

April 18, 2013

JA-EHLEIS

Healthy Life Expectancies in Japan

Toshiyuki OJIMA, MD, DrPH

Professor of

Department of Community Health and Preventive Medicine,
Hamamatsu University School of Medicine, JAPAN

Contents

- Governmental actions about healthy life expectancies in Japan
- Selected results of the Research Group about Healthy Life Expectancy in Japan
- Preliminary results about healthy life expectancy in Japan

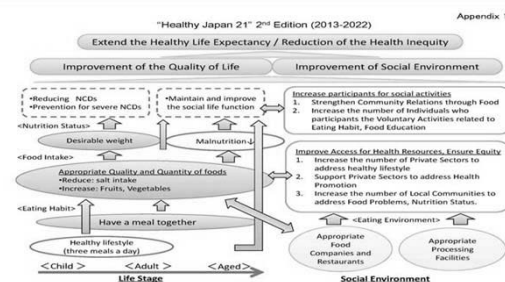
Health Japan 21 (2nd edition)

- Published as the Official Public Notice #430 of Minister of Health, Labour and Welfare Japan in July 10, 2012 according to the Health Promotion Law

Chair of the planning committee was Prof. Ichiro TSUJI in Tohoku University

<http://www.mhlw.go.jp/bunya/kenkou/kenkouinippon21.html>
(in Japanese)

Four main concepts of the Health Japan 21 (2nd edition)



Health Japan 21 (2nd ed) set 64 target indices

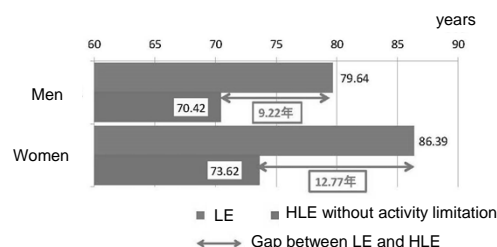
Target #1. Extend the healthy life expectancy

- More than the increase of life expectancy
- Healthy life expectancy without activity limitation from the data of the Comprehensive Survey of Living Conditions
- Healthy life expectancy by self perceived health should also be used as the supplemental indices

Target #2. Reduce the health inequity

- Measured by the gap of the healthy life expectancy between the 47 prefectures

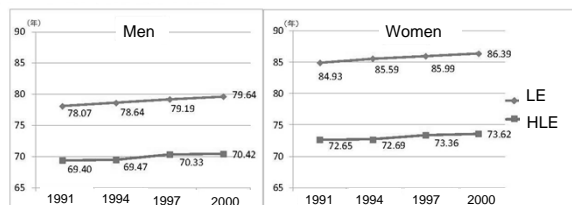
Gap between life expectancy (LE) and healthy life expectancy (HLE)



Source: LE (2000): The life table by the Ministry of Health, Labour and Welfare
HLE (2000): The Research Group about Healthy Life Expectancy

Official supplemental paper for Health Japan 21 (2nd edition)

Time trend of life expectancy (LE) and healthy life expectancy (HLE)



Source: LE (2000): The life table by the Ministry of Health, Labour and Welfare
HLE (2000): The Research Group about Healthy Life Expectancy

Official supplemental paper for Health Japan 21 (2nd edition)

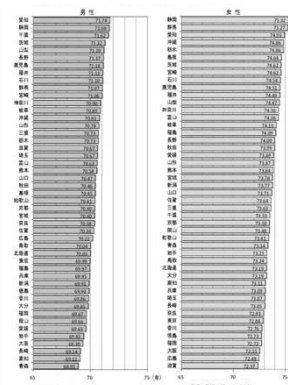
Healthy life expectancy without activity limitation by prefectures

Men:

Top
71.74 (Aichi)
Bottom
68.95 (Aomori)
Gap
2.79 years

Women:

Top
75.32 (Shizuoka)
Bottom
72.37 (Shiga)
Gap
2.95 years



Source: The Research Group about Healthy Life Expectancy

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Healthy Life Expectancies calculated by the research group

- (1) Disability free life expectancy (without activity limitation)
日常生活に制限のない期間の平均
– Used for the Health Japan 21 (2nd edition)
– Using self-administered questionnaire data
 - (2) Life expectancy with self-perceived health
自分で健康であると自覚している期間の平均
– Using self-administered questionnaire data
 - (3) Disability free life expectancy (without care need)
日常生活動作が自立している期間の平均
– Using Long-term Care Insurance Data
- * (1) and (2) are useful for national and prefectural level
(3) is especially useful for municipality level

Principal Investigator: Prof. Shuji HASHIMOTO in Fujita Health University

Question for activity limitation

Q6 Do you have any health problem which affect daily living now?

