

# Community-based nursing care practice for the prevention of dementia in elderly residents in Japan\*

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This article reports on the implementation of community-based prevention of dementia among older adults in Japan. It is expected that the incidence of dementia will continue to increase as the population ages and thus care of those at risk of and with dementia is an important issue for nursing practice in the community. Community-based prevention of dementia comprises a comprehensive range of activities such as obtaining an understanding of community residents, early detection of dementia, fostering of volunteers, implementation of dementia prevention activities, provision of nursing care for older adults with dementia, as well as collaboration with local administrative institutions. We are working with a Japanese community (population of 65 years or more: about 2480 out of a total population of 10 800) and in this article our activities are described. Among our activities we focus on itemizing the signs of dementia for early detection of the disease and on fostering volunteers. For early detection of dementia it is important to itemize the signs of dementia that close family members would notice in daily life. For fostering of volunteers it is necessary to enable them to develop skills to provide activities/clubs to interest the older adults and which are effective for prevention of dementia. We have started with clubs including a personal computer club, children's songs club and a picture mail club. Such activities are important strategies for a community-based intervention. The article concludes with reference to the need for verification studies to evaluate the impact of the community-based approach to the prevention of dementia outlined here which includes anticipatory education of the population concerning dementia, development of a method of early detection of dementia using a check-list and a means of secondary prevention via the activities of a group of volunteers (Ichigo Kai).

**Key words:** community-based prevention; dementia; early detection; volunteers

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## Introduction

The overall Japanese population, which stood at more than 127 million in 2005, is expected to

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decrease in the future (Health and Welfare Statistics Association, 2000).

But the numbers of older adults of 65 years or more will continue to increase for some years. The increase of the population of older adults in Japan is unique among the developed countries because the increase in the population has accelerated within a very short time. For example, the time that the proportion of the population of 65 years or older took to double from 7% to 14% is 24 years in Japan compared to 47 years in UK, 73 years in USA and 85 years in Sweden according to

National Institute of Population and Social Security Research (Demographic data) (2004).

Under these circumstances the health care of older adults is an important theme and the issue of dementia is also therefore important in Japan. In 2005 the population of older people stood at 27 million. The number of old adults with dementia is estimated to be 1 690 000 in 2005 and will be 2 500 000 by 2015 (Health and Welfare Statistics Association, 2004). Nursing activities in the community for prevention of dementia will be an increasingly important task.

The basic approach to dementia that we are implementing is to assist the person with dementia and his/her family in order that they may enjoy a happy life in their own home with hope while his/her dignity, freedom, personality and potential are well respected.

## Purpose

The purpose of this study is to describe the practice of community-based nursing care to prevent dementia in older residents in one community. Activities for and with the community include provision of knowledge about dementia to the public, the early detection of dementia, actual prevention activities, fostering of volunteers and co-operation with the local municipality.

## Subject and methods

The community where we are tackling the implementation activities to prevent dementia is T town where our university is located. T town is a rural area, rich in nature surrounded by the Japan Sea and mountains. The population is about 10 800 and that of 65 years or older is about 2480 or 23% in 2000. In this town, we are primarily carrying out health education in relation to the prevention of dementia through lectures and symposia; the early diagnosis of dementia (through the development and design of the check-list), and fostering of volunteers.

## Results

### The early detection of dementia

We have developed a check-list with the items shown in Table 1. The check-list was tested

**Table 1** Check-list for early detection of forgetfulness

Number of items	Contents
1	Can you fill out pension or tax documents?
2	Can you give advice to your families or friend?
3	Can you straighten up washing or tableware?
4	Can you do shopping for daily necessities?
5	Do you spend more than half of your time of the day watching TV or doing nothing?
6	Can you properly control the drugs given by a hospital?
7	Do you have any experience that you couldn't recall what you were doing or where you had been just a few minute ago?

