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## Minireview

# How can we realize the health promotion measures for all the people in a mature society, Japan? – Proposing for “collaboration between academy and practice” in Japanese public health by Self-Management Education, especially Chronic Disease Self-Management Program

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## Abstract

This paper focuses on how we can realize the health promotion measures for all the people including ones with disabilities in a mature society, Japan. I compared the pros and cons of Self-Management Education (SME), and examined whether it was appropriate as a methodology of realizing health promotion support systems for all, including those living with chronic conditions, in Japan. As a result, SME, especially Chronic Disease Self-Management Program (CDSMP) was considered to be a method that can be applied to all people, not just persons with disabilities. The “Image of an environment that supports Health for All by SME” was considered to be feasible, for example, by collaboration between public health academic researchers and practical researchers on a regional basis. Further it has many advantages, including the possibility of contributing to the reform of Japan’s social security system in anticipation of a declining birthrate and an aging population. From these, in this paper, I have proposed the spread of SME, especially CDSMP as the methodology of progressing public health policies in Japan in the future.

**Keywords:** evidence-based health and welfare policies for people with disabilities, Self-Management Education (SME), Chronic Disease Self-Management Program (CDSMP), health promotion system that does not leave anyone behind, social security system structural reform

## Introduction

The author has been proposing “establishment of a health promotion support system for people with disabilities who live independently” as measures to solve the problems in the reform of people with disabilities in Japan [1]. That is, it is a proposal to position the system of health promotion support measures for the people with disabilities in the policy for people with disabilities by utilizing SME. Furthermore, the author has proposed “the definition of health in a mature society” encompassing all persons including those with disabilities [2].

In this paper, I have compared the pros and cons of SME as a way to realize a health promotion support system for people living with chronic conditions, including disabilities and chronic diseases, in Japan. And I examined whether utilization of SME was appropriate as a methodology that could contribute to the realization of health promotion policies and Sustainable Development Goals (SDGs) [3] in the future of Japan’s social security system reform, in anticipation of a declining birthrate and an aging population.

## Necessity of Self-Management Support for People Living with “Chronic Conditions” Such as Disabilities and Chronic

## Diseases

In recent years, with the change in the structure of diseases and the change in social conditions surrounding medical care, many people have come to work and live daily life while having chronic diseases [4]. The increasing number of chronically ill patients and the consequent effects are becoming a problem not only in developed countries but also in developing countries [5]. Japan is no exception, and not only prevention but also care for chronically ill patients has become a health care and public health issue [6].

People are responsible for managing their own health on a daily basis (= Self-Management). In particular, self-management conducted by “people who live with chronic conditions such as chronic diseases” sometimes leads to “life re-institution” sometimes. There are many cases where it is necessary to continue daily, and in line with the real life and the view of one’s own life, which can be extremely difficult. Therefore, the importance of “support by SME” is becoming recognized worldwide. The style of health in Japan is required to switch from a style based on acute disease models, that is “disease → diagnosis → treatment → cure” to a style based on chronic disease models “Onset

→ diagnosis → treatment → support of life and life living with chronic condition(s)”.

I examined about utilization of the SME as a methodology for promoting a health promotion support system for all people in Japan in the future, in particular, CDSMP. The SME is the method to teach “task solution technology so that patients (of chronic disease) can take appropriate actions to be healthy from their own point of view” [7]. When comparing “Patient education” and “SME” in the past in Japan, in the former case, the problem / problem of self-management is “medically defined” by the disease specific, and the solution technology and information were provided by a medical professional. On the other hand, in SME, the problem / problem of self-management is “defined by the patient him/herself”, and the solution technology and information are also “determined by the patient”. That is, SME supports: 1) Decision-making and action for problem-solving of self-management, and 2) Providing technology that can take appropriate action even if the environment surrounding patients changes. Therefore, SME is positioned as “the complement to (conventional) patient education”.