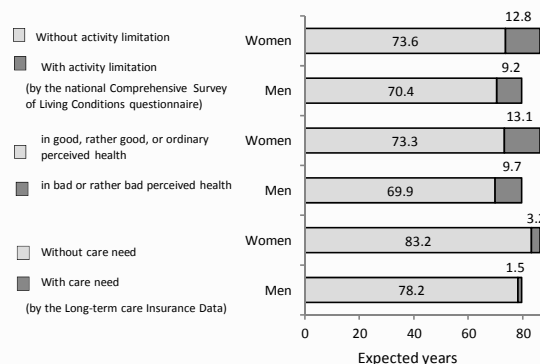
1 Yes 2 No

Q6-1 How is it affect ? Select all of applicable items.

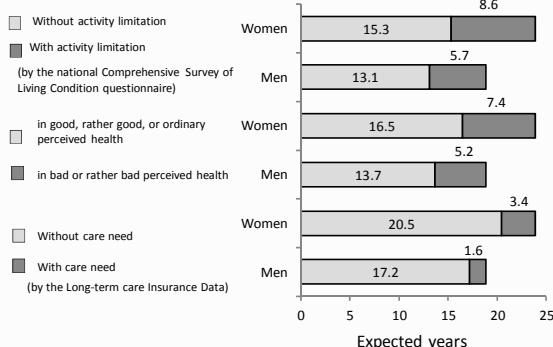
- 1 Activity of daily living
- 2 Going out
- 3 Working, housekeeping, studying
- 4 Physical activities
- 5 Others

Used in the national Comprehensive Survey of Living Conditions conducted by the Ministry of Health, Labour and Welfare of Japanese government

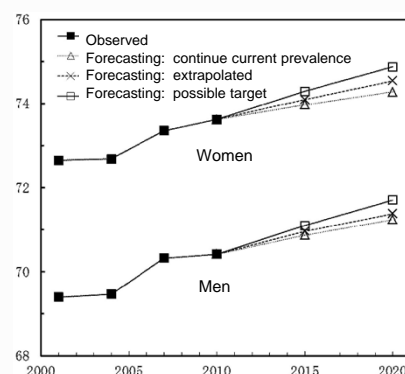
Life Expectancy at age 0 and expected years in Japan



Life Expectancy at age 65 and expected years in Japan



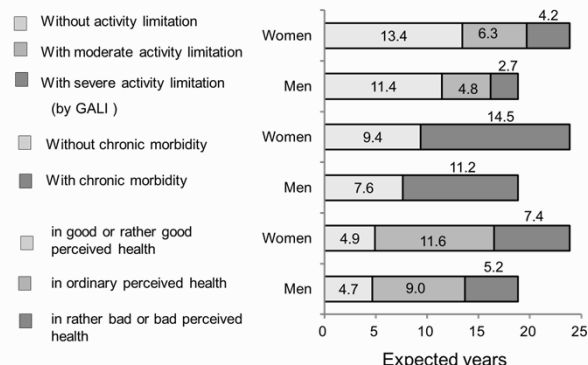
Observed data and forecasting for healthy life expectancy without activity limitation



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Estimated Life Expectancy at age 65 and expected years in Japan



