



Dementia Prevention Study and Policy in Taiwan

Liang-Kung Chen, MD, PhD

Professor and Director, Aging and Health Research Center, National Yang Ming University; Director, Center for Geriatrics and Gerontology, Taipei Veterans General Hospital

Identifying residents at greater risk for cognitive decline by Minimum Data Set in long-term care settings

Liang-Yu Chen, MD ^{a, b, c}, Li-Kuo Liu, MD ^{a, c, d}, Li-Ning Peng, MD ^{a, b, c}, Ming-Hsien Lin, MD ^{a, c}, Liang-Kung Chen, MD, PhD ^{a, b, c, *}, Chung-Fu Lan, MD, PhD ^e, Po-Lun Chang, MD, PhD ^d

Table 2Factors associated with cognitive decline by multivariate analysis. a,b

Variables	Decliner		
	Odds ratio	95% confidence interval	p
Age (y)	1.061	1.008-1.115	0.023*
Cancer	1.613	0.304-8.547	0.574
Chronic lung disease	1.018	0.448-2.309	0.966
RUG-III ADL	1.111	1.008-1.225	0.034*
RAP trigger for cognitive loss/dementia	3.774	1.825-7.813	< 0.001*
Sum of RAP triggers	1.188	1.046-1.349	0.008*

Physical function is a good predictor for cognitive decline

^a Aging and Health Research Center, National Yang-Ming University, Taipei, Taiwan

b Institute of Public Health, National Yang-Ming University, Taipei, Taiwan

^c Center for Geriatrics and Gerontology, Taipei Veterans General Hospital, Taipei, Taiwan

^d Institute of Biomedical Informatics, National Yang-Ming University, Taipei, Taiwan

^e Institute of Health and Welfare Policy, National Yang-Ming University, Taipei, Taiwan

LATE-LIFE METABOLIC SYNDROME PREVENTS COGNITIVE DECLINE AMONG OLDER MEN AGED 75 YEARS AND OVER: ONE-YEAR PROSPECTIVE COHORT STUDY

C.-L. LIU^{1,2}, M.-H. LIN^{1,2}, L.-N. PENG^{1,2}, L.-K. CHEN^{1,2}, C.-T. SU^{3,4}, L.-K. LIU^{1,2}, L.-Y. CHEN^{1,2}

Aging and Health Research Center, National Yang Ming University, Taipei, Taiwan;
 Center for Geriatrics and Gerontology, Taipei Veterans General Hospital, Taipei, Taiwan;
 Department of Family Medicine, Taipei Medical University Hospital;
 School of Public Health, College of Public Health and Nutrition, Taipei Medical University, Taipei, Taiwan.
 Corresponding author: Dr. Liang-Kung Chen, Center for Geriatrics and Gerontology, Taipei Veterans General Hospital, No. 201, Sec. 2, Shih-Pai Road, Taipei, Taiwan 11217,
 TEL: +886-2-28757830, FAX: +886-2-28757711, Email: lkchen2@vghtpe.gov.tw

Table 2
Comparisons of cardiometabolic risk factors between subjects with and without cognitive decline (Cog-D)¹

	Cog-D (+)	Cog-D (-)	P-value
	(N=43)	(N=186)	
Age (yr)	83.8±4.2	82.1±4.2	0.020*
Current smoking (%)	10(23.3)	49(26.3)	0.330
Hypertension (%)	30(69.8)	107(57.5)	0.168
Diabetes mellitus (%)	12(27.9)	40(21.5)	0.419
ATP III-defined Metabolic syndrome (%)	7(16.3)	44(23.7)	0.299
IDF-defined Metabolic syndrome (%)	7(16.3)	34(18.3)	0.775
Body mass index (kg/m²)	23.6±3.2	23.8±3.3	0.673
Waist circumference (cm)	86.9±7.9	85.6±9.3	0.430
Systolic blood pressure (mmHg)	135.8±20.8	138.4±22.1	0.479
Diastolic blood pressure (mmHg)	66.7±12.7	71.5±13.9	0.040*
Fasting plasma glucose (mg/dL)	110.1±29.4	105.8±34.5	0.446
Serum total cholesterol (mg/dL)	167.6±29.2	182.8±36.5	0.011*
Serum triglyceride (mg/dL)	114.7±59.0	128.6±67.2	0.215
Serum HDL-C (mg/dL)	55.5±13.2	60.0±15.0	0.072

