

# ***Social Abuse caused by Structural Violence***

## ***Scientific Proofs of Mental Health Impact of the Fukushima Nuclear Disaster***

Takuya TSUJIUCHI, MD, PhD

- Professor, Faculty of Human Sciences, Waseda University
- Director, Waseda Institute of Medical Anthropology on Disaster Reconstruction



Photo ©T.TSUJIUCHI



# INTRODUCTION

## Explosion of Nuclear Power Plant & Evacuation



March 12th, 2011 | Explosion of Unit No.1 in Plant. I



March 14<sup>th</sup>, 2011 | Explosion of Unit No.3 in Plant I

# Large Scale Written Survey

from Medical Anthropology and Human Sciences Perspective

Qualitative and Quantitative Research

Collaborator : Shinsai-Shien Network Saitama(SSN)

NHK (Sendai, Fukushima) Japan Broadcasting Co.





## IMPACT OF EVENTS SCALE-Revised (IES-R)

INSTRUCTIONS: Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to \_\_\_\_\_

\_\_\_\_\_ (event)  
that occurred on \_\_\_\_\_ (date). How much have you been distressed or bothered by these difficulties?

	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Any reminder brought back feelings about it	0	1	2	3	4
2. I had trouble staying asleep	0	1	2	3	4
3. Other things kept making me think about it.	0	1	2	3	4
4. I felt irritable and angry	0	1	2	3	4
5. I avoided letting myself get upset when I thought about it or was reminded of it	0	1	2	3	4
6. I thought about it when I didn't mean to	0	1	2	3	4
7. I felt as if it hadn't happened or wasn't real.	0	1	2	3	4
8. I stayed away from reminders of it.	0	1	2	3	4
9. Pictures about it popped into my mind.	0	1	2	3	4
10. I was jumpy and easily startled.	0	1	2	3	4
11. I tried not to think about it.	0	1	2	3	4

12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	1	2	3	4
13. My feelings about it were kind of numb.	0	1	2	3	4
14. I found myself acting or feeling like I was back at that time.	0	1	2	3	4
15. I had trouble falling asleep.	0	1	2	3	4
16. I had waves of strong feelings about it.	0	1	2	3	4
17. I tried to remove it from my memory.	0	1	2	3	4
18. I had trouble concentrating.	0	1	2	3	4
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.	0	1	2	3	4
20. I had dreams about it.	0	1	2	3	4
21. I felt watchful and on-guard.	0	1	2	3	4
22. I tried not to talk about it.	0	1	2	3	4

# Table I. Four-year Trend in Stress Levels

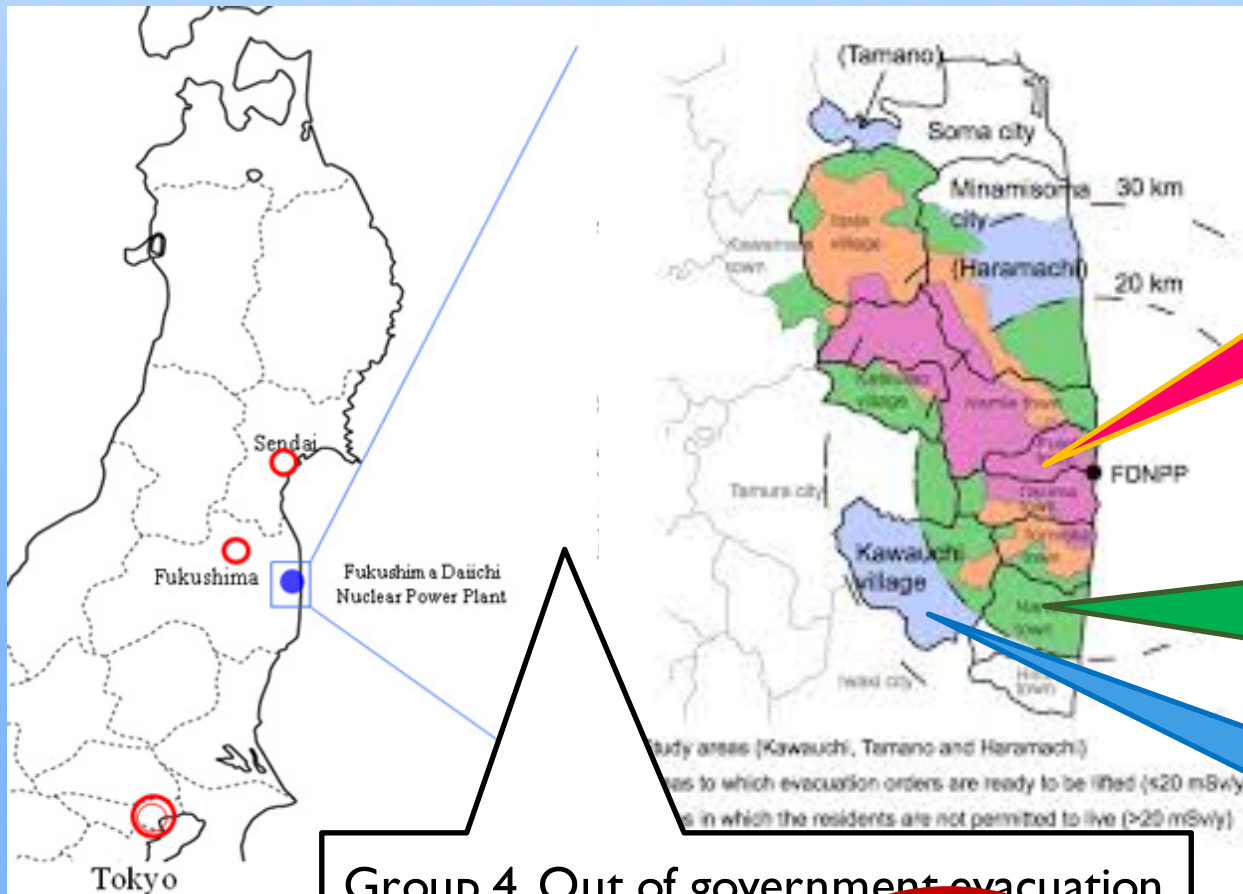
(Tsujiuchi, 2015)

