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### **REVIEW ARTICLE**

## Toward successful aging: The Chinese Health Criteria for the Elderly

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#### Abstract

The Chinese Association of Geriatric Medicine proposed a set of criteria, *The Health Criteria for the Elderly*, to measure senior health. These criteria have their origins in the efforts in the past several decades to define successful aging. Successful aging theories, including the disengagement theory, the activity theory, and the continuity theory, represent sets of constructs on what elements constitute satisfactory aging and how it can be achieved. Rowe and Kahn's framework for successful aging emphasizes the impact of lifestyle choices on aging outcomes. The proposed health criteria for Chinese seniors may be too restrictive to be used as clinical guidelines. Instead, they can be promoted as goals of healthy aging in public education programs or serve as parameters to evaluate the effect of health policies and health-care delivery models on the elderly population.

#### KEYWORDS

elderly health, geriatric medicine, health criteria, successful aging

## 1 | INTRODUCTION

As population aging in China continues at a fairly fast pace, an increasing portion of the people in this country will be made up of senior citizens. Coming along with the demographic shift are challenges on many fronts, not the least of which is health care. While healthy aging and longevity are the common goals of the elderly, whether and how they can be achieved depends on numerous factors involving the social structure, policy agendas, healthcare delivery mechanisms, and individual choices, among others. The geriatrics community has a special role to play in helping people realize these goals.

In an effort to promote senior health, an expert panel commissioned by the Chinese Association of Geriatric Medicine formulated a set of criteria, *The Chinese Health Criteria for the Elderly*, in 2013.<sup>1</sup> In a separate article, several experts from the panel provide an account of how the definition of health has evolved within the Chinese medical community over the past several decades and explain why they felt it necessary to establish health criteria for seniors.<sup>2</sup> Aging and aging-related healthcare issues have long been a primary focus of researchers and practitioners in various fields. There has been considerable controversy over definitions, objectives, assessment methods, and intervention measures. Here, we introduce *The Chinese Health Criteria for the Elderly* and give a brief discussion on the historical context of successful aging and strategies to achieve it.

## 2 | THE CHINESE HEALTH CRITERIA FOR THE ELDERLY (2013)

According to the expert panel, the criteria were intended to be comprehensive, relevant, and operational.<sup>2</sup> They are composed of five categories, which contain varying numbers of items, as can be seen below:

 Major organs showing no functional abnormalities associated with aging; no major illness; risk factors controlled at levels considered satisfactory for the corresponding age group; possessing reasonable defense capabilities against disease.

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- Normal or nearly normal cognitive function; good adaptation to the environment; staying optimistic and proactive; satisfaction with life or positive self-evaluation.
- **3.** Competent management of family and social relationships; active participation in family and social activities.
- 4. Self-sufficient or nearly self-sufficient in activities of daily living.
- Normal nutritional status, appropriate body weight, and good lifestyle habits.

The items in Category 1 are related to physical health, that is, the health of major organs and systems. In the subsequent explanatory notes, more specifics are given on how each item is defined and assessed.<sup>1</sup> For example, "relevant risk factors" refer to those associated with cardiovascular and cerebrovascular disorders, including hypertension, diabetes, and lipid disorders, and parameters used for their assessment are common clinical measures that are widely used in disease diagnosis and health screening. The last item in Category 1 is an exception, which does not offer any definition or measurement method for "defense capabilities against disease." Category 2 is mainly concerned with mental health, and the minimental status examination and the geriatric depression score are the recommended assessment tools. Categories 3-5 deal with the social, daily living, and nutritional aspects of elderly health, which will be measured with the Katz Activities of Daily Living Scale, the body mass index, and questionnaires.

Overall, these criteria cover the salient components of what are commonly agreed to constitute good health for seniors. Most of the items can be evaluated via well-established tests and parameters. It has been suggested that this set of criteria may be used for a range of purposes, including serving as a basis for healthcare policy-making, identifying healthy individuals in clinical practice and research, and helping the aging population with self-assessment.<sup>2</sup> However, in a preliminary survey that involved 13 501 participants from a region in Jiangsu Province, only 3.6% of those aged 60 and over were found healthy when these criteria were used.<sup>2</sup> This means the vast majority of the aged population in this country cannot be considered healthy if the results also reflect the health status of the elderly in other regions. Controversy usually arises if the practical value of a definition cannot be convincingly demonstrated.

