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Viewpoint

Indicators of Societal Adaptations to Ageing Well

Jean Woo [1,2]

[1] Department of Medicine & Therapeutics, Faculty of Medicine, The Chinese University of Hong Kong, Shatin NT, Hong Kong;
Email: jeanwoowong@cuhk.edu.hk; Tel.: +852-3505-3493

[2] The Chinese University of Hong Kong Jockey Club Institute of Ageing, Shatin NT, Hong Kong

ABSTRACT

A universal aim for ageing societies is that older people may remain healthy, be functionally independent, and be engaged in society. Various indicators with summary scores have been proposed, which may be used for international comparison or within country monitoring to guide ageing policy development and evaluate effectiveness of such policies. However, it is uncertain whether these indicators may be adapted to countries with different cultures and political systems. Simple indicators such as the Human Development Index may be misleading when compared to more detailed multi domain indices in reflecting the performance of ageing policies in a particular country, such as the Hong Kong Elder Quality of Life Index (EQOLHK). Construction of country specific indicators may be more relevant to shaping ageing policies rather than using indicators just for the sake of international ranking.

KEYWORDS: Global Age Watch Index; Active Ageing Index; Ageing Society Index; Hong Kong Elderly Quality of Life Index; well-being; income security; capability; physical environment

SOCIETAL IMPACT OF POPULATION AGEING

Population ageing is a phenomenon that is taking place in all countries, irrespective of whether they are classified as high, middle of low income countries, as a result of advances in public health. In general there is agreement that a desirable objective would be that older people may remain healthy in a broad sense to include both physical and psychological well-being, be functionally independent, and be engaged in society. Much research has been carried out in the past 2 decades on this topic. There is also consensus that achieving this goal depends on multiple domains outside of the traditional health and social care systems, to include various aspects of the physical and social environment, as well as financial security. Initially various terms have been applied to this desirable state, from successful ageing [1], healthy ageing [2], to active ageing [3]. The origins of these terms are developed from predominantly social or medical science disciplines, and taken up by different countries

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and organizations with a view to informing policy. Based on these concepts, various indicators with summary scores have been proposed, as an indicator of how societies are responding to the population ageing challenge. These include the Global Age Watch Index proposed by Age UK [4], the Active Ageing Index proposed by the European Union [3], the Ageing Society Index score or Hartford Ageing Index proposed by the United states for OECD countries [5], and the intrinsic capacity measure adopting a life course approach proposed by the World Health Organization in 2016 [6,7]. Such developments are very relevant, since ageing incorporates health as well as social domains involving expects from multidisciplinary backgrounds. However the question then arises of which indicator to use for comparison, and whether one indicator derived from one country or a group of countries with similar cultures, economy and health and social care systems may be used or whether each society has to develop its own, following similar principles.

CURRENT ATTEMPTS USING COMPOSITE INDICES, TOGETHER WITH INTERNATIONAL COMPARISONS MATERIALS AND METHODS

The recent proposal by the World Health Organization' Department of Life Course and Ageing to use five domains of intrinsic capacity as indicators of healthy ageing relies on individual assessments, and so far has not been widely adopted yet to be part of routine datasets. Furthermore it may be more appropriate to be used as an outcome measure only, since it only consists of individual attributes. Consequently international comparisons are not available, and will not be discussed further.

Other indicators cover broad domains including physical, social and economic environments, capture data from existing available government data, and have been used in international comparisons for ranking purposes. Such tools are useful for policy makers as well as advocates promoting ageing well, since comparison with others may be a strong motivator for overall improvement in ranking, as well as highlight individual domains or areas for which there is room for improvement irrespective of the overall ranking. Furthermore within each country, temporal changes may be monitored to assess the impact of policy changes.

