Kidney International, Vol. 68, Supplement 98 (2005), pp. S86–S88

Integrated approaches to prevention and control of chronic conditions

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Integrated approaches to prevention and control of chronic conditions. Chronic conditions currently account for more than 50% of the global disease burden, and this figure is projected to continue to rise. Yet, around the world, health care systems are not organized to provide effective and efficient care for chronic health problems. Health care systems have evolved around the concept of acute, infectious disease, and they perform best when addressing patients' acute and urgent symptoms. Without change, health care systems will grow increasingly inefficient and ineffective. Effective prevention, management, and rehabilitation of chronic conditions require an evolution of health care, away from a model that is focused on acute symptoms toward a coordinated, comprehensive system of care. The results of this shift include less waste and improved efficiency. Integrated health care models that transcend specific illnesses provide a feasible solution. The World Health Organization's Innovative Care for Chronic Conditions Framework provides a flexible but comprehensive model to build or redesign health systems in accord with local resources and demands.

Chronic kidney diseases (CKD) are part of a broader category of health problems: *chronic conditions*, which are defined as health problems that require ongoing management over a period of years or decades. They include, in addition to CKD, diabetes, heart disease, asthma, chronic obstructive pulmonary disease, cancer, human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS), depression, and physical disabilities [1]. Although these conditions' biomedical etiologies are generally distinct, their effects place similar demands on health care systems, health care providers, patients, and families [2].

Current health care systems that are organized around treating acute, episodic illness are ill-equipped to meet growing population needs for comprehensive health care for chronic conditions. Addressing pressing concerns—diagnosing, prescribing treatment, relieving symptoms—focuses on only a fraction of what is needed [3]. Clearly, chronic conditions are not a series of disconnected complaints, yet frequently, people with chronic conditions are treated as such by the health care system. This approach is wasteful and inefficient, given that complications and the eventual outcomes of poorly managed chronic conditions follow a known and predictable course.

The risks and complications associated with chronic conditions are reasonably calculable and, in many cases, can be delayed, if not prevented entirely. However, this requires health care that is proactive and organized around the concepts of planned care and prevention. Although vital in any context, comprehensive and proactive health care approaches are especially important for resource-limited health care settings, in which it is essential to maximize health care efficiency [4–6].

WHY IS THIS ISSUE OF GLOBAL IMPORTANCE?

Globally, chronic conditions are on the rise. Forty-seven percent of the global disease burden is due to noncommunicable conditions, and HIV/AIDS adds another 6% to this estimate [7]. Yet, around the world, health care systems are not organized to provide effective and efficient care for chronic conditions. Developing countries often struggle with the complexity of insufficient resources combined with inadequate access to necessary drugs and technologies. Worldwide, only 5% of those in need have access to essential HIV/AIDS health care; in Africa, where HIV/AIDS is the leading cause of mortality, this figure drops to 1% [7]. In the Caribbean, a medical record review of over 1600 patients attending health care clinics for diabetes indicated that over a 12-month period, less than one third had received dietary advice, and only 5% had received exercise advice [8]. Similar findings have been reported in South Africa and India [9, 10].

This article contains the views of its author, and does not necessarily represent the decisions or the stated policy of the World Health Organization.

Key words: chronic disease, world health, delivery of health care.