### **Chronic Disease Self-Management Program: CDSMP Characteristics of CDSMP**

The CDSMP, developed at Stanford University in the late 1980’s, is one of the most popular SME programs and has the following characteristics [8]: 1) Two people, including non-professional patients, proceed with the program as a leader, and they are easily accepted by students (including patients and families) and cost is low. 2) Because it is not limited, it is possible to target general people with chronic disease (including rare disease), etc. 3) Furthermore, CDSMP is a well-established methodology in which many evaluation studies such as randomized controlled trials have been conducted and reports have been shown to have the following effects [9]: (1) pain reduction, (2) improvement of disability/impaired physical function, (3) fatigue reduction, (4) anxiety improvement, (5) improvement of psychological well-being, (6) improvement of general/self-rated health, (7) decreased health distress, (8) increase in frequency of aerobic exercise, (9) increased frequency of cognitive symptom management, (10) improvement of communication with healthcare professionals, (11) improvement of self-efficacy to manage, etc.

### **Status of efforts to the CDSMP in the United States, the United Kingdom and Japan**

In the United States, the CDSMP-induced arthritis program first developed at Stanford University has been replicated and spread in many other groups and countries. According to the home page of the US CDC [10], in the US in recent years, the scope of the “chronic conditions” has been expanded in the US, and corresponding programs have been provided. In addition, health education programs based on SME and CDSMP are provided in various applied forms in the health department of each state.

In the UK, in the 1990s, various measures related to healthcare professionals were implemented, in order to ensure the sustainability by improving the quality and quantity of medical services which are under severe financial conditions and

restricting working hours to medical professionals. As part of the reform, the UK National Health Service (NHS) has adopted CDSMP as a major expert partner program under the NHS Constitution’s philosophy that patients and citizens support the system as one of its members, and the provision of CDSMP was started at all primary healthcare facilities in the UK. In the case of the U.S. Arthritis SME Program and Arthritis CDSMP replicated in the UK, both programs were found to be effective, including a significant reduction in healthcare use [11]. SMEs in the UK are now widely used for over 100 chronic diseases, etc. [12].

In Japan, several patient groups jointly visited Stanford University to examine CDSMP in 2004. In 2005, the training of leaders for program implementation was started, Japanese-language teaching materials (manuals for leaders and reference books) were prepared, and the provision of programs began. Currently, CDSMP is provided by non-profit organization Japan Chronic Disease Self-Management Association throughout the country [13]. In the medical setting, in Japan, SME efforts are progressing on a disease-by-disease basis, and a protocol for self-management has been established for multiple diseases such as diabetes and Chronic Obstructive Pulmonary Disease (COPD) [14]. However, there are few cases where those protocols are promoted in cooperation with regional health departments such as local governments beyond medical institutions. One of the reasons is that historically regional public health in Japan has been developed in a system independent of medical care.

### **Discussion**

#### **Social Security Reform for 2040**

In Japan, by 2025, when the baby boomers are 75 years old or older, the development of a system for the realization of regional comprehensive care systems is being promoted. In the regional comprehensive care system, local governments such as municipalities and prefectures are required to “provide high quality services without break or gap to all residents”. However, looking at the transition of Japan’s population structure, it is expected that there will be a change in the phase from “the rapid increase in elderly people” to “the rapid decline in active generations” from 2025 [14]. Public debate on the overall picture of social security reform is being sought. According to the Cabinet Secretariat, the Cabinet Office, and the Ministry of Finance, “The future outlook for social security in 2040”, the increase in the number of employees in medical welfare, particularly medical services cannot be expected in fiscal 2040 (plan basis) [21,22]. The Ministry of Health, Labor and Welfare has set out to establish goals and implement measures to extend the health life expectancy and improve the productivity of medical and nursing care services and is considering budgeting and system revisions from what is possible.

As mentioned above, SME has the following advantages as a solution to the problems with an eye on the declining birthrate and aging population: “Efficacy, methodology has been established”, “Possibility of reducing the use of medical institutions”, “Low cost,” etc. In order to promote its spread in Japan, it will be necessary to promote collaboration between “scientific researchers” and “administrative practitioners” etc. on a region-

al basis while training human resources for local government employees etc. in the National Institute of Public Health etc. I propose SME, especially CDSMP as a solution to the problem of contributing to social security reform in Japan, with an eye toward declining birthrate and aging population, as a methodology to be promoted in future public health policy in Japan.