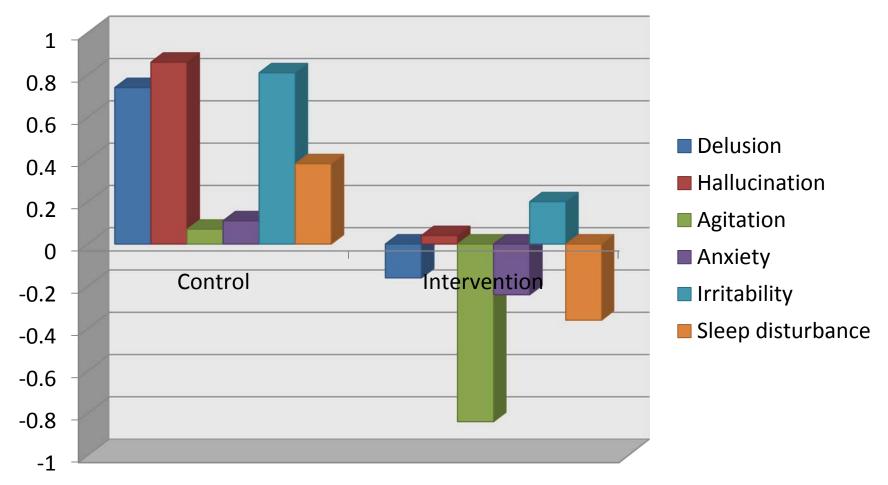


Good nutrition is protective

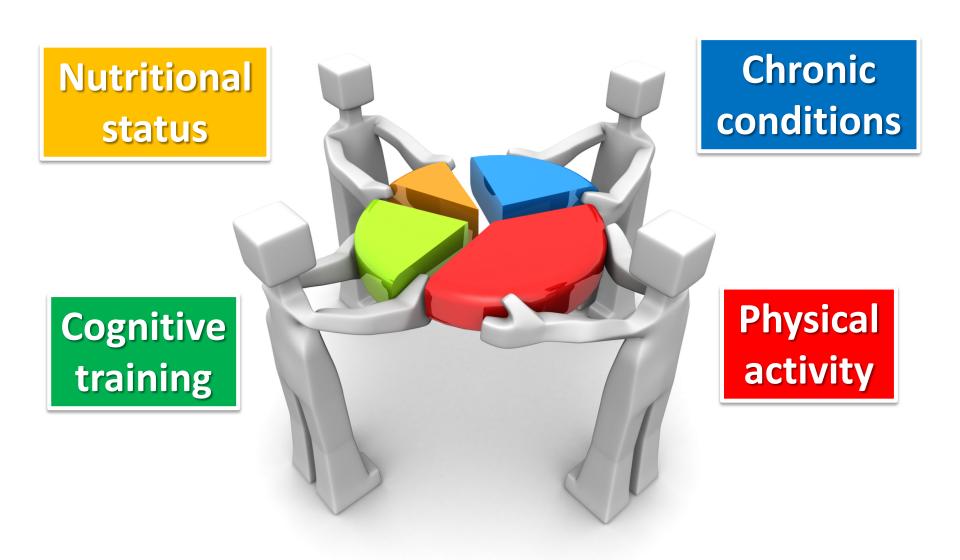
Non-pharmacological treatment reducing not only behavioral symptoms, but also psychotic symptoms of older adults with dementia: A prospective cohort study in Taiwan

Rue-Chuan Chen,^{1,2} Chien-Liang Liu,³ Ming-Hsien Lin,^{1,3} Li-Ning Peng,^{1,3} Liang-Yu Chen,^{1,3} Li-Kuo Liu^{1,3} and Liang-Kung Chen^{1,3}

¹Aging and Health Research Center, National Yang Ming University, ²Department of Family Medicine, Taipei City Hospital Zhonghsiao Branch, and ³Center for Geriatrics and Gerontology, Taipei Veterans General Hospital, Taipei, Taiwan



