A new health education program on dietary variety for the community elderly: implementation by health promotion volunteers

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Background

- Higher dietary variety can reduce the risk of mortality and the decline of activities of daily living (Cornoni-Huntley, 1983; Kumagai, 2003).
- Mobilizing community health workers, could be an effective way to improve health and to empower community members to improve their own health (Eng, 2009; Haines, 2007).
- In Japan, health promotion volunteers perform activities similar to those performed by community health workers.

Purpose of the study

- To develop a health education program of dietary variety that health promotion volunteers (HPVs) could implement with elderly people in the community.

Health promotion volunteers in Japan

HPVs:

- are qualified by municipality.
- are trained by about 80% municipality in Japan.
- are recruited by flyers and word of mouth.
- are unpaid.

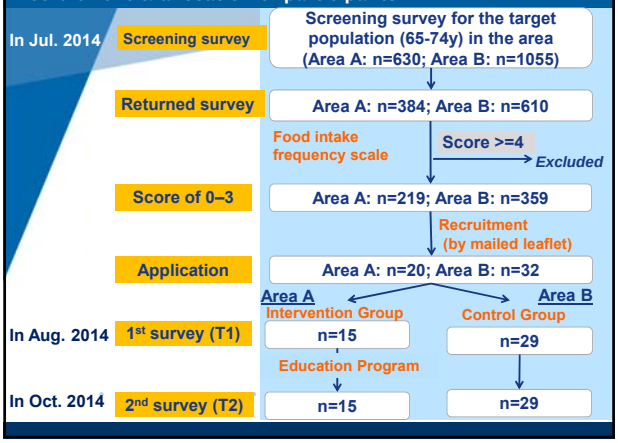
Methods: study settings

- The city of Hikone, Shiga Prefecture
- We selected two areas in the city: the elementary school districts, divisions [Area A] and [Area B] were chosen as the intervention and control groups
- HPVs in these areas were willing to join this study

Methods: Target population

- The entire community-dwelling elderly population: aged 65–74 years.
- Excluding elderly people requiring long-term care.

Recruitment & allocation of participants



A new health education program of dietary variety

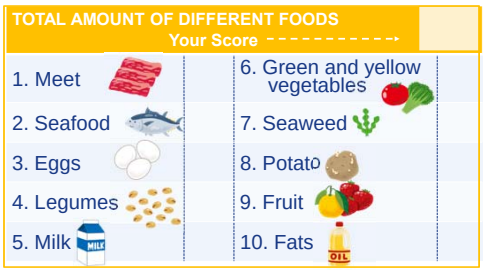
- From September to October 2014
- Once every 2 weeks, 4 total sessions, during each 2-h class
- Held in community center

1st	• **Lecture**: "What is food variety? -Relationship with care prevention." • **Health Education**: How much variety is enough? -The function of the carbohydrate." • **Group Discussion**: Self-introduction & a participation motive.
2nd	• **Health Education**: How much variety is enough? -The function of the protein and vitamins" • **Group Discussion**: Your habit for an unbalanced diet.
3rd	• **Health Education**: The quantity of foods required each day. • **Group Discussion**: Healthy diet by simple ingenuity.
4th	• **Food Tasting**: The simple and convenient recipes. • **Group Discussion**: What can we do to continue healthy lifestyle?

Methods: primary outcome

Dietary variety score (DVS):

- By food intake frequency ; 10-items (Kumagai, 2003)
- Give yourself one point for each food category eaten almost everyday (for more than 5 days) throughout the week.
- For less than 4 days throughout the week give yourself 0 point.

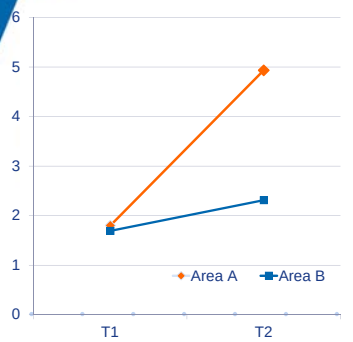


Findings: characteristics of the study participants

		Area A n=15		Area B n=29		p-value	
		n	%	n	%		
Sex	Male	4	26.7	11	37.9	0.520	b
	Female	11	73.3	18	62.1		
Age [a]		68.9±2.6		69.0±3.3		0.921	c
Educational level	College graduate	1	6.7	4	13.8	0.222	d
	Junior college/vocational school graduate	0	0	3	10.3		
	High school graduate	11	73.3	18	62.1		
	Junior high school	3	20.0	4	13.8		
Financial level	Good	1	6.7	1	3.4	0.327	d
	Somewhat good	2	13.3	5	17.2		
	Normal	8	53.3	20	69.0		
	Somewhat severe	0	0	3	10.3		
	Severe	4	26.7	0	0.0		

a): Values represent mean ± SD. b): Fisher's exact test c): t-test d): Mann–Whitney U test

Findings: primary outcome
Dietary variety score



T1: Participants ate less than 2 items.

T2: Participants ate more than 5 items.

Discussions