Date of survey	March 2012	February 2013	March 2013	March 2014	Feb-March 2015
Evacuation prefecture	Saitama	Fukushima	Saitama, Tokyo	Saitama, Tokyo	All
Collaborator	SSN	NHK	SSN	SSN	NHK
Sample size	2,011	2,425	4,268	3,599	16,686
Collecting size	490	745	530	761	2,862 (448)
Response rate	24.4%	30.7%	12.4%	23.9%	17.2%
IES-R Mean	36.31	34.20	31.93	31.07	25.86
<b>Probable PTSD</b>	<b>67.3%</b>	<b>64.6%</b>	<b>59.6%</b>	<b>57.7%</b>	<b>52.5%</b>





# Figure 1. Reorganization of the Evacuation Area and Probable PTSD (2015)



Group 1. Areas that the residents have difficulties in returning for a long time  
Probable PTSD = 52.5%

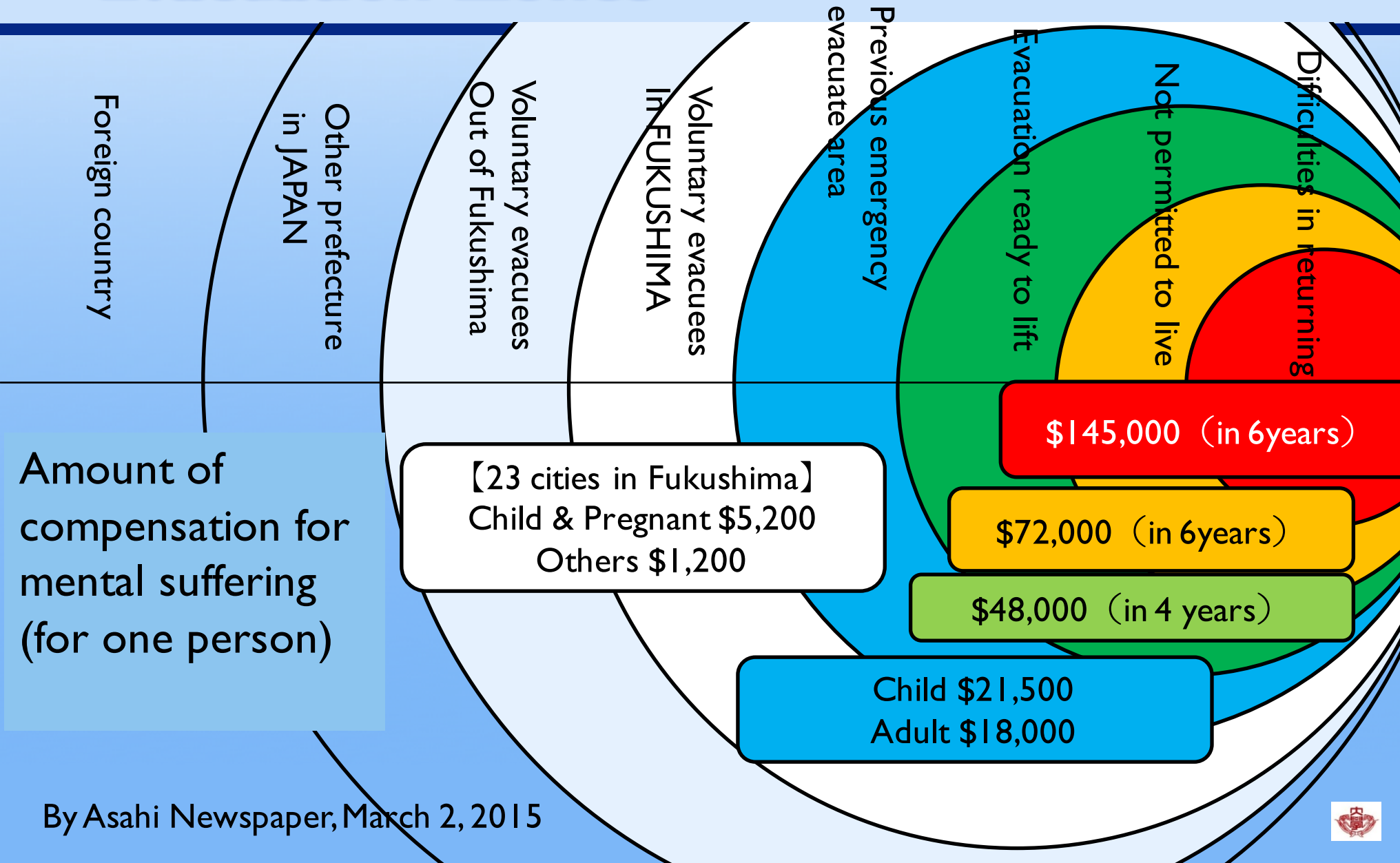
Group 2. Areas to which evacuation orders are ready to be lifted  
Probable PTSD = 40.2%

