Kobe Dementia Project: Devising new strategies to strengthen health systems

Lead Research Institution: Kobe University

Principal Investigator (PI): Dr Yoji Nagai, Professor, Clinical & Translational Research Center

Budget: US$ 600,000
Start of Project: 1 August 2017; **Data collection + Program evaluations & adjustments:** from November 2017 to June 2020;
Data Analysis: from January 2020 to July 2020; **Completion of Research Report:** 31 July 2020

● Overview

Globally, there has been a steady increase in life expectancy, population ageing, and a rapid upsurge in the number of people living with dementia. Japan has the highest proportion of people over 65 years of age in the world. More than 8 million Japanese citizens have cognitive problems, with over 4.5 million people suffering from dementia. Currently no cure for dementia exists; therefore, the immediate goal is early detection and management to help slow cognitive decline and delay the progress of dementia. Evidence-based methods will help identify best practices for the early identification of symptoms and subsequent coping interventions. Such evidence can be used to devise pragmatic novel initiatives that support older adults in their communities as well as reduce the growing social losses caused by dementia.

● Research Background

In cooperation with Kobe University and Kobe City, the WHO Kobe Centre initiated a joint research venture entitled, "Kobe Project for the Exploration of Newer Strategies to Reduce the Social Burden of Dementia". This 3-year project aims to support the creation of an innovative "Kobe Model" for the early detection and management of dementia, to minimize the society-wide impact by using data gained from the Kihon Checklist (KCL) survey conducted by Kobe City on lifestyles of the elderly as well as data from the Frailty Check-up program started by Kobe City this year.

Research Outline

1. Analyze the health data of 80 000 Kobe citizens in their 70s collected via the KCL survey
2. From the KCL survey, analyze the data of approximately 5000 people who are considered high risk for future nursing care for dementia-related problems to measure cognitive function and evaluate quality of life
3. Analyze the data from approximately 5000 participants in the Frailty Check-up program to measure cognitive function and evaluate quality of life
4. Study the impact of additional long-term cognitive training on approximately 100 participants from the "Brain Health Class" program administered by Kobe City

● Goals

The project will:

✓ clarify the association between cognitive functions and the likelihood of requiring specialized long-term nursing care;
✓ identify evidence related to effective methods for the management of dementia, especially those that can slow any decline in cognitive function;
✓ develop a community-based model for the early detection and management of dementia; and
✓ propose evidence-based policy options that can be evaluated within Japan and globally.
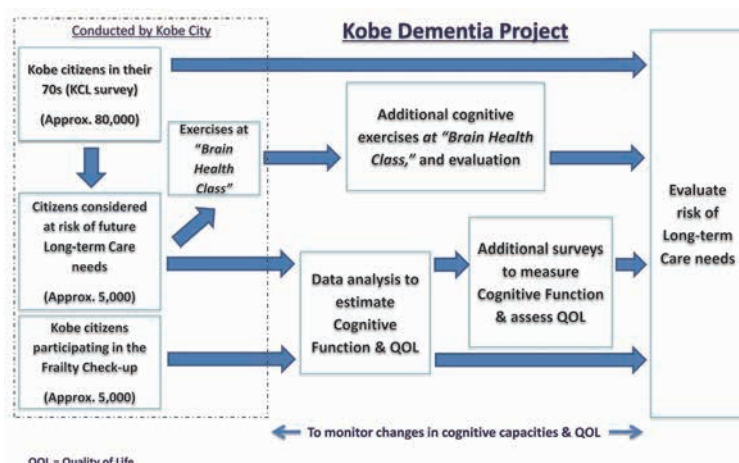
Research Team
Lead Research Institution: Kobe University
Dr. Yoji Nagai (PI): Professor & Director, Clinical & Translational Research Center, Kobe University Hospital;
Dr. Hisatomo Kowa, Professor, Graduate School of Health Sciences; and
Dr. Yasuji Yamamoto, Associate Professor, Graduate School of Medicine
Translational Research Informatics Center
Dr. Shinsuke Kojima, Medical Science Group, Division of Medical Innovation
Kobe Gakuin University:
Dr. Kiyoshi Maeda, Professor, School of Rehabilitation
WHO Kobe Centre:
Dr. Ryoma Kayano, Technical Officer

