English Version

Health Literacy Workshop
for Health Professionals

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This workshop was based on Harvard's Health Literacy Studies workshop tools.

Rudd, RE (2010) Assessing Health Materials: Eliminating Barriers – Increasing Access.
www.hsph.harvard.edu/healthliteracy

2021/1/3

https://en.wikipedia.org/wiki/Fukushima_Daiichi_nuclear_disaster

Fukushima nuclear accident

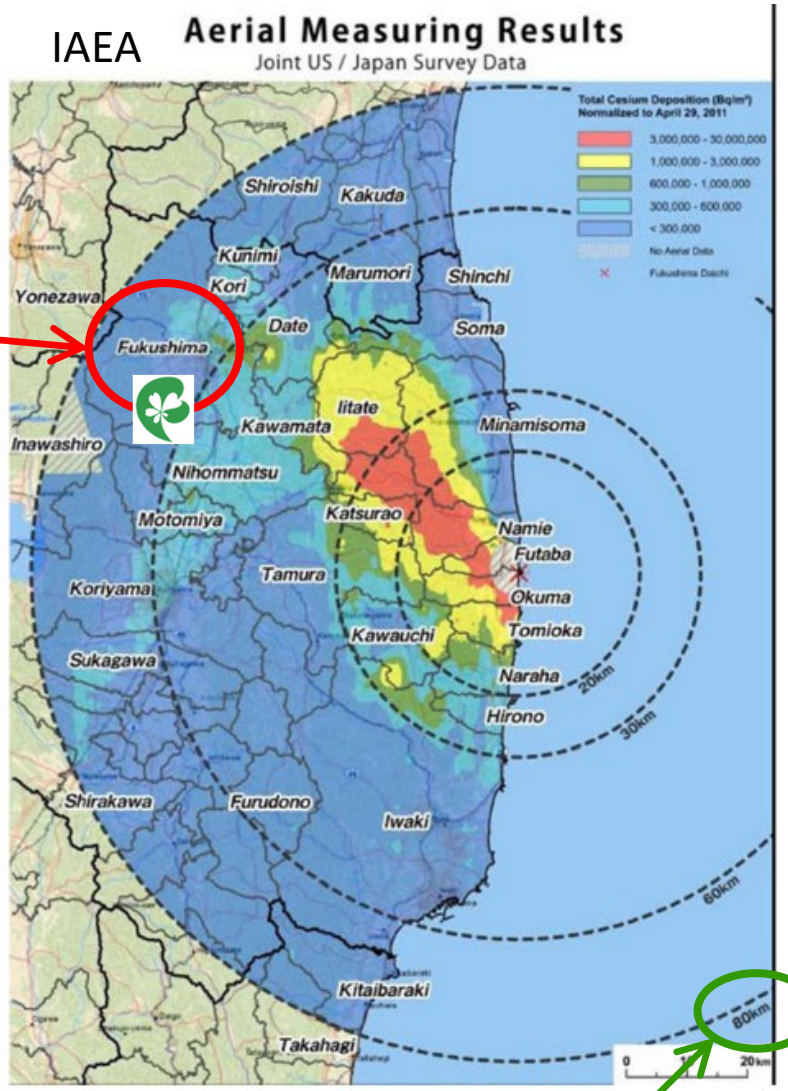
Fukushima City

15% decline in under 5-yo pop. in 2 years

Depression and decline in maternal confidence among Fukushima mothers

BMC Psychiatry. 2015; 15: 59.

J Commun Healthc. 2014; 7: 106-116.



50 miles: US Recommended Evacuation Zone

Fear of unknown health effects of radiation contamination due to confusing and often contradicting health risk messages with difficult scientific data

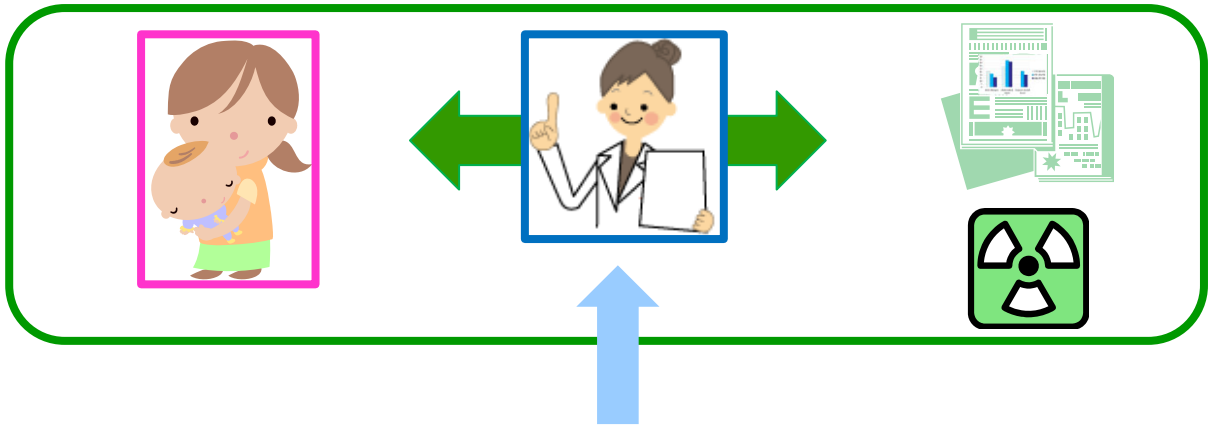
Picture: Leaflets about radiation placed in the lobby of a health center in Fukushima City.