Integrated approach is needed

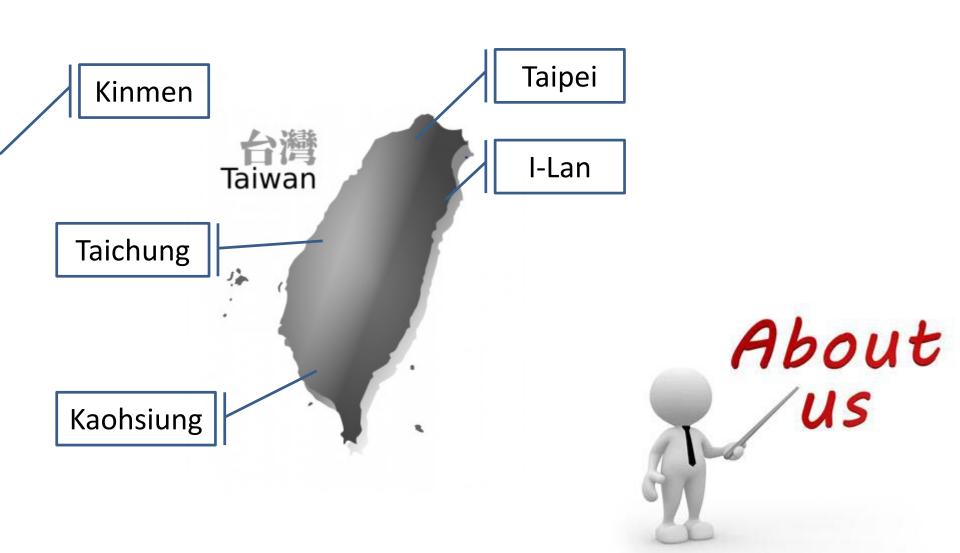


Taiwan Health Intervention Study on Community-dwelling Elders (THISCE)

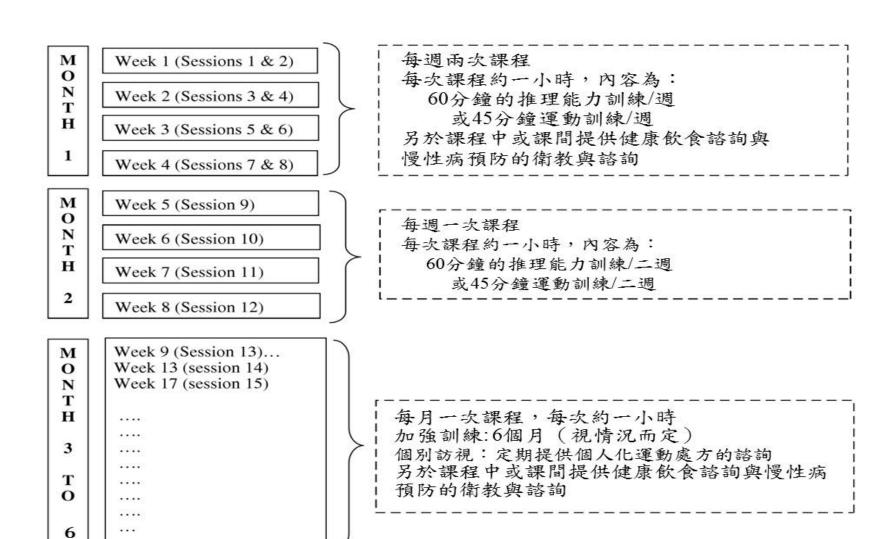
- 1. Nationwide randomized controlled trial
- 2. Inclusion criteria
 - a. Slow walking speed
 - b. Subjective memory complaint
 - c. IADL impairment
- 3. Integrated intervention program
 - a. Physical activities
 - b. Cognitive training
 - c. Dietary counselling
 - d. Chronic disease management



Taiwan Health Intervention Study on Community-dwelling Elders (THISCE)