METHODOLOGICAL CONSIDERATIONS AND COMPARISON OF EXISTING INDICATORS

There are common features in the development of these indicators (Table 1). The first step consists of the formation of expert panels with members from diverse disciplines to agree on domains and areas to be covered, where information could be obtained from routine government statistics. Then the weighting of each area is determined, with or without input from older people. Then a composite score is calculated for each country. The Global Age Watch Index (GAWI) compared 99 countries worldwide, while the Active Ageing Index (AAI) covers 28 European

countries. Using data from different waves of data collection, comments could be made not only regarding international comparisons, but also within country changing trends. The Ageing Society Index (ASI) covered 18 countries in USA and Europe, and has similar potential for regular data collection to observe trends.

Table 1. Comparison of some societal ageing well indicators.

Index	Number of measures	Domains					
		Income security	Health status	Capability	Enabling environment	Equity	Cohesion
Global Age Watch Index	13	√	√	√	√		
Active Ageing Index	20		√	√	√		
Hartford Ageing Index	22	√	√	√		√	√
HK Elder Quality of Life Index	23 *	√	√	√	√		

* 12 from WHO indicators measuring the age-friendliness of cities.

Since these indicators capture overlapping areas and domains, it may not matter which indicator is chosen as they all provide comprehensive indicator of societal adaptations to ageing well, for the purpose of within country monitoring; or intercountry comparisons as a starting point for review and policy planning. Detailed coverage of some domains such as equity and social cohesion varies, the ASI providing more detailed coverage for these two areas. Nevertheless there appears to be close correlation between indicators: the correlation coefficient between ASI and AAI being 0.84, and with GAWI 0.88 [8].

It is uncertain whether these indicators may be adapted to countries with different cultures and political systems. Information used in the construction of such indicators may not be routinely collected, and therefore inter country comparisons need to be interpreted with caution. The application of the AAI to Korea [9] and China [10] raises some of these issues, suggesting that each country may need to develop and validate their own indicators following similar principles [9,10].

For example, although Hong Kong currently has the highest life expectancy for men and women in the world, there is no specific ageing policy, perhaps because the long life expectancy induces a sense of complacency with respect to ageing issues (and hence policy neglect). Using some of the older rankings such as the Human Development Index (HDI), comprising of life expectancy at birth, extended and mean years of schooling, and Gross National Income per capita, Hong Kong ranked 4th out of 189 in 2019 (http://www.hdr.undp.org/en/content/2019-human-development-index-ranking). The HDI also has good correlation with the Hartford Ageing Index (R = 0.87) [8]. Use of this indicator may reinforce inaction regarding ageing policies. Yet it would be more relevant to use indicators comprising of more domains in greater detail, subject to availability of routinely collected data. For example, it is pertinent to assess how it performs in the various indices and sub domains of the other

indicators discussed above. With respect to the AAI, differences were found in what older people consider important under some domains, that are likely to be city specific, and also the weighting values [11]. With respect to the construction of the GAWI, not all information exists (e.g., Government figures for healthy life expectancy); however as a result of this exercise in comparison with other countries, it was shown that although Hong Kong ranks first in the physical health domain (purely because of its long life expectancy, it ranked 79 in psychological health-one of the health subdomains [12], drawing attention of policy makers to examine causes and devise strategies for improvement. Following the Age Friendly Cities initiative (www.jcafc.hk), and incorporating the World Health Organization's list of age friendly indicators to the Hong Kong GAWI to form the HK EQOL, the latter is used to monitor the outcomes of the five year territory wide age Friendly City initiative started in 2015 [13]. The HKEQOL combines the WHO Age Friendly Cities indicators, the GAWI, and also addition of some local indicators such as frailty (which may be regarded as a loss of intrinsic capacity).

In summary it is important to incorporate societal indicators of ageing well to regular government collected statistics, particularly for rapidly ageing societies. The choice of indicator may not be so important as long as it follows the common domains and is adapted to a particular country. The purpose for which these are used depends on whether international comparisons are required as an initial yardstick; a more important purpose is to guide policy and action by monitor any improvements or deterioration.

CONFLICTS OF INTEREST

The author declares no conflicts of interest.

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