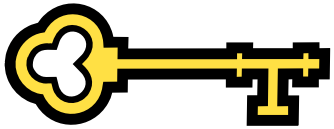
Fukushima City Child health checkup data	% of mothers with depressive symptoms	
	2012 18 Ms (N=274)	2014 42Ms (N=468)
Concerned about differences in risk perception about radiation among family members		
No	**8%**	**7%**
Yes	**20%**	**18%**

2012 p=0.02, 2014 p<0.01 (Chi-square test)
Two-item depression screen was used.

Journal of Communication in Healthcare 2014; 7: 106-116.

Community workers bridge science and community





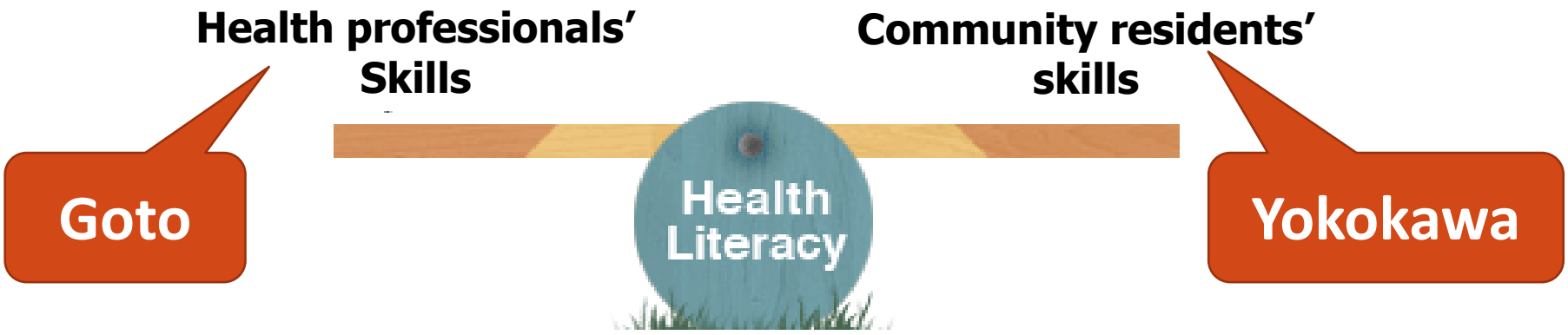
Training on Health Literacy

What is health literacy?

Health literacy

"The cognitive and social skills which determine the motivation and ability of individuals to gain access to understand and use information in ways which promote and maintain good health"

WHO, 1998



Rima E Rudd's diagram (revised)
http://www.hsph.harvard.edu/healthliteracy/overview/

Numeracy

"Health numeracy is the degree to which individuals have the capacity to access, process, interpret, communicate, and act on numerical, quantitative, graphical, biostatistical, and probabilistic health information needed to make effective health decisions."

Golbeck, 2005

Health literacy training in Japan

First session	Second session	Follow-up
• Lecture: Concept of health literacy and tools to assess written health materials • Exercise: Assessment of an assigned material.	• Lecture: Skills to improve text, graphics, and risk presentation. • Exercise: Revision of a material.	• One month application of learned skills. • Review of the application in field.

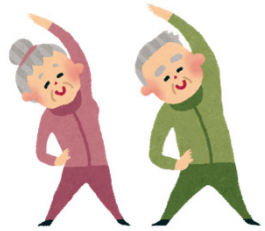
Goto A, et al. Japan Medical Association Journal. 2014; 57: 146-53. & 2015; 58: 1-9.


課題の成果発表会
1．何を評価したか
2．どのツールを使って評価したか
3．主な結果、発見

Long-term effects after training

One-year after training	Nurses (N=31)
I applied learned skills in practice.	68%
I want to attend further training.	81%

