The Role of Public Health Nurses in Japanese Long-term Care Prevention Projects in the Community

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Abstract

As the frontrunner of ageing countries, we would like to introduce the role of public health nurses in Japanese long-term care prevention projects in the community and our research on healthy longevity in this review article. Previous studies in Japan reported that lack of participation in social activities was significantly related to an increased risk to suffer from disability and subsequently requiring the application of Japanese long-term care insurance. As for primary/secondary prevention for old populations, public health nurses are expected to develop and utilize the social capital in health promotion interventions at individual and community levels in Japan. Since 2006, long-term care insurance was revised focusing on preventive care by detecting people aged 65 years and older who are at high risk of needing future care or support. There will be increasing demand for health care professionals to promote a community’s overall health status in cost-effective ways, and public health nurses should play an important role to make it.

Keywords: Aged society; Community; Long-term care prevention; Public health nurse; Old-old; Young-old

Introduction

According to the Japanese national census, over the past 50 years the percentage of the older population has increased fourfold from 5.7% in 1960 to 23.1% in 2010 [1]. This increasing rate is the fastest in the world. As the frontrunner of ageing countries, we would like to introduce the role of public health nurses in Japanese long-term care prevention projects in the community in this article. In this article, the following definition applies to public health nursing according to American Public Health Association: “Public health nursing is the practice of promoting and protecting the health of populations using knowledge from nursing, social, and public health sciences” [2].

Primary prevention for long-term care

The percentage of the older population is estimated to continue increasing rapidly and reach up to 26.8% in 2015 as reported by the National Institute of Population and Social Security Research [3]. Japan will face a super-aged society in the near future, in which 40% of the population will be over 65 years of age [3]. However, prolongation of life expectancy is inevitably associated with greater numbers of frail old people who need help in daily activities. The percentage of the old-old population (aged 75 years and over) in 2012, comprising more frail people compared to the young-old population, exceeded 11.9% of the entire life and continue to live in their hometown with a sense of connections as well as norms of reciprocity and trust that exist in community [9]. Many recent studies have found that high levels of social capital are associated with better health [10,11]. Since public health nurses are the main community health practitioner who had been promoted and protected the health of populations, as for primary/secondary prevention (Figure 1) for old populations, public health nurses are now expected to develop and utilize the social capital in health promotion interventions at individual and community levels in Japan [12].
Long-term care prevention interventions to promote a community's overall health status in cost-effective ways is the key to establishing a society that can live with a sense of security in their community. To realize it, a macroscopic integration and cooperation among industries, education institutions, administration and community through an interdisciplinary approach including medical science, nursing science, nursing care, study of gerontology, social welfare, social science, engineering, psychology, economics, religion and ethics should be made [5]. As the community health practitioner, public health nurses are expected to make the best use of their practice characteristics, “focusing on the health needs of an entire population”, “conducting assessment of population health using a comprehensive, systematic approach”, “developing and implementing community-wide health promotion programs”, and “working in community partnerships and interdisciplinary teams” [18]. Although public health nurses have the advanced skills in population/community health management, their role has been underutilized and not well understood [19, 20]. Public health nurses should now play their emerging role to develop those primary and secondary prevention projects utilizing their skills and resources, especially in this world’s most aged society Japan.
## Basic health check list for those over 65 years old

**Date**

**Name**

**Years & date of birth**

### 1. Daily Life
1. Do you use normal travel by bus or train by yourself? 0: Yes 1: No
2. Do you go out and by daily necessities by yourself? 0: Yes 1: No
3. Do you manage your own deposits and savings at the bank? 0: Yes 1: No
4. Do you often go out to visit your friends? 0: Yes 1: No
5. Do you consult with your family or friends about these problems? 0: Yes 1: No

### 2. Physical Ability
6. Are you able to go upstairs without holding rail or wall? 0: Yes 1: No
7. Are you able to stand up from the chair without any aids? 0: Yes 1: No
8. Are you able to keep walking for about 15 minutes? 0: Yes 1: No
9. Have you fallen during the past year? 0: Yes 1: No
10. Are you worry about falling down? 0: Yes 1: No