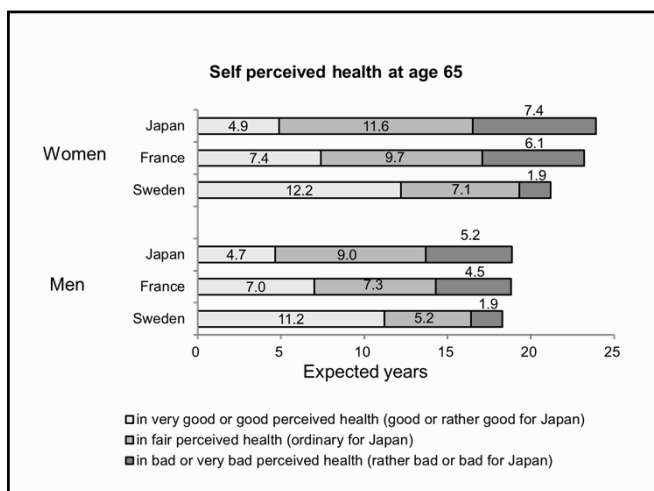
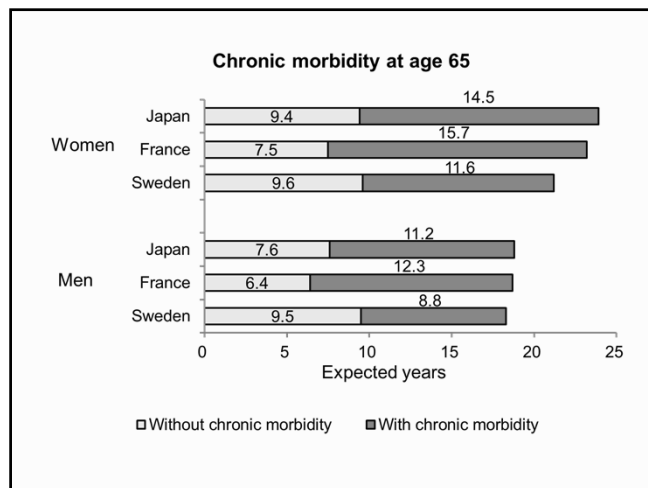
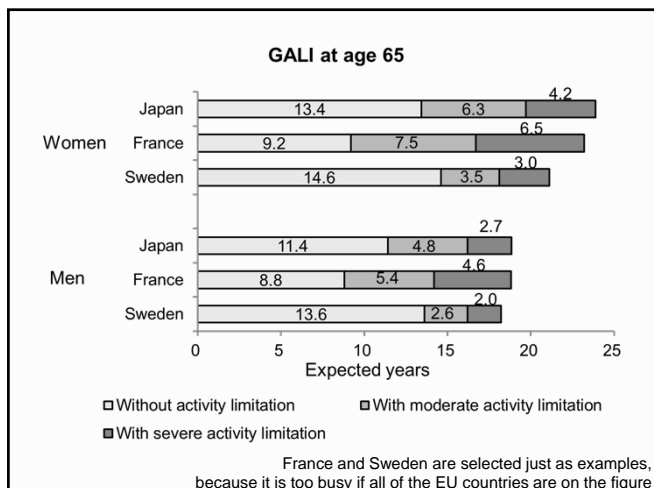
Methods of conversion

- Subjects: 2,700 randomly selected residents of 20+ years old in 6 municipalities in Shizuoka prefecture, Japan
- Self administered mail survey
- Response: 1,774 (66.0%)
- Questionnaire:
 - Activity limitation, the same as the Japanese national survey
 - Activity limitation by GALI
 - Chronic morbidity, the same as EU
 - Self perceived health, the same as the Japanese national survey
- Conversion table was made and applied to the national data
- Limitations
 - Not a nationally representative sample
 - Sample size might not be enough

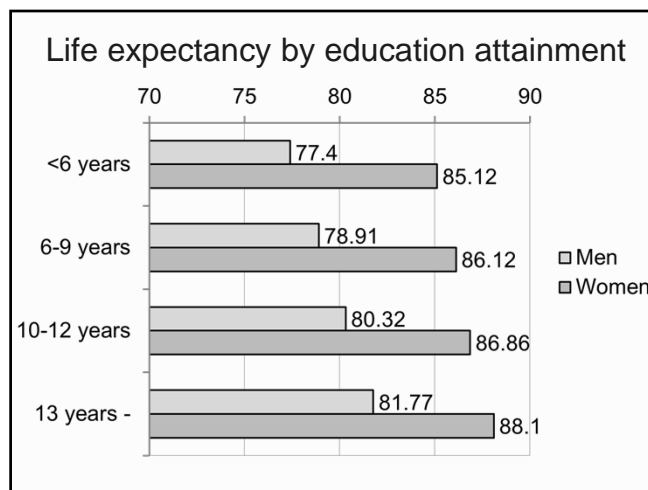
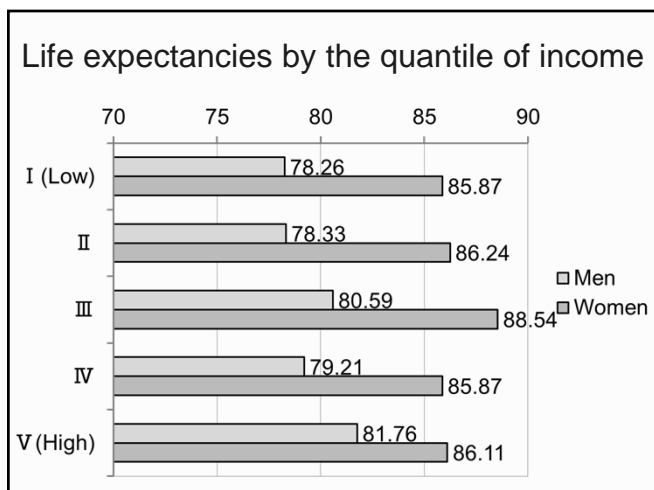
Conversion table