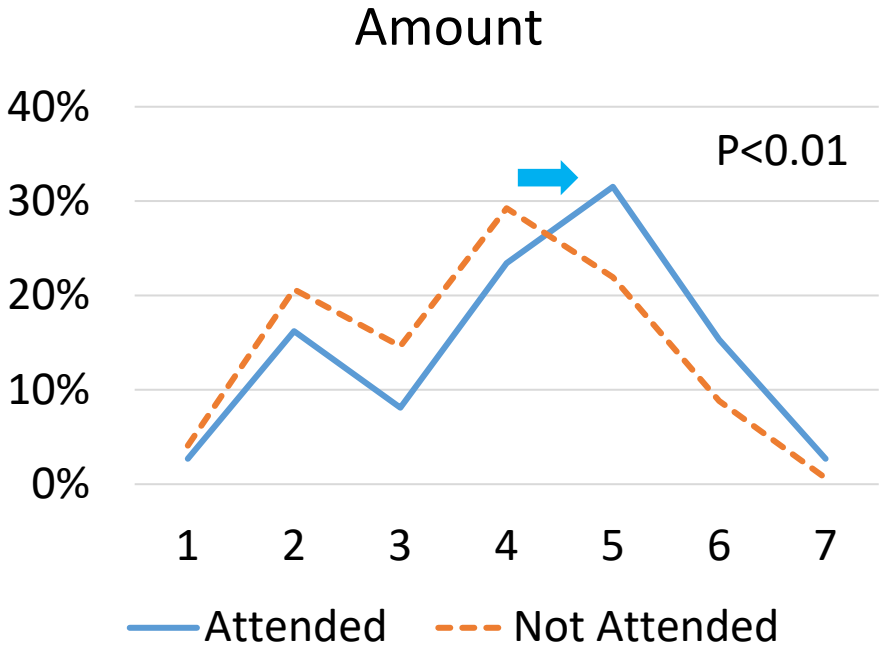
“When I gave a talk about exercise and practiced at an elderly club, I used topic sentences and SAM (assessment tool) to make a leaflet. I was able to clearly communicate my points and facilitate [the session] smoothly.” (Public health nurse)



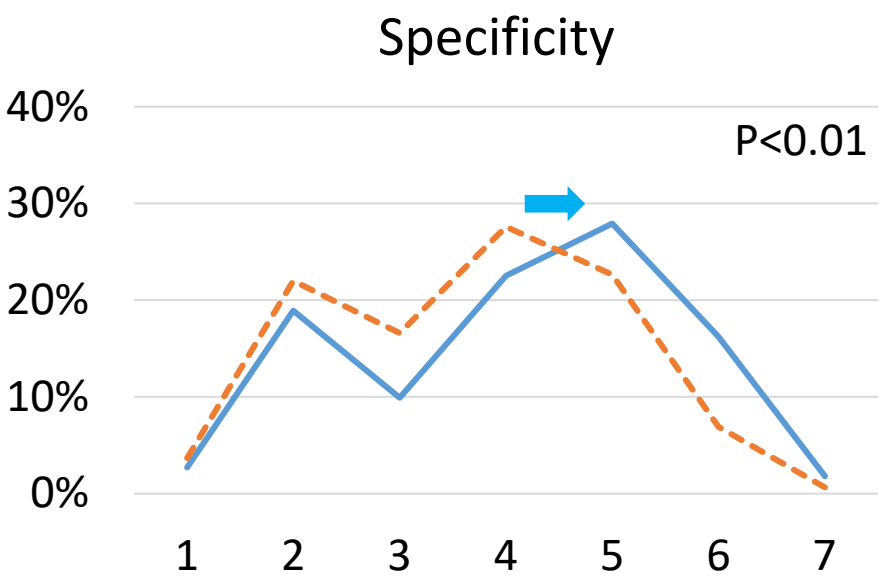
Japan Medical Association Journal. 2015; 58: 1-9.
Journal of Seizon and Life Sciences. 2017; 27: 192-207.

- From 2011 to 2017, 19% (113/582) of public health nurses in Fukushima have attended our health literacy workshop.
- Attendants showed a higher likelihood of accepting feedback from clients (← Interactive communication)

"I have received a sufficient amount of feedback from clients."



"I have received specific feedback from clients."