Knowledge management for healthy ageing: lessons learned from the Japan Gerontological Evaluation Study

Lead Research Institution: National Center for Geriatrics and Gerontology
Principal Investigator (PI): Dr Katsunori Kondo, Chiba University

Budget: US$90, 000
Start of project: May 2017 **First draft:** November 2017 **External review & consultation:** December 2017
**Completion of project:** May 2018

Overview

This project will identify effective strategies to produce quality scientific evidence regarding the determinants of good health among older people and how to translate such knowledge into public health policy and practice. Specifically, it will describe the tools and strategies that have been instrumental for the success of the Japan Gerontological Evaluation Study (JAGES) in advancing social epidemiological research on ageing and health, and in influencing local and national government policies to be more responsive to the needs of an ageing population. To facilitate the adaptation of these tools and strategies by other countries, this project will produce a guide that explains the JAGES research methodology and the key findings with respect to effective and equitable public health and social interventions that promote healthy ageing. The guide will also outline ways in which researchers can best engage and communicate their findings to government officials and policymakers to facilitate the integration of sound scientific evidence into policy and planning. The publication will include illustrative examples of how these processes have worked in practice.

Research Background

The JAGES is the largest longitudinal survey of community-dwelling older adults in Japan. It takes a social epidemiological approach to understand the causes of health problems and inequalities in health that occur at older age. It is especially notable for its strategic engagement with local and national governments to accelerate both the scientific research and the application of evidence to policies and programmes.

Specifically, the new project will:
1. Describe the strategies employed by JAGES to collaborate with local governments to conduct large-scale surveys of older adults.
2. Review the body of scientific evidence accumulated by JAGES and their implications for healthy ageing policies.
3. Demonstrate effective methods for communicating research evidence to policy makers and practitioners, including the development and use of the JAGES Health Equity Assessment and Response Tool, which is a data visualization tool.
4. Illustrate JAGES' impact in diverse municipalities using the case examples of Kobe (Hyogo), Matsudo (Chiba) and Taketoyo (Aichi).
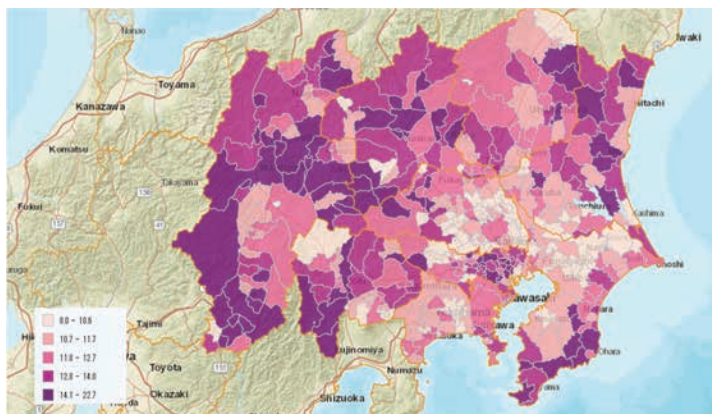
Example of a data visualization produced by the JAGES. Inequalities in the proportion (%) of older people (65 and over) who have been certified as eligible for and in need of long-term care by municipalities in the Kanto Region.
Source: http://www.doctoral.co.jp/WebAtlas/201112WebAtlas/kanto/atlas.html