**Recommendation to the Japan Public Health Association**

As a methodology for establishing a health promotion support system for people with disabilities, we have made recommendations on problem solutions using SMEs, especially CDSMP. CDSMP is a well-established methodology in which many evaluation studies by randomized controlled trials are conducted worldwide, and various effects such as self-efficacy improvement effect, physical disability function improvement effect, medical institution use reduction effect, etc. As it is a methodology [15] that only results, “health education and epidemiology using CDSMP, implementation and promotion of both researches” are essential for its realization. It is considered that there are no academic groups that can comprehensively carry out, promote, and disseminate such research in Japan, so in this paper, the following concrete recommendations were given to the Japan Public Health Association.

For the Japan Public Health Association, the author proposed that “the accumulation of the scientific basis for health promotion of people with disabilities”, as shown in Figure 1: Image of an “environment that supports health” for people with disabilities, and promotion and spread of epidemiological research using CDSMP by the following concept: Implementation and promotion of “Support by SME”, in regional units, among public health members “administrative researcher (such as public health centers / health welfare offices / health welfare centers)” and “an academic researcher such as epidemiology (such as universities)”, by collaboration with each other and related

fields of groups.

**Social impact of the task**

The realization of the recommendations in this paper can be expected to contribute to the following important policies in Japan:

1. Contributing to the promotion of important policies for people with disabilities as well as measures against poverty of children and barrier-free universal design in the promotion of the “symbiotic society” which is one of the important policies of the Cabinet Office [16].
2. “Goal 3: Health and welfare for all people” in SDGs (17 international goals for 2030, with the goal of achieving a sustainable, diverse and inclusive society) Contribution to the promotion [3].
3. Contributing to the social security reform and working reform for medical professionals with a view to 2040 [17].

**Concluding Remarks**

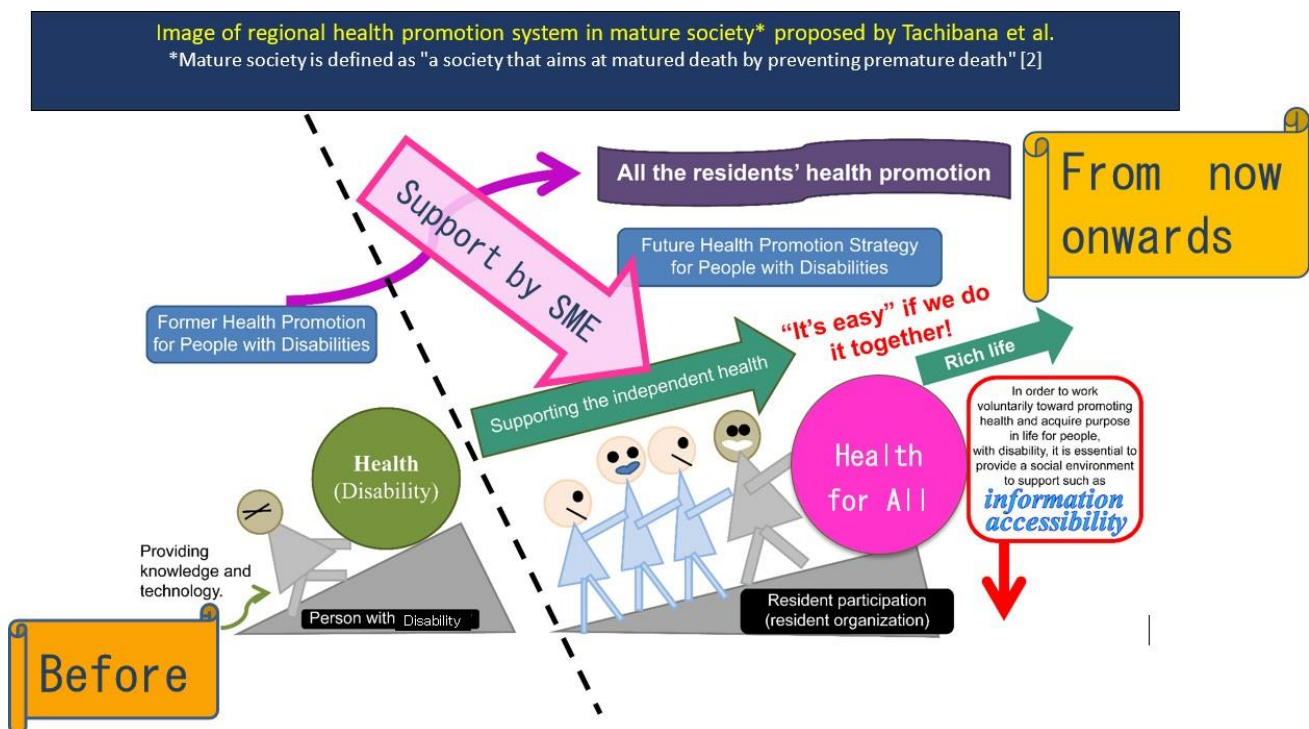
In this paper, the author has examined how to develop the proposal of ours to contribute some important policies in Japan. In order to realize the health promotion policy for all the people based on the “definition of health in a mature society”, I propose progression of SME, especially CDSMP as a solution method to the problem of contributing to social security reform in Japan.