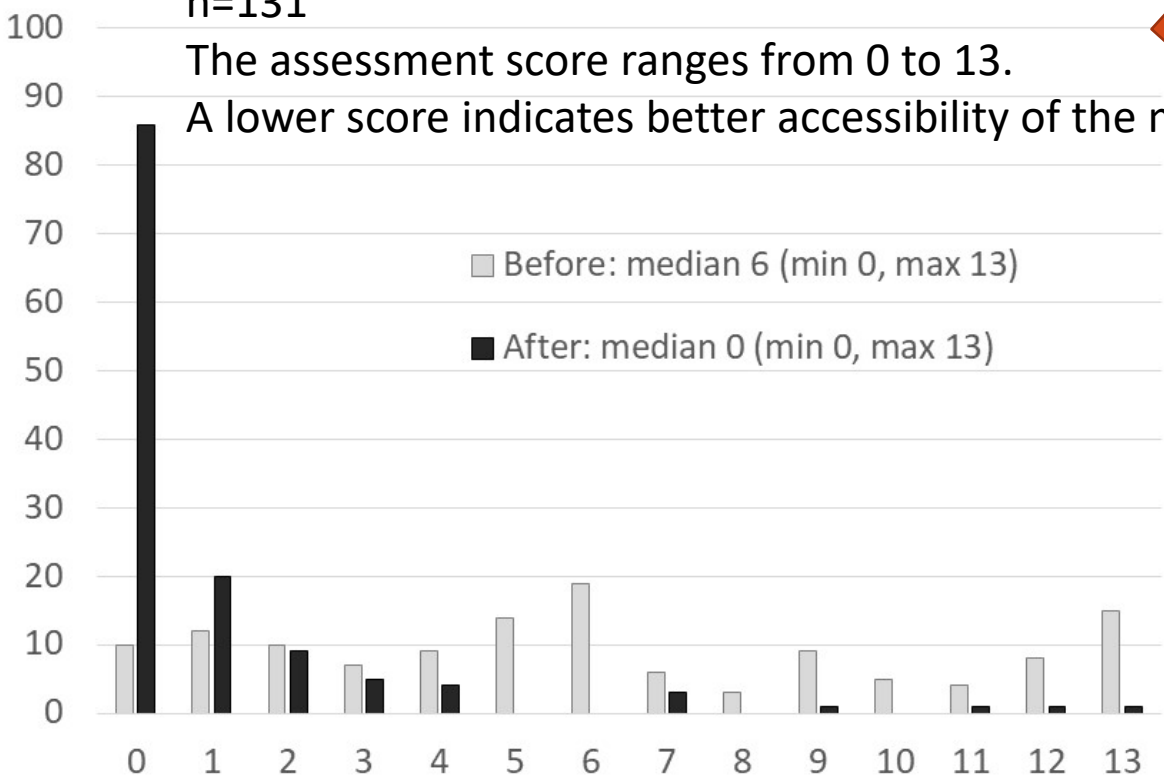


Answer options: 1 "strongly disagree" → 7 "strongly agree"

Health Communication. 2020; 35: 1274-1282.

Attendants revised their leaflets.
Asked their clients to assess their leaflets.

n=131
The assessment score ranges from 0 to 13.
A lower score indicates better accessibility of the material.



- The elderly and those who were not familiar with medical services benefited more.

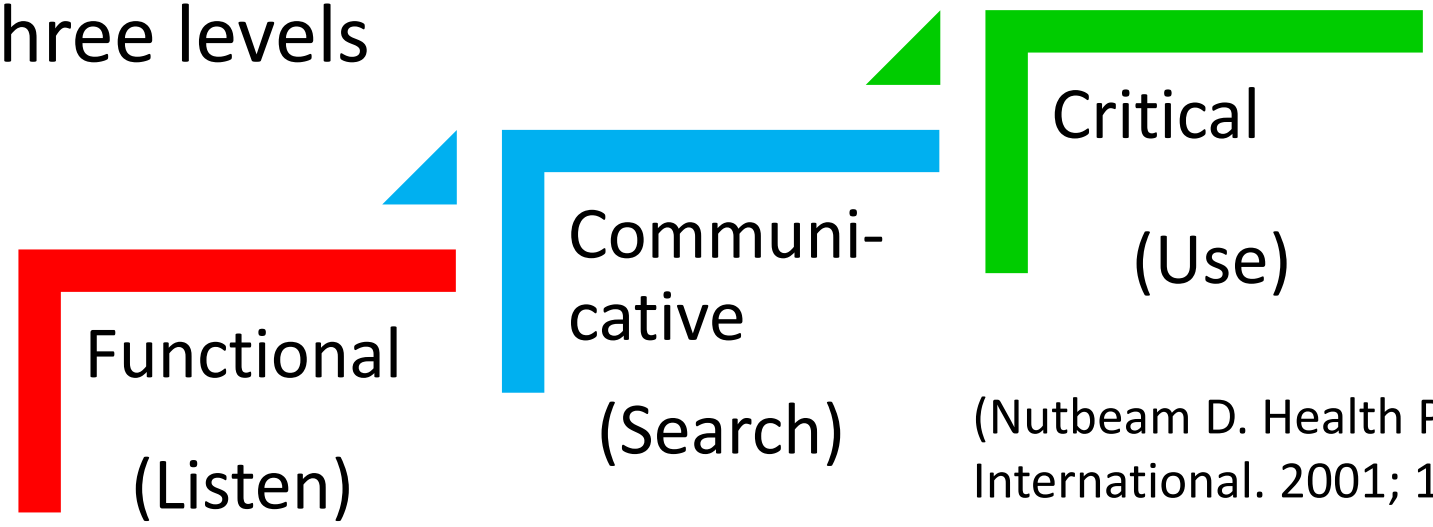
Presented at the ICRP International Conference on Recovery After Nuclear Accidents. 2020. Fukushima.

Health literacy mini-workshop

Yokokawa

Health literacy level of your patients

- Three levels



(Nutbeam D. Health Promotion International. 2001; 15: 259-67.)

- Universal precaution

‘‘How confident are you in filling out forms (at hospitals/clinics) by yourself?’’ N=1040, mean age 57 yo

15% in total (10% among university graduates) are not confident.

(Tokuda H, et al. Patient Educ Couns. 2009;75(3):411-7.)

Assessing accessibility

- **Overall assessment of written materials**
  - ✓CDC's CCI (← text, numbers, and risks)
    https://www.cdc.gov/ccindex/index.html
  - ✓ SAM (← layout)
    aspiruslibrary.org/literacy/SAM.pdf
  - ✓ Marker method
    Ask readers to mark difficult parts that <u>others</u> can not understand.