Research Team
Lead Institution: National Center for Geriatrics & Gerontology (NCGG)
Katsunori Kondo (PI), Director, Gerontological Evaluation Unit, Center for Gerontology and Social Science, and Professor & Director of the Center for Preventive Medical Sciences, Graduate School of Medicine, Chiba University
Hamamatsu University School of Medicine
Toshiyuki Ojima, Professor & Chair, Department of Community Health & Preventive Medicine
University of Tokyo Graduate School of Public Health
Naoki Kondo, Associate Professor, Social Epidemiology & Public Health and Chief, Department of Health Education & Health Sociology
Tohoku University Graduate School of Dentistry
Jun Aida, Associate Professor, Department of International & Community Oral Health
Nihon Fukushi University
Masashige Saito, Associate Professor
WHO Kobe Centre
Megumi Rosenberg, Technical Officer

Goals

Leveraging the achievements and insights gained from the JAGES to guide policymaking, including:
✓ synthesizing the epidemiological research findings;
✓ developing case studies of knowledge translation to public policies;
✓ analyzing key lessons regarding effective strategies for measurement, research and knowledge translation;
✓ consulting experts to maximize relevance to an international audience; and
✓ producing evidence-based advice and guidance for wide dissemination.

Community-Based Social Innovations

Phase 1 – Multiple partners in China, India, Poland, Republic of South Africa, Thailand, Uganda, and Viet Nam
Phase 2 – RAND Europe (principal implementing partner)

Budget: US$ 610,000
Phase 1: Oct. 2014-Sept. 2015 // **Phase 2:** Nov. 2016-Dec. 2017

● Overview

Partnering with RAND Europe, this research aims to improve health and well-being among older people at a community level and to guide the development and implementation of models of community-based care and support services. New models are needed, as many countries and communities are not prepared to deliver comprehensive health/social services in support of rapidly ageing populations.

● Research Background

Community-based social innovations (CBSI) represent one group of models that seek to empower older people, their families and communities to improve self-care, maintain wellbeing and promote social cohesion and inclusiveness. Launched in 2014, this research aims to provide evidence of CBSIs that address the needs of older people in low- and middle-income countries. It is anticipated that a greater understanding of how CBSIs have been organized, how they are integrated into existing care delivery systems, and how they impact the quality of life of older people will help countries plan for sustainable universal health coverage.
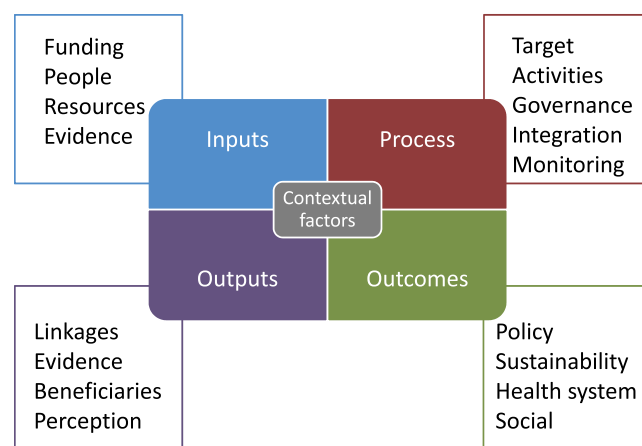
Research data from the case studies will be organized thematically to explore six domains:
1. Context of the project, including analyses of the actors, local or national champions, and background of the project inception.
2. Actors, including general stakeholders, and older people, including their role as recipient, provider, intermediary or manager.
3. Nature of services – what is provided, by whom, when and why?
4. Funding available – how does a given project find operational resources and is it sustainable?
5. Linkages with formal health and social services.
6. Outputs or outcomes that have been identified as markers of success.

● Goals

✓ The study will investigate a) health/social delivery innovations implemented in a community that emphasize active engagement of older people, b) interventions that aim to assist older persons to increase autonomy and to maintain or enhance their health and quality-of-life for as long as possible, and c) examination of the effectiveness and integration/coordination of CBSIs with the wide health care system.

✓ WHO and RAND Europe will conduct a systematic review and case studies of up to ten middle-income countries across the world. Primary data collection in the selected case studies will provide evidence about CBSIs, including how they operate, link to other health and social care services, and what benefits they bring to participants.

✓ Anticipated research results include a typology of CBSIs and policy options/briefs. The results will be used to inform country policy and planning to ensure greater sustainability and integration of services for universal health coverage.