**Table 2** Number of items by gender answered as 'can't' ( $n = 1034$ )

Number of item answered as 'can't'	Number		
	Male	Female	Total (%)
0	175	351	526 (50.9)
1	97	117	274 (26.5)
2	41	76	117 (11.3)
3	16	36	52 (5.0)
4	15	19	34 (3.3)
5	6	10	16 (1.5)
6	2	3	5 (0.5)
7	2	8	10 (1.0)

through a study of people attending for a medical check-up. The subjects were 1034 examinees of a medical check-up, from among a total of 2230 people of 60 years and 65 years or older living in this community. The study was conducted by interviewing participants at the medical institutes where they received the check-up.

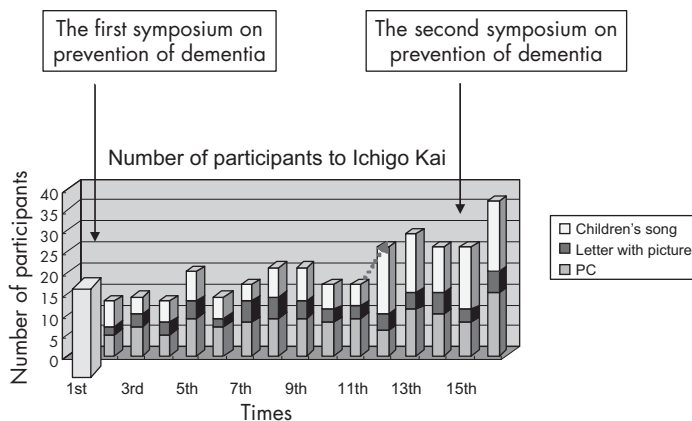
As Table 2 shows, 526 people (50.9%) did not answer 'can't' to any of the items, 274 people (26.5%) answered 'can't' to one of the items. Ten people (1.0%) answered 'can't' to all of the 7 items (identified as dementia) and 5 people (0.5%) to 6 items.

There were 65 people (6.3%) who could not do at least 4 items or more.

As Table 3 shows the older adults who could not undertake a large number of items were eligible for Nursing Care Insurance, or were bedridden or

**Table 3** Relation of the items for early detection of forgetfulness to other factors  $n = 65$ 

Number of items of check-list answered as can't	Total number	Receiver of nursing care insurance	80 Years or older	Bedridden	Judged as having dementia
7	10	10 (100)	8 (80.0)	8 (80.0)	10 (100)
6	5	5 (100)	3 (60.0)	3 (60.0)	5 (100)
5	16	4 (25.0)	11 (68.7)	4 (25.0)	6 (37.5)
4	34	9 (26.0)	22 (64.7)	11 (32.4)	15 (44.1)

**Figure 1** Number of participants by club

judged as having dementia and the existence of the problems was suggested. We hope to consider further the utilization of these items for detection of forgetfulness.

### Fostering of volunteers

We solicited volunteers starting from the health education programme and a group of them ('Ichigo Kai' in Japanese) was established in 2003. The present number of the group members is 45. The programme of activities includes meeting once every month to learn basic issues in relation to dementia, to hold discussions in each club and to carry out club activities. It is necessary to acquire skills such as personal computer skills, to write letters with pictures (Etegami in Japanese) and to sing children's songs as part of the volunteer activities and we wish to expand these in future. Figure 1 shows the evolution of the number of participants to Ichigo Kai. The members are gradually increasing.

### Discussion

In developing community-based nursing care practice, it is important to focus the comprehensive activities and we have based these on the concept of 'community as partner' (Anderson *et al.*, 2000; Kanagawa, 2000). The strategies to support this are community assessment and community nursing diagnosis which are related to individual health and the improvement of quality of life. Each strategy requires detailed development and evaluation in order to enhance the scientific value of the approach. It is necessary to establish the methodology to scientifically identify the needs of the community, to seek co-operation by the community people and to make good use of the resources in the community, such as the volunteers.

Up to now we have been carrying out verification studies by comprehensively observing the culture, the lives and the ways of thinking of the community people through the implementation of investigations and comparison of findings with

existing statistics. This multifaceted strategy of assessment of the community enables exploration of the relationship between the community nursing diagnosis and elements of the community. However there is much room for further study in terms of simplification and improvement of efficiency in the process of verification.

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