

Editorial

Mass prevention and treatment: Fundamental strategy for chronic disease control and prevention



Da-Yi Hu

Peking University, People's Hospital, Institute of Cardiovascular Disease, Beijing United Family Hospital Heart Center, China

Received 16 March 2016

Available online 5 May 2016

Non-communicable disease (NCD, hereinafter referred as chronic disease) accounts for 80% of total mortality from various causes in China, and has become a persistent global challenge. However, while there is a need to increase investment of resources for chronic disease prevention and control, the greater need is for a complete overhaul of the undeveloped traditional medical service system, to avoid greater waste and loss of invested resources. Translational medicine is not only applicable to B2B (Bench to Bedside) biomedical technology. More importantly, change and transformation of top-level design has continuously promoted innovations in existing medical technology. These innovations have transitioned into effective chronic disease prevention strategies to promote better general health.

The passive, fragmented, and broken health care system is unable to cope with the challenges of chronic disease

China's current health care system is a super-sized giant monopoly of hospitals. The general ethos of

practice is passive and reactive. It largely expects patients to visit the practice with established symptoms. In the absence of established symptoms, the general approach is to wait until clinical presentation becomes more acute. Once a patient has been diagnosed and treatment administered, the general practice is to wait for either recurrence or acute conditions to develop. This passive, reactive, and procrastination-oriented practice continues throughout the treatment process until the terminal stages. There is no emphasis on control and prevention or follow-up care and maintenance therapies. Prevention and rehabilitation and other secondary proactive initiatives exist only as slogans without any substantial medical insurance support. The institution is operating like a car dealership that only sells cars without the 4S service package.

Traditional medical practice is based on a simple biomedical model. It is limited in its heavy dependence on increasingly costly biotechnologies such as pharmaceuticals, stents, and surgical equipment. This model of treatment ignores the social and psychological factors involved in chronic disease control and prevention. The root cause of NCD is an unhealthy social environment and associated unhealthy lifestyles. However, the current medical system and its practitioners are not equipped to address lifestyle issues, and also give scant attention to the patient's quality of sleep or psychological wellbeing. The result is a growing reliance on pharmaceutical products, and a rapid increase in stent usage. This has greatly depleted medical resources,

E-mail address: dayi.hu@china-heart.org.

Peer review under responsibility of Chinese Medical Association.



Production and Hosting by Elsevier on behalf of KeAi

<http://dx.doi.org/10.1016/j.cdtm.2016.03.001>

2095-882X/© 2016 Chinese Medical Association. Production and hosting by Elsevier B.V. on behalf of KeAi Communications Co., Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

without any improvement in the general health status of the population.

How to regain the initiative and become proactive?

The key issue is not the lack of knowledge and technology, but the need for a complete overhaul of the system to introduce positive change and innovation. The solution lies in the implementation of two proactive initiatives with effective interactions.

The first proactive initiative is the mass introduction of new patient and public health focused service centers, which would be vastly different from traditional hospitals. These new medical centers will proactively provide consultation and guidance on chronic disease management (resembling the 4S car dealership). There will be new patient support teams led by doctors and comprised of nurses, sports therapists, nutritionists, psychotherapists, clinical pharmacists, volunteers, social workers, and the patient's family members. This new support system will proactively provide comprehensive and complete service, care, and management of the patient's and the public's health.

Comprehensive care refers to the five areas of prescription medication, exercise regimen, nutrition and diet, psychology (including sleep management), and tobacco and alcohol management. Complete care refers to full follow-up management, services, and care during the entire life span of the patient.

Once this proactive, service-oriented system is in place, the most important initiative would be to develop patients and their families into self-sufficient units that can proactively manage personal health and prevent chronic disease. Under these two proactive initiatives, patients would have complete access to and control over their own health, disease management, and treatment methods.

Once these two proactive initiatives are in place, it is then possible to have effective interactions. The medical team will regularly take the initiative to inform the public about health-related issues. If the patients or the public have questions, they can proactively reach out to the team

for consultation. This would reduce the cost of health care as well as provide effective and timely service.

The most effective interactive platform is the smartphone, due to its market penetration. Different patient groups can be formed on social media service (SMS) channels, such as WeChat. Chat groups or SMS group chat can be used as the main method of interaction. Medical devices, telemedicine, and online medical/health services can all play an active role on this platform.

Mass prevention and treatment – the people's war

Chronic diseases are highly prevalent, with a large number of patients. Chronic diseases also require life-long management. The only hope for the development of NCD prevention and control can come by raising the awareness of millions to push toward much needed progress in this area.

By the implementation of these two proactive initiatives and subsequent effective online interactions, it is possible to empower patients and the general public to actively manage their own health. These three effective areas can be implemented:

1. Raise the awareness of NCD and its management as an individual responsibility.
2. Empower patients with knowledge and skills for health and NCD management.
3. Improve self-management practices and effectiveness.

The effective implementation of these three key areas via the two proactive initiatives and effective interaction methods is a change in strategy and ethos. This change will revolutionize health care systems at a macro level. The successful implementation of this change is the only solution to chronic disease management in China. It is the only way to achieve the ideal of a healthy China!

Edited by Wei-Zhu Liu