Framework for assessing CBSIs

Funding
People
Resources
Evidence

Inputs

Process

Target
Activities
Governance
Integration
Monitoring

Contextual factors

Outputs

Outcomes

Linkages
Evidence
Beneficiaries
Perception

Policy
Sustainability
Health system
Social

Long-term Psycho-social Impact of Natural Disasters on Survivors in Japan

Lead Research Institution: National Center for Neurology and Psychiatry (NCNP)

Principal Investigator (PI): Dr Yoshiharu Kim, Director, Department of Adult Mental Health, National Institute of Mental Health, NCNP

Budget: US$ 35 000

Development of a review paper: November 2016-January 2017**; Expert consultation: February 2017; Literature review and integration of the result of the meeting:** March-June 2017**; Design of a nationwide survey:** July-August 2017**; Conduct the survey and analyse the result:** September-November 2017
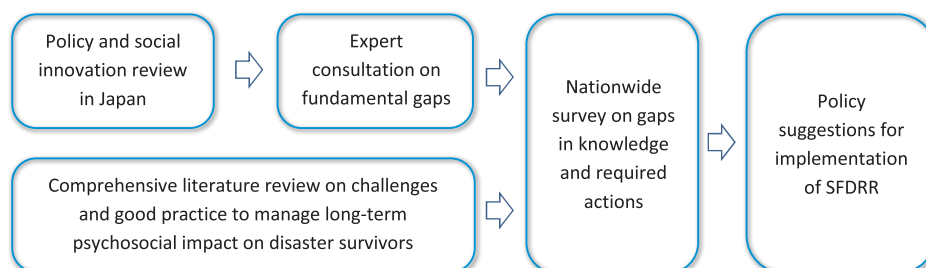
● Overview

Over the past few decades, the frequency and severity of natural disasters have exacerbated. Increasing population, unplanned urbanization, ageing of the population, and related demographic trends have contributed to this exacerbation. A resulting document from the 3rd UN World Conference for Disaster Risk Reduction, Sendai Framework for Disaster Risk Reduction 2015-2025 (SFDRR), highlights the fundamental role of health in disaster risk management (DRM) and emphasizes the need of scientific evidence in this research area. In practice, the majority of attention to DRM has focused on preparedness and response. On the other hand, the long-term psychosocial impact and needs of survivors during the recovery phase have not been well documented nor have there been studies of evidence about possible interventions.

● Research Background

In cooperation with NCNP Japan (leading institute), Hyogo Institute for Traumatic Stress and WHO Kobe Center Working Group for this project (21 Japanese experts of this research area), a comprehensive review of DRM in Japan with a focus on psycho-social interventions are to be conducted.

Research Outline

1. Develop a review paper on policy and social innovations for disaster mental health in Japan based on gaps and needs in key natural disasters: Dr Hiroshi Kato, Director of Hyogo Institute for Traumatic Stress.
2. Convene an expert consultation meeting to identify fundamental gaps in knowledge and required actions for better long-term mental health management for disaster survivors: WHO Kobe Center Working Group for this project.
3. Conduct a systematic literature review to understand global research gaps.
4. Conduct a nationwide comprehensive survey of researchers, local/national government officers and NGO and community workers to complement and strengthen the key findings of the expert consultation
5. Integrate the results of the survey into the results of the consultation meeting and literature review to develop evidence-based policy suggestions.

Policy and social innovation review in Japan → Expert consultation on fundamental gaps → Nationwide survey on gaps in knowledge and required actions → Policy suggestions for implementation of SFDRR

Comprehensive literature review on challenges and good practice to manage long-term psychosocial impact on disaster survivors →

● Goals

The project will

✓ Identify fundamental gaps in knowledge and required actions in long-term psychosocial management for disaster survivors.

✓ Contribute to evidence-based policy options for better long-term psychosocial management after disasters.

✓ Provide scientific evidence for health emergency and disaster risk management by sharing lessons and evidence from Japan.