The World Health Organization (WHO) defined health in its adopted constitution in 1946 as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."<sup>3</sup> This definition has not been revised ever since. At that time, it was inspiring, as it broke away from the conventional view of health as the absence of illness and instead incorporated physical, mental, and social constructs. In fact, these are also the primary components around which the concept of successful aging has evolved in the following decades. However, the WHO definition of health has received criticism, especially in recent years, on several accounts. To critics, the word "complete" seems most problematic, making the definition both inflexible and misleading. It is argued that a state of complete physical, mental, and social well-being is more closely associated with happiness than with health.<sup>4</sup> The distinction notwithstanding, as the quest for happiness or absolute health is boundless, healthcare services would need to expand infinitely to meet the demand, clearly an unsustainable scenario.<sup>5</sup> More importantly, there is the issue of whether seniors living with chronic illness should be considered normal.<sup>6</sup> A similar problem also exists with the Chinese criteria.

## 3 | SUCCESSFUL AGING: DEVELOPMENT OF THE CONCEPT

Although the exact meaning of successful aging has not been agreed upon, it is generally used to describe the positive aspects of aging processes or outcomes. The term is often attributed to Robert Havighurst, who used it as the title of his paper published in the maiden issue of The Gerontologist.<sup>7</sup> Other terms, such as productive aging and active aging, presumably have a similar if not the same meaning. Productive aging emphasizes how older individuals, with their wisdom and skills, can enrich their own lives, their communities and society as a whole.<sup>8</sup> Active aging, which the WHO has adopted in its aging program documents and defines as the process of optimizing opportunities for health, participation, and security in order to enhance quality of life as people age, seems to be in line with the continuity theory proposed by Robert Atchley.9 Havighurst rested successful aging on the premise that a wealthy society is capable of providing material and nonmaterial needs to all of its people, and the older segment's needs are not mutually exclusive of those of other age groups. Therefore, the task of successful aging is to identify or create conditions of individual and social life under which older people can get a maximum of satisfaction and happiness.<sup>7</sup> More than half a century later, the debate continues over what precisely those conditions should be.

The first theory about the social aspect of aging, the disengagement theory, proposed by Cumming and colleagues, appeared before the term "successful aging" became widely known.<sup>10</sup> According to the theory, as old age comes with deterioration in knowledge and skills and no longer meets society demands, together with social permission and acceptance, it is rational for aged individuals to disengage from society.<sup>10</sup> This theory has been roundly dismissed for its negative outlook of aging and lack of empirical evidence.<sup>11,12</sup> However, it is not without its merit and may still resonate with seniors in societies where life expectancy is short and senior participation in social activities is discouraged. In contrast, the activity theory suggests that older adults age successfully when they stay active and are fully engaged in social interactions. Meaningful activities help elderly people replace lost life roles and maintain their social life space.<sup>7,13</sup> The theory may have played an important role in social initiatives and services for older adults, but it has been criticized for being too simple and insufficient to capture the complexity of the interplay between people and their social situations.<sup>14</sup> Another theory, the continuity theory of normal aging, states that people who age successfully are those who carry over their habits, preferences, lifestyles, and relationships into old age.<sup>15</sup> As the theory makes a 156

distinction between normal aging and pathological aging, much of the criticism has been directed at its failure to accommodate older adults with chronic illness.<sup>16</sup>

A highly dominant and still influential framework for successful aging emerged in the 1980s when John Rowe and Robert Kahn, dissatisfied with researchers' focus on the difference between older people with diseases and those without disease, proposed the distinction between usual and successful aging as nonpathologic states. They contended that this approach would help stimulate research to identify the criteria and determinants of successful aging as well as proper targets for interventions with "normal" elderly.<sup>17</sup> A decade later they amended their model to include maintenance of high physical and cognitive function and continuing engagement in social and productive activities, in addition to avoidance of physical illness and disability.<sup>18</sup> The Rowe and Kahn model was based on the belief that individuals can make choices for themselves to achieve or maintain successful old age. The amended version also assimilated findings from the MacArthur Foundation Research Network on Successful Aging, which concluded that four factors were significant predictors of successful aging: genetics, education, physical fitness, and self-efficacy. Conceptually, the first three factors are straightforward enough, whereas self-efficacy refers to a person's apparent ability to cope with specific environmental demands. Although the close association between self-efficacy and mental function is clear. their causal relationship remains to be resolved.<sup>19,20</sup> The authors recommended intervention studies in future research to test the theories in order to enhance the proportion of the population aging successfully.

