between the healthcare system and the neighbourhoods and villages in which patients spend most of their time. Referral pathways between the healthcare setting and outside organisations can be developed when everyone works together.

Quality improvement—Quality improvement requires the healthcare workforce to be clear about the outcomes they are working towards, know what changes would lead to improvements, and know how to evaluate their efforts.¹³ In addition, a quality improvement approach requires workers to translate into practice evidence from their own efforts at

improvement and those of others. Improved safety for patients and increased efficiency of service delivery is embedded in this competency.

Information and communication technology—The workforce needs the skills to use available technologies to support care of patients. Information systems (from paper and pencil records to sophisticated electronic databases) are essential for organising and monitoring patients' responses to treatments and outcomes. Communication systems (from fixed line telephones to mobile devices to the internet) allow the exchange of information on patients with other providers, who may be in other settings or distant locations.

Public health perspective—Thinking from a public health perspective moves the workforce from caring for one patient at a time to planning care for populations of patients. Related to this is the concept of systems thinking—the understanding that health care is a series of systems that are embedded in other, broader systems. Patients and providers are influenced by healthcare organisations that are in turn influenced by even larger national healthcare policies. Finally, a public health perspective includes care across the disease continuum, from clinical prevention to palliative care.

Importance for developing countries

These competencies are vitally important in developing countries, where increasingly health workers care for patients with chronic conditions. For example, in sub-Saharan Africa, 86% of the disease burden is attributable to chronic conditions.¹⁴ While HIV, AIDS, and tuberculosis account for most chronic conditions, other chronic problems are on the rise. About a quarter of the healthcare budget in South Africa is spent on cardiovascular diseases.¹⁵ In fact, among South Africans over age 45, the prevalence of cardiovascular disease surpasses that of HIV and AIDS.¹⁶

Experts agree that urgent mobilisation of human resources is critical to combat HIV and AIDS and to meet the millennium development goals that were endorsed by 189 countries in 2000.¹⁷ These goals outline their commitment to reduce poverty and hunger and address ill health, sex inequality, lack of education, and environmental degradation—all by 2015. The need for additional healthcare workers to meet the goals provides an opportunity to prepare a new cohort of health professionals to care for chronic health problems including cardiovascular diseases, tuberculosis, and HIV and AIDS. Will this opportunity be met by training a new workforce in the skills necessary to care for patients with chronic conditions or will the chance slip away and result in our teaching “new dogs” the same “old tricks”? This new workforce will increasingly confront a double burden of chronic HIV and AIDS and chronic non-communicable conditions. Innovative and integrated approaches for care will be necessary as will a new set of competencies that transcend specific illnesses and apply to all healthcare workers, regardless of discipline.

Moving to implementation

The competencies outlined in the WHO publication are supported by several influential health professional bodies, including the World Medical Association, the



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Urgent mobilisation of human resources is critical to meet the millennium development goals

International Council of Nurses, and the International Pharmaceutical Federation (collectively representing the World Health Professionals Alliance) and the European Respiratory Society. Importantly, the publication also has the support of the International Alliance of Patients' Organisations. The competencies must now be translated into reality by reform in health training institutions and centres of higher education.

To prepare healthcare workers to manage chronic conditions some experts have proposed new teaching methods,^{2 18 19} while others have experimented with innovative training models.^{2 20} On the basis of these proposals and experiences, we recommend that all healthcare workers, regardless of discipline, be systematically exposed to training opportunities as part of their curriculum (box 2).

Are these recommendations unrealistic or out of touch with the needs of developing countries? Perhaps not, considering the current training efforts in Eritrea, Sudan, Swaziland, and Uganda, where healthcare workers are learning to deliver chronic care for people with HIV and AIDS. In addition to basic biomedical training, the workforce is learning to negotiate care plans with patients, to support patients in self management, to use information systems, and to work as members of healthcare teams.

The urgent need for mobilisation of human resources to combat HIV and AIDS and to meet the millennium development goals creates an opportunity to advance the quality of healthcare training. A new workforce can be prepared to deliver 21st century health care for 21st century health problems—new “dogs” can learn new “tricks.”

Contributors: SDP and JEE-J developed and wrote the article, and JEE-J is guarantor. SDP is a scientist-practitioner in the integration of behavioural science into health care. She has a long-standing interest in methods for improving healthcare workers'

Box 2: What healthcare workers should do as part of training

- Learn how to move from reactive care to proactive, planned, and preventive care, using several of the new competencies outlined above
- Learn how to negotiate individualised care plans with patients, taking into account their needs, values, and preferences
- Learn how to support patients' efforts at self management
- Learn how to organise and implement group medical visits for patients who share common health problems
- Care for a defined group of patients over time
- Work as a member of a healthcare team
- Work in a community based setting
- Design and participate in quality improvement projects
- Develop information systems (for example, patient registries) and use available technology and communication systems to exchange information on patients
- Learn to think beyond caring for one patient at a time to a “population” perspective
- Develop a broad perspective of care of patients across the continuum from clinical prevention to palliative care

Summary points

Traditional models of acute care are inadequate for training a workforce to manage today's most prevalent health problems: chronic conditions

WHO has led an effort to identify a new set of core competencies that will yield better outcomes for patients with chronic conditions

These competencies apply to everyone who cares for patients with chronic conditions

Several influential health professional bodies and patients' associations support these competencies

The competencies must now be translated into reality by initiating reform in training institutions and centres of higher education

skills for chronic conditions. JEE-J is also a behavioural scientist and, at WHO, she has coordinated efforts to help reorganise health care so that it is more effective and efficient for the management of chronic conditions. This paper is based in part on a recent WHO publication on core competencies for delivering effective health care for patients with chronic conditions, and on subsequent discussions between the authors on how to begin translation of these competencies into training methods that could help meet the millennium development goals.

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