### 3. Nutrition
11. Have you lost more than 2-3 kg in the past month? 0: Yes 1: No
12. Height cm, Weight kg, BMI
   - BMI = weight (kg) / height (m)²

### 4. Oral Condition
13. Compared with 6 months ago, do you have difficulty in eating hard food? 0: Yes 1: No
14. Do you chew when you drink tea or soup? 0: Yes 1: No
15. Do you often feel your mouth dry? 0: Yes 1: No

### 5. Sleep
16. Do you go out more than once a week? 0: Yes 1: No
17. Compared with last year, do you go out less often? 0: Yes 1: No

### 6. Forgetfulness
18. Do people around you say you repeat the same thing and have become forgetful? 0: Yes 1: No
19. Do you make phone calls by yourself? 0: Yes 1: No
20. Do you find yourself not knowing today’s date? 0: Yes 1: No

### 7. Emotion
21. I do not feel any fulfillment in my daily life during the last two weeks. 0: Yes 1: No
22. I cannot enjoy things I used to enjoy during the last two weeks. 0: Yes 1: No
23. During the last two weeks, I am not willing to do what would do easily before. 0: Yes 1: No
24. During the last two weeks, I do not feel I am useful to anyone. 0: Yes 1: No
25. During the last two weeks, I feel I am exhausted without any reason. 0: Yes 1: No

**Physical strength**

**Overall low score on question 1-20**

**Nutrition status**

**Oral function**

**Household懂話**

**Cognitive function**

**Depression risk**

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For a detailed explanation and more information, refer to [this link](http://example.com).

**Table 1**: Basic health check list (Kihon Checklist) for older people (aged 65 or more) in Japan
The basic health check list is a 25-item self-rated questionnaire consists of seven categories. Older persons (aged 65 years or more) who need some intervention are screened out by the criteria defined by the Ministry of Health, Labour and Welfare in Japan [16]. This Table is adopted from the web page of the Association of Medical Doctors in Asia [25].

Our research on healthy longevity

"Which factors influence the healthy longevity?" is the key for the practice of LTC prevention project. There has been considerable research on the influence of these factors on mortality from birth to older age but remarkably little research on how these factors affect the likelihood that a person will survive and remain healthy to an oldest old age [21]. Starting with the research premise of healthy longevity in Japan, we started a longitudinal cohort study for the aged population to clarify factors contributing to healthy longevity. It is the study about Septuagenarians, Octogenarians, Nonagenarians Investigation with Centenarians (SONIC study). Aims of the SONIC study are to investigate age differences and similarities in factors influencing healthy aging and psychological well-being including psychological (cognition, change in emotion and compensation: personality, psychological development), social (socio-economic status, social relationship), medical, dental and nutritional aspects [22]. Study participants include more than three thousand, septuagenarians aged 69–71 years, octogenarians aged 79-81 years, nonagenarians aged 89-91 years, and centenarians aged 100 and over collected from four urban and rural towns in Japan. Most studies focusing on centenarians are aiming to investigate factors contributing to healthy longevity [23]. However, SONIC is supposed to be unique and more practicable than centenarian studies because of including 70, 80, 90, 100 years and more. Centenarians are not always good models of healthy longevity. Most of the centenarians are lying on bed especially in Japan [24]. We are looking for targets to realize the prevention of LTC from the public health nurse’s standpoint.

Conclusion

In order to realize a better aged society in which all people can have healthy, satisfying lives while supporting each other, there will be increasing demand for health care professionals who have the skills to manage the health of the population and communities. These health care professionals such as public health nurses are especially essential in a super-aged country, Japan, as mentioned above. Since public health nurses have the knowledge and skills to “work in community partnerships and with interdisciplinary teams” and “develop health promotion and disease prevention programs that are culturally appropriate and cost-effective” [20], they should play an important role for Japanese long-term care prevention projects in the community.

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