Improving accessibility

- **Text**
  - ✓ Lowering grade level

    Grade 5-8
  - ✓ Usage of topic sentences

    Main message should be on the top
  - ✓ Paraphrasing professional terms by using plain language

    e.g. Exercise can help lower your LDL (“bad”) cholesterol and increase your HDL (“good”) cholesterol.

- **Numbers**

Be aware that tables, graphs, and the concept of risk are difficult for patients to udnerstand.

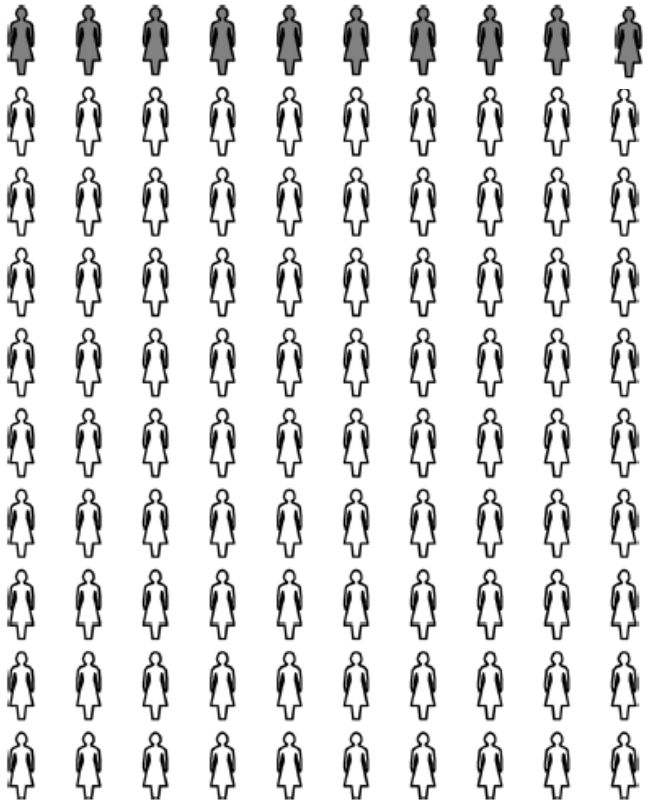
1. Reading numbers, counting, telling time
2. Arithmetic operations
3. Estimation of size, trend
4. Frequency
5. Percentage
6. Mathematical concepts to be applied
7. Reading tables
8. Reading graphs
9. Reading maps
10. Estimation of error, uncertainty, variability
11. Relative versus absolute
12. Risk (cumulative, relative, conditional)

Apter AJ, et al. J Gen Intern Med. 2008;23:2117-24.

- **Illustrations**
  - ✓ Match text and illustrations
  - ✓ Show the whole context relevant to readers

Houts PS, et al. Patients Education and Counseling. 2006; 61: 173-190.

