Health Equity Assessment and Response Tool (HEART) developed by JAGES

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Contents

Health Equity Assessment and Response Tool

• Necessity of HEART
• Developing process
• Overview of JAGES HEART
  – Use case and usefulness
  – Remaining challenges
Committee on Social Determinants of Health

Recommendations of CSDH
(WHO 2008)

1. Improve Daily Living Conditions

2. Tackle the Inequitable Distribution of Power, Money, and Resources

3. Measure and Understand the Problem and Assess the Impact of Action
Background & Purpose

• Scientific evidence accumulated
  – Health Inequality by Social Determinants of Health
  – We need measurement and assessment systems which induce responses

• We developed a prototype of measurement (benchmark) system for Age Friendly Cities/Communities (AFC) policy collaborated with WHO Kobe Center (WKC).
JAPAN Gerontological Evaluation Study (JAGES)

- One of the few population-based gerontological surveys in Japan
- Focused on social determinants of health (SDH) and social environment
- Collaborated with municipalities as insurers of public long term care
- In 2010-112,000 older people across 31 municipalities responded (response rate: 66.3%)
- In 2013-138,000 older people responded. (RR: 70.3%)
- In 2016- about 200,000 in 39 municipalities responded. (RR: 70%)
Collaboration between WKC + JAGES

Urban Health Equity Assessment and Response Tool (Urban HEART)

JAGES: Japan Gerontological Evaluation Study

http://www.doctoral.sakura.ne.jp/WebAtlas/

http://www.who.int/kobe_centre/ageing/j_ages_heart/en/
Management Cycle

- Defining the problem
- Setting the agenda
- Implementing the programme
- Developing policy

Urban HEART

ASSESSMENT

RESPONSE

PROGRAMME

POLICY

MONITORING & EVALUATION
WHO Monitoring Framework & Core Indicators for AFC

**Accessible Physical Environment**
- Neighbourhood walkability
- Accessibility of public spaces and buildings
- Accessibility of public transportation vehicles
- Accessibility of public transportation stops
- Affordability of housing

**Inclusive Social Environment**
- Positive social attitude toward older people
- Engagement in volunteer activity
- Engagement in paid employment
- Engagement in socio-cultural activity
- Participation in local decision-making
- Availability of information
- Availability of health & social services
- Economic Security

**Impact on Well-being**
- Quality of life

**Equity Measures**
- Difference between two reference groups
- Difference between population average and highest attainable level of outcome
% of depression (GDS>=5)
Limited to 65-74 y.o.

One block represents rank of one municipality

% of depression: 14.9～34.5%
Participant rate of volunteer

Resources should be allocated or developed in this area

Risks & Resources are visible

4~15%
School districts with higher sports-group participation rates = lower rates of fall among aged 65–74
Can we facilitate social participation and it reduces the incidence of functional decline?

We need intervention trials
How to use the benchmark system

Visualizing status

Sharing the results
Community meeting

Setting the agenda
Poor health and difficulty of shopping are detected in area A

Developing program
Fostering volunteers

Implementing the program

Needs of shopping are simultaneously filled by mobile shop invited

Lunch club for older people living alone

M. Yamaya, et. al. 2015
Enjoyable Social Programs

Just chatting is very popular!
Various programs

Making a Short Poem → led by volunteers

Physical Exercise instructed by volunteers
### Trend of Number & rate of Participants

**Participants**

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**Volunteer**

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**Rate of Participation**

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<td>2016</td>
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**Source:** Taketoyo town
Participants Rate by Education

Health Check Up

The New Program

Educational Attainment

The program reduced inequalities in social participation
Participants keep functions

Taketoyo project, 2014

Comparison between Participants and Non-Participants in Taketoyo Project

6.3% point reduction during 5 years followed up


*Journal of Epidemiology and Community Health*

doi: 10.1136/jech-2014-205345
Incidence of dementia reduced

OR of Incidence of dementia

Taketoyo project

7 years follow up
Dementia rank ≥ 1

JAGES HEART

Using comparative statistics, it supports;
1. to make the health inequalities more easily visible
2. to support setting priorities and targets for local policies
3. to analyze possible factors relating to policy targets such as participation in sports clubs for fall prevention
4. to monitor changes in time and effects of intervention.
Conclusions

• JAGES HEART is useful to find the determinant of healthy aging communities.
  – social participation seems to be a good for prevention of fall, depression, and functional decline, etc.
  – It provides response tools tackling health inequalities.

• Remaining challenges are
  – To validate indicators
  – To collect more good practices
  – To increase number of municipalities/countries which use these kind of HEART systems