Study flowchart

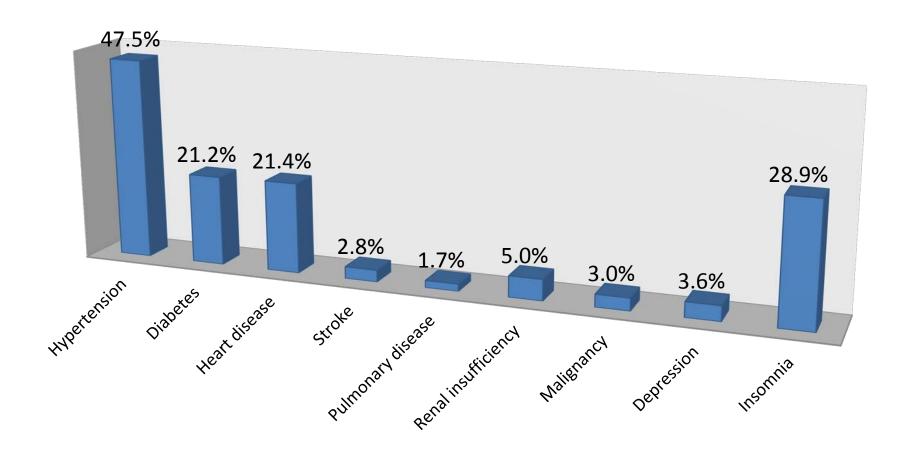


Baseline demography

- 1191 community-dwelling older people participated
 - Female dominant (63.6%)
 - Age: 75.1 \pm 8.0 years
 - Formal education year: 2.1 ± 1.6 years
 - IADL score: 7.1 ± 1.4
 - MNA-SF: 13.2 ± 1.2
 - TGDS-5: 0.4 \pm 0.9
 - 6m walking speed: 0.92 \pm 0.34 m/s
 - Grip strength: 28.7 \pm 8.4 Kg for men; 17.4 \pm 4.9 Kg for women
 - MoCA: 19.9 \pm 5.9 adjusted for education

Old old people with low education and some cognitive impairment and certain degree of physical frailty

Chronic conditions



Cognitive training







- 1. Memory training + Deductive function training
- 2. Group-based and person-based
- 3. Frequency
 - a. Twice a week, 8 courses in the 1st month
 - b. Once a week, 4 courses in the 2nd month
 - c. Once a month up to 6th month
 - d. Education for home maintenance training

Exercise training







- 1. Resistance exercise-based program
- 2. Accumulated dose: 150 minutes per week
- 3. Frequency
 - a. Twice a week, 8 courses in the 1st month
 - b. Once a week, 4 courses in the 2nd month
 - c. Once a month up to 6th month
 - d. Education for home maintenance training

Diet and chronic conditions



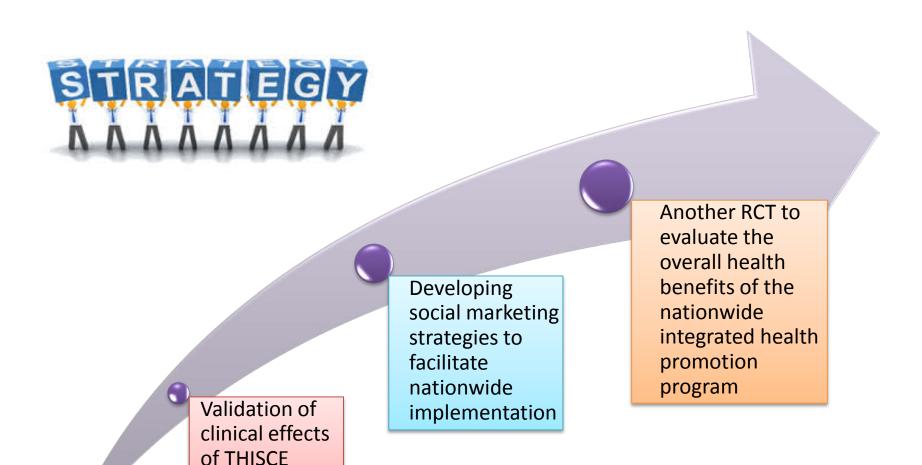








National implementation strategy



intervention

programs



Liang-Kung Chen, MD, PhD

Professor and Director, Aging and Health Research Center, National Yang Ming University, TAIPEI, TAIWAN

Director, Center for Geriatrics and Gerontology, Taipei Veterans General Hospital, TAIPEI, TAIWAN

Email: lkchen2@vghtpe.gov.tw