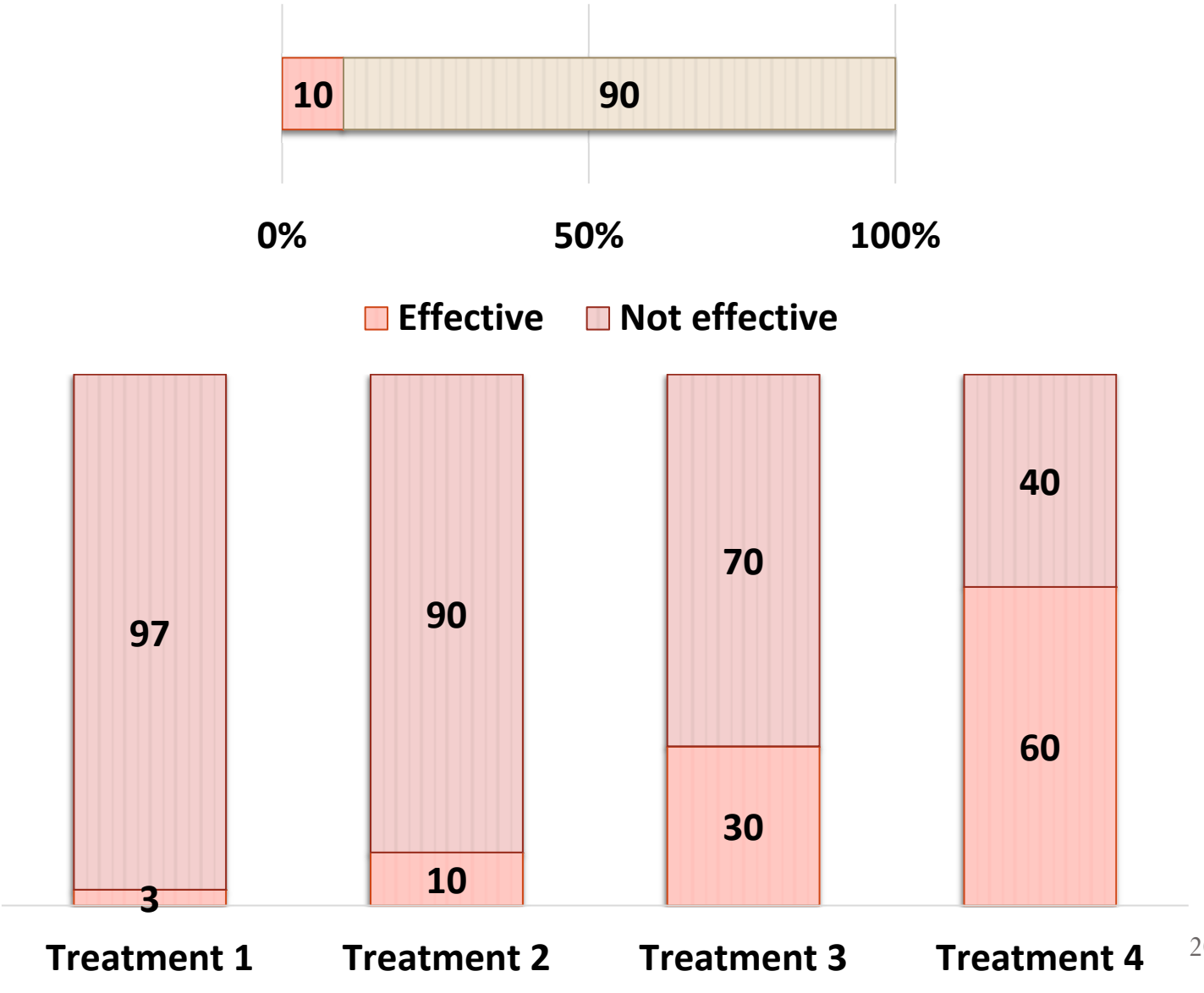
- **Graphs**
  - ✓ Pictogram e.g. 10%



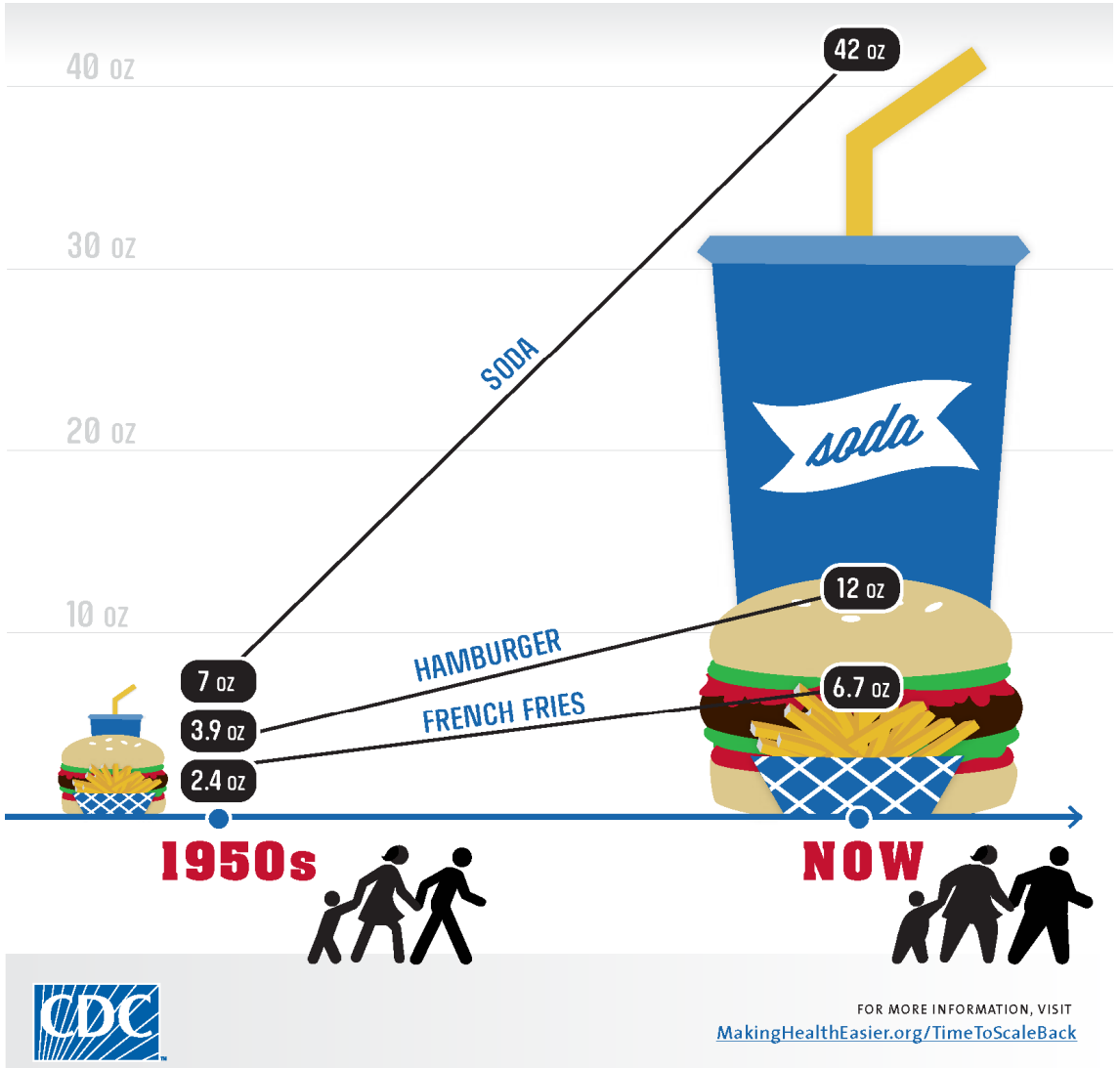
Free pictogram source
http://pictogram2.com/?lang=en