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**Conflicts of Interest**

The author has no financial conflicts of interest to dis-



**Figure 1.** Image of an environment that supports “Health for All” [2].

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close concerning the study.

## References

1. Tachibana T. Promotion of Evidence-Based Health and Welfare Policies for People with Disabilities in Japan. Proposing to Apply Self-Management Education for Switching to the “Health Promotion System for a Care-Centered Mature Society, that Does Not Leave Anyone Behind”. *Health Educ Public Health*. 2019; 2(3): 198 - 202. doi: 10.31488/heph.124.
2. Tachibana T, Mizushima H. A Review for Promoting Evidence-based Healthcare and Welfare Policies for People with Disabilities. A Proposed “Definition of Health” for a Care-focused Mature Society. *J Epidemiol Public Health Rev*. 2017; 2(6): doi <http://dx.doi.org/10.16966/2471-8211.158>.
3. Ministry of Foreign Affairs of Japan. Japan SDGs Action Platform. <https://www.mofa.go.jp/policy/oda/sdgs/index.html> (accessed 2019-11-13).
4. Shibuya K, Hashimoto H, Ikegami N, et al. Future of Japan’s system of good health at low cost with equity: beyond universal coverage. *Lancet*. 2011; 378: 1265-73.
5. World Health Organization. Preventing Chronic Diseases: a vital investment. 2005.
6. World Health Organization. Preventing a Health Care Workforce for the 21st Century: The Challenge of Chronic Conditions. 2005.
7. Bodenheimer T, Lorig K, Holman H, Grumbach K. Patient self-management of chronic disease in primary care. *JAMA J Am Med Assoc*. 2002; 288(19):2469-2475.
8. Bandura A. Self-efficacy: toward a unifying theory of behavioral change. *Psychol Rev*. 1977;84(2):191-215.
9. Foster G, Taylor SJ, Eldridge SE, et al. Self-management education programs by lay leaders for people with chronic conditions. *Cochrane Database Syst Rev*. 2007(4): CD005108.
10. Tachibana T. Promotion of Evidence-Based Health and Welfare Policies for People with Disabilities in Japan. Proposing to Apply Self-Management Education for Switching to the “Health Promotion System for a Care-Centered Mature Society, that Does Not Leave Anyone Behind”. *Health Edu Public Health*. 2019; 2(3): 198-202.
11. Barlow J, Williams B, Wright C: Patient education for people with arthritis in rural communities: The UK experience. *Patient Education Counsel*. 2000, 1451:1-10.
12. Self Management UK. <https://www.selfmanagementuk.org/> (accessed 2019-11-13).
13. Japan Chronic Disease Self-Management Association. <https://www.j-cdsm.org/> (accessed 2019-11-13).
14. Mogi T. Educational theory in rehabilitation. 5. Education for patients and families. Self management education. *J Clin Rehabilitation*. 2018; 27(6):577-580. (in Japanese)
15. Tachibana T. Human Resource development for Public Health Workers in Japan: A minireview. *Health Edu Public Health*. 2018; 2(1): 149-153. doi: 10.31488/heph.114
16. Cabinet Office. Symbiotic society. <https://www8.cao.go.jp/shougai/index.html> (in Japanese) (accessed 2019-11-13).
17. Ministry of Health, Labour and Welfare. Social Security and Way of Working Reform Headquarters looking to 2040. [https://www.mhlw.go.jp/stf/shingi/other-syakaihosyou\\_306350\\_00001.html](https://www.mhlw.go.jp/stf/shingi/other-syakaihosyou_306350_00001.html) (in Japanese) (accessed 2019-11-13).

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