# 4 | STRATEGIES FOR SUCCESSFUL AGING IN CHINA

Aging research is a broad field that owes the impressive progress achieved so far to researchers from numerous disciplines. As the above brief review shows, most of the theories on successful aging have been put forward by social scientists and psychologists. Successful healthcare outcomes are critically dependent on the ability to absorb and adopt knowledge and skills acquired in other fields. As geriatric care professionals, we are primarily engaged in delivering services to the elderly through clinical work, medical research, and knowledge dissemination, ultimately contributing to their health and happiness. The criteria for Chinese senior health introduced here clearly represent an effort to bring the elements characterizing positive aging, regardless of the exact terms and meanings, into health promotion practice. The question is as follows: How are we going to make the best use of it?

Judged by scope, the criteria are sufficiently inclusive, encompassing physical health, mental health, social engagement, and nutritional status, which in principle are in conformity with both the WHO definition and the Rowe and Kahn model. The parameters are commonly used health screening tests or senior care assessment measures. Nevertheless, as the survey found only a small minority of senior resident from one of the most developed regions of the country met the criteria, the purposes they could serve may not be as broad as stated by experts from the panel. Instead, they can be used as attributes of successful aging. In longitudinal studies, candidates who meet the criteria can be followed for extended periods of time to see whether they or how many of them remain healthy and, for those who do, what additional traits can be identified as predictors of healthy aging. On the other hand, surveys at regular intervals using these criteria can monitor the health status of the aging population and provide clues to social and economic factors affecting senior health.

Population health promotion requires people from various social and professional groups working together toward shared goals. If these criteria are the goals geriatric care professionals and society should try to help elderly individuals achieve, there needs to be a clear understanding on what paths should be taken and what the priorities should be. A large number of aging-related chronic diseases are associated with lifestyle choices, which, in turn, are influenced by health literacy.<sup>21,22</sup> Many people, especially the disadvantaged, still lack the ability to obtain and process health information.<sup>23</sup> Medical professionals have a duty to offer evidence-based advice for government decision-making. China's social structure and communication systems are uniquely suited for efficient and effective public health education. It takes government commitment and professional expertise to make it happen. An informed elderly population on health issues will undoubtedly encourage individuals to practice healthy lifestyles and eliminate many risk factors. The net results will be vast improvement in senior health and reduced reliance on the healthcare system.

Difficulties in providing quality care for the aging population also reveal a pressing need for change in the healthcare infrastructure and service delivery mechanisms. Seniors with acute or major illnesses often require hospitalization. After their conditions stabilize, they are transferred to nursing institutions or go back to their own homes to recover. A range of physical and mental care services are required during this period. Currently, well-equipped geriatric wards at the largest hospitals in China are not accessible to the majority of the population. Even at these hospitals, geriatric assessment methods have not been integrated into clinical care routines. There is a severe shortage of long-term care facilities and personnel.<sup>24</sup> As a result, many patients cannot gain admission to geriatric wards or be transferred to long-term care institutions after hospitalization. In order to improve access to geriatric services and quality of care for seniors, a healthcare network with geriatric facilities at different levels of hospitals and nursing homes needs to be established. Policy innovation and resource allocation are required to formulate and implement construction plans, training programs, and service delivery designs.

As a developing country, China faces a long road ahead before its senior citizens can receive adequate health care. Rural residents still make up close to half of the population, and most of them currently receive very limited health benefits, if at all. Many of the urban poor experience similar problems. To realize equitable economic development and healthcare access, a major overhaul in the social security and medical insurance systems is long overdue. Fortunately, the outlook is encouraging. The Chinese government recently announced Healthy China 2020, a program designed to provide universal health care for the entire population. Along with the program, one initiative will be launched aiming to prevent chronic diseases through promoting healthy lifestyle choices.<sup>25</sup> Senior citizens will no doubt have much to gain from the move. By contributing to what is outlined above, the geriatrics community can also play an important part in guiding the elderly population toward successful aging.

#### CONFLICT OF INTEREST

The authors confirm that they have no conflict of interest.

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