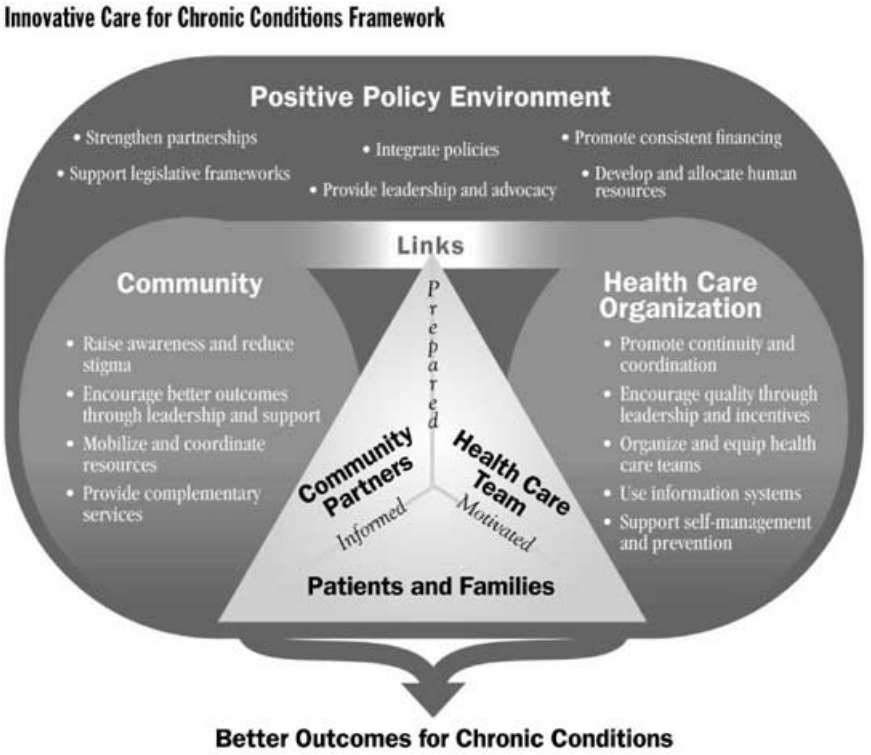

Fig. 1. The Innovative Care for Chronic Conditions Framework (from *Innovative Care for Chronic Conditions: Building Blocks for Action*, Geneva, Switzerland, World Health Organization, 2002, pp 65). Copyright 2002, World Health Organization. Reprinted with permission.

IMPROVING HEALTH CARE FOR CHRONIC CONDITIONS

Whereas biomedical management is generally dependent on the unique features of the specific disease, the general components of care organization and delivery for all chronic conditions are essentially the same. These components include a well-defined care plan, patient self-management, scheduled follow-up appointments, monitoring of outcome and adherence, and stepwise treatment protocols [11]. Collectively, these approaches represent a significant shift in health care.

A model based on these collective characteristics has been developed by WHO. The Innovative Care for Chronic Conditions (ICCC) provides a road map for decision makers who want to improve their health system's capacity to manage chronic conditions. [1] This is described in Figure 1. The ICCC Framework is an expansion of an earlier model, the Chronic Care Model [12], which was developed to present a structure for organizing health care for chronic conditions. The new, expanded framework is comprised of fundamental components within the levels of patient interactions, organization of health care, community, and policy. These components are described as building blocks, which can be used to help decision makers progressively create or redesign a health care system to expand their capacity to manage long-term health problems. Although the Framework does not prescribe specific changes, which must be tailored to unique needs and resources, it highlights the need for comprehensive system design or change, the requirements for effective care.

The Framework also highlights the importance of the following health system characteristics:

Partnership with patients and communities

According to the ICCC Framework, optimal outcomes occur when a health care triad is formed: a partnership among patients and families, health care teams, and community partners. This triad functions at its best when every member is informed, motivated, and prepared to prevent and manage chronic conditions, and communicates and collaborates with other members of the triad. This partnership approach is a significant change from traditional health care, in which health care providers are seen as experts, whereas patients are viewed as passive recipients of care, and communities are largely ignored by the formal health care system.

Primary health care based

In developing countries, chronic conditions present mainly at the primary health care level and need to be handled principally in these settings. This represents a shift from health care systems that are driven by tertiary care, specialty settings.

Proactive

Proactive care refers to care that anticipates patients' needs rather than relying on a patient-initiated interaction that is often introduced because of urgent symptoms. Clear treatment plans with scheduled, regular follow-up are typical features of proactive approaches.

Population based

Health care for chronic conditions is most effective when policies, plans, and practices prioritize the health of a defined population rather than the single unit of a patient seeking care. A population focus implies that health care systems assess and monitor the health of communities, emphasize prevention and promote healthy behavior, assure universal access to appropriate and cost-effective services, and contribute to the evidence base for effective treatments and systems of care.

CONCLUSION

Models of integrated, coordinated care, such as the ICCC Framework, capture the complexity of providing health care for chronic conditions in an organized way. They also underscore the importance of using multifaceted approaches as opposed to "magic bullet" or single/singular interventions. The magnitude of the undertaking is not a justification to continue to ignore the problem of chronic conditions, or to pass it onto future health care leaders. Today's decision makers have the responsibility for initiating the process of health care system change and improvement.

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