Schapira MM et al. Journal of Health Communication 2006;11:569–582.

✓ Comparison increases credibility



✓ Infographics



http://www.cdc.gov/socialmedia/tools/infographics.html

- **Showing risks**
  - ✓ "Thyroid cancer will strike about 7.7 out of 1000 baby girls."
  - ✓ "7.7 out of 1000 baby girls become thyroid cancer in their lifetime." (lifetime=89 yrs)
  - ✓ "Chances of baby girls to become cancers in their life time are…"

Low numeracy level, but info. not sufficient

Specify time and outcome

Compare

All	Breast	Thyroid
290	55	7.7

Woloshin S, et al. Know your chances. University of California Press. 2008.

Relative + absolute risk

All	Breast	Thyroid	Increase due to Fukushima accident
290	55	7.7	1.8

Media “23% increase!” (←1.8/7.7)

while the actual increase is 1.8 per 1000 baby girls during lifetime

Relative risk needs to be carefully explained with absolute risk.

*Data from WHO’s earliest report: Health risk assessment for the nuclear accident after the 2011 Great East Japan Earthquake and Tsunami.

Woloshin S, et al. Know your chances. University of California Press. 2008.

Risk vs Benefit for the person

✓Framing risks

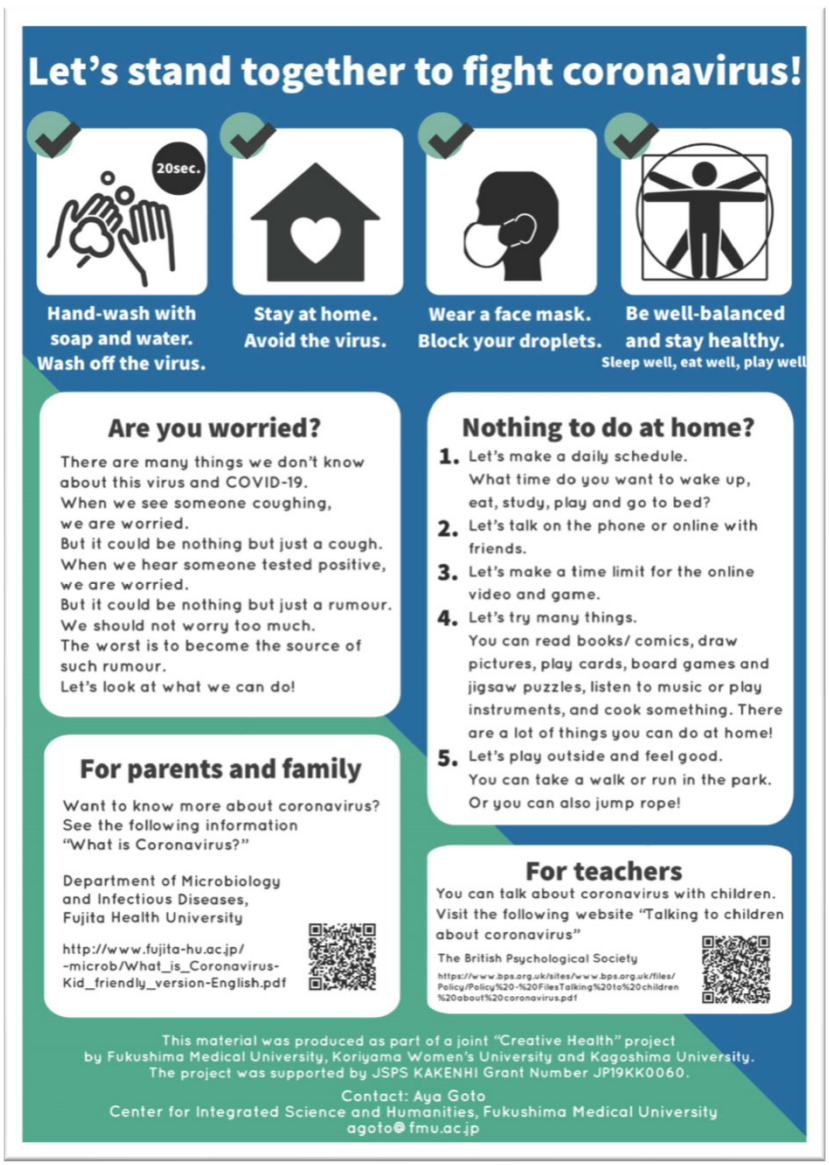
"After taking this treatment, 80% can go back home within three days."