Activity limitation (national Comprehensive Survey of Living Conditions questionnaire)	Age group	Activity limitation (GALI)			Total
		With severe	With moderate	Without	
With	20-39	17.4%	34.8%	47.8%	100.0%
	40-64	22.2%	44.4%	33.3%	100.0%
	65-74	23.1%	50.0%	26.9%	100.0%
	75-	52.7%	35.1%	12.2%	100.0%
	Total	35.1%	39.9%	25.0%	100.0%
Without	20-39	1.2%	5.8%	93.0%	100.0%
	40-64	.7%	8.2%	91.0%	100.0%
	65-74	1.1%	13.9%	85.0%	100.0%
	75-	2.2%	25.0%	72.8%	100.0%
	Total	1.1%	10.8%	88.1%	100.0%

Results are almost same between men and women.
Conversion tables from self perceived health to chronic morbidity,
and from activity limitation to chronic morbidity are also made.



- ### Comments
- GALI of Japan is around the midpoint between France and Sweden.
 - Duration with chronic morbidity of Japan is long as France.
 - Duration with bad health of Japan is longer than France and Sweden. Majority of Japanese are with "ordinary" health.



Methods of life expectancy inequality estimation

- Subjects: 21,047 community dwelling older people in 8 municipality in Japan
- Followed up 2 - 4.5 years
- Hazard ratios were calculated by quantile of income and education attainment
- These data are from the AGES project
- Applied to the national life table in 2000

Practices to reduce health inequality and to extend the healthy life expectancy in Japan

- Community health promotion volunteers (86.8%)
 - Salon or café for older people (67.0%)
 - Following up children by public health nurses according to their household economic situation (65.5%)
 - Community bus service by public sectors (59.1%)
 - Providing healthy lunch and cooking education at elementary schools (almost 100%)
- () : proportion of active municipalities

from the preliminary results of the Research Group about Social Determinants of Health and collaborated survey

April 19, 2013
JA-EHLEIS seminar

Concept for a new Global Disability Indicator

Toshiyuki OJIMA, MD, DrPH

Professor of
Department of Community Health and Preventive Medicine,
Hamamatsu University School of Medicine, JAPAN

General comments

- Excellent working paper with comprehensive and detailed discussion
- Focusing on measuring participation of ICF is quite reasonable
- Scoring system according to the selected criterion is very useful.

Framework of health expectancies

Current set of health expectancies

1. GALI
2. Chronic morbidity
3. Perceived health

The working paper are discussing about criticism of GALI.

Problems of chronic morbidity and perceived health should also be discussed.

New framework of health expectancies

1. GALI → Change to a new indicator?
Then, we should focus on activity limitation
2. Chronic morbidity
3. Perceived health → Add a new indicator as the 4th one?
Then, focusing on participation might be meaningful challenge

Measuring participation would be important, because it is more affected by social system including interpersonal interaction and transportation than biological conditions.

Changing "chronic morbidity" to a new indicator might be another option.

Subcategories of “activities and participation” in ICF

- | | | | |
|---|---|---|---------------|
| 1. Learning and applying knowledge | } | } | Activity |
| 2. General tasks and demands | | | |
| 3. Communication | | | |
| 4. Mobility | } | } | Participation |
| 5. Self-care | | | |
| 6. Domestic life | | | |
| 7. Interpersonal interactions and relationships | } | } | |
| 8. Major life areas | | | |
| 9. Community, social and civic life | | | |

Covering all of the subcategories of “activities and participation” would be quite difficult.

If we focus on “participation”, “community, social and civic life” or “interpersonal interactions and relationships” would be useful.

Conclusion

- GALI would be a good indicator, even if it has some problems.
- If we use a new indicator instead of GALI, the new indicator should be focused on activity limitation like GALI.
- If we add a new indicator or change instead of chronic morbidity, “participation” would be a key concept.

Homeboundness

- We often assess homeboundness for older people in Japan.
- It is highly related to their health and life prognoses and a major risk factor
- It is a kind of objective behavioral measurement for participation
- Importance of going out might be sometimes questionable

Selected reference: Bruce ML, et al. Psychiatric status among the homebound elderly: an epidemiologic perspective. J Am Geriatr Soc 1992; 40(6): 561-566.

Questionnaire of homeboundness

- How often do you go out? (Going out include visiting neighbours, shopping, going to the hospital)
a. 4 times or more/week b. 2 or 3 times/week
c. once/week d. 2 or 3 times/month
e. a few times/year f. do not go out

We regard people who go out less than once/week as homebound.

Another participation indicator

- If we focus on “participation” rather than activity, how about to consider “social isolation” ?

Developing a new indicator is a really meaningful challenge

Thank you!