"After taking this treatment, 20% cannot go back home within three days."

Need to know about your patients by listening to their voices.

Woloshin S, et al. Know your chances. University of California Press. 2008.

Poster for pregnant women (Tanzania) and Leaflet for children (Japan)



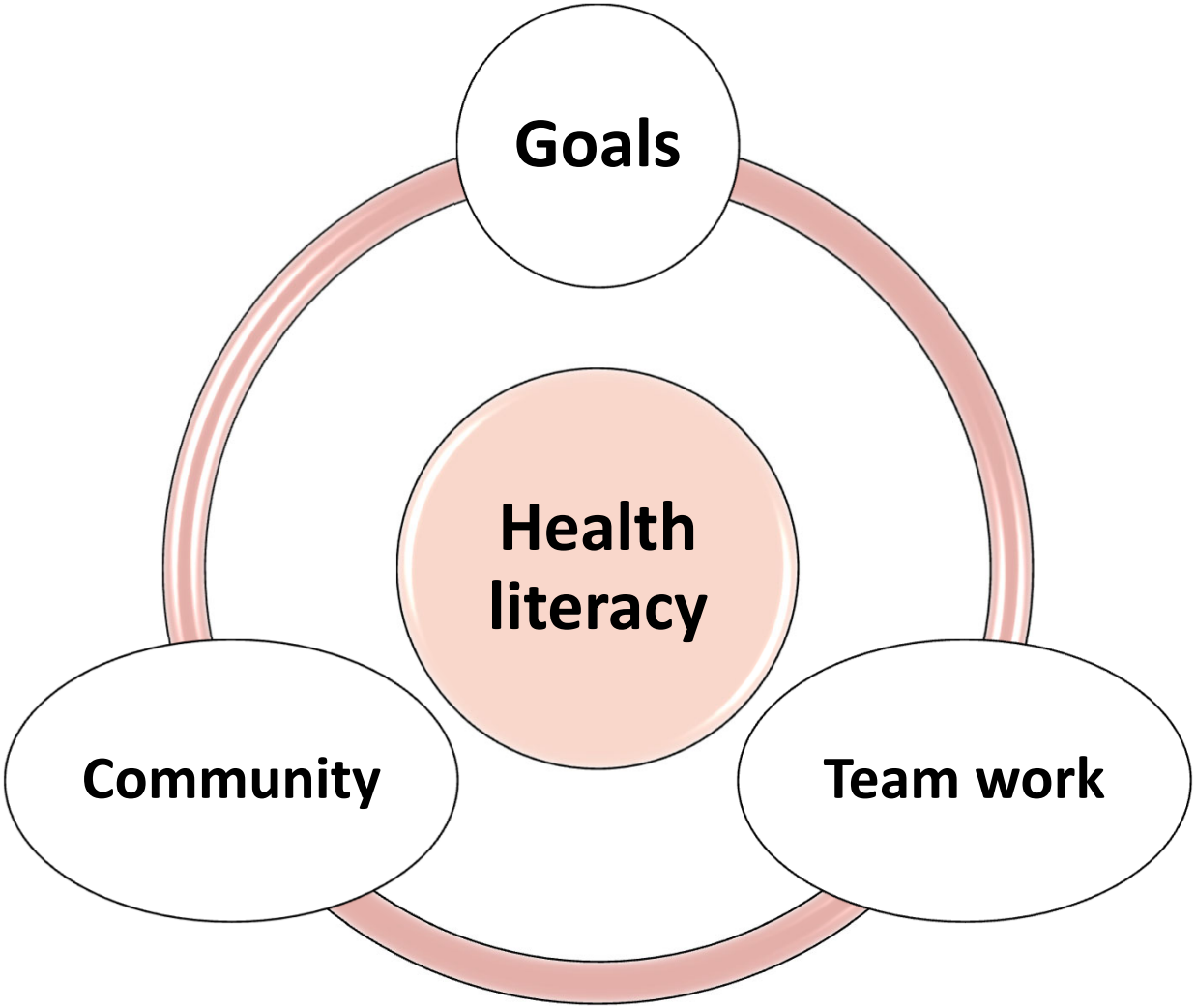
Frontiers in Communication. 2020; 5: 603656.
https://doi.org/10.3389/fcomm.2020.603656

Exercise questions

1. Which health literacy techniques do they use?
2. What are similarities?
3. What are differences?
4. How do you make a leaflet like these?

Frontiers in Communication. 2020; 5: 603656.
https://doi.org/10.3389/fcomm.2020.603656

Health literacy and health system



Goto A. Thinking, talking, and working with professional community workers after the Fukushima nuclear accident. Ann ICRP. 2016.