Group 4. Out of government evacuation order “voluntary evacuees”  
Probable PTSD = 43.3%

Group 3. Previous emergency evacuation area  
Probable PTSD = 31.0%



# Disparities in Compensation among Evacuation Zones





# Regional Community Divided by a Road

Security Camera



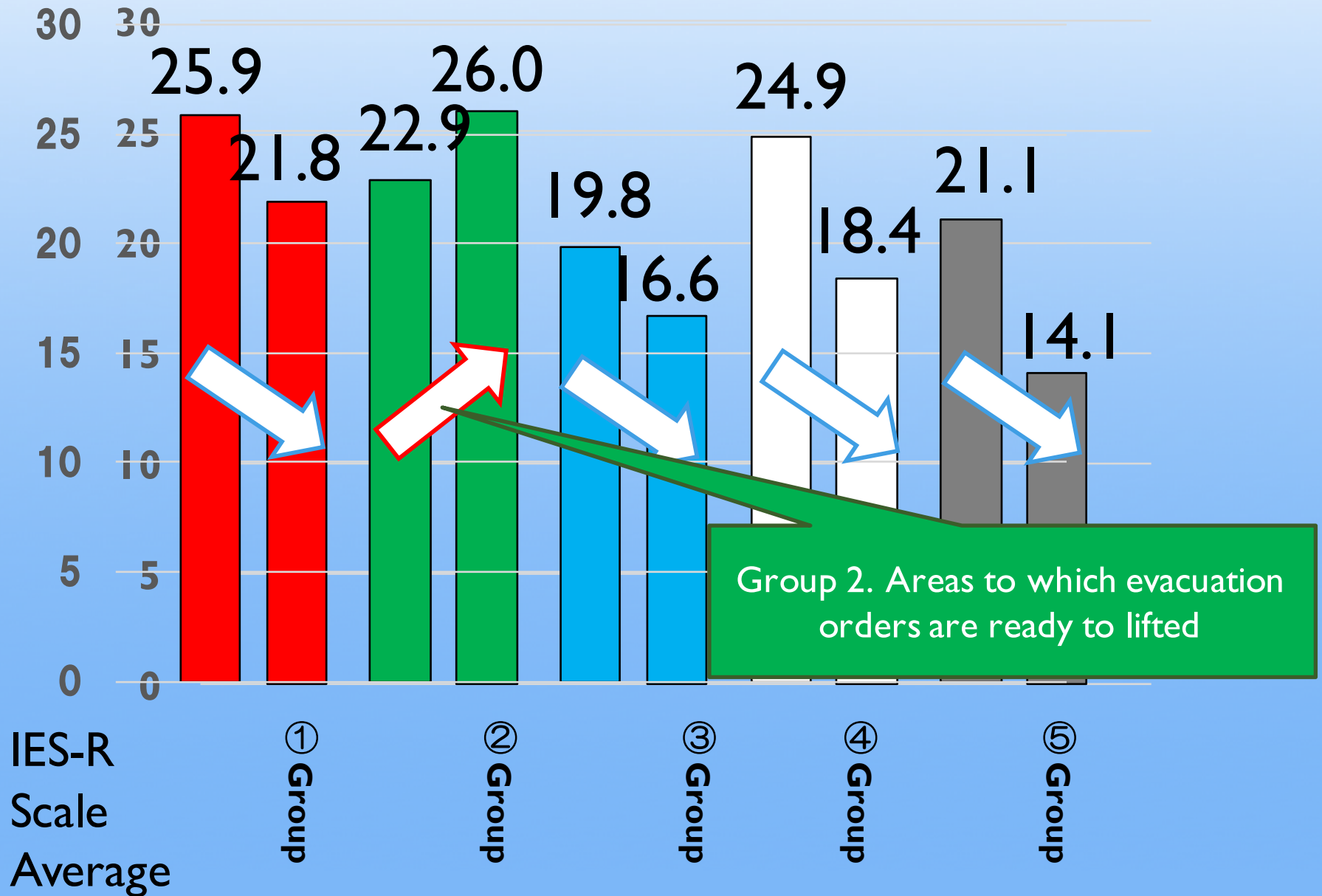
**“DETOUR”**  
**Restricted area from this point.**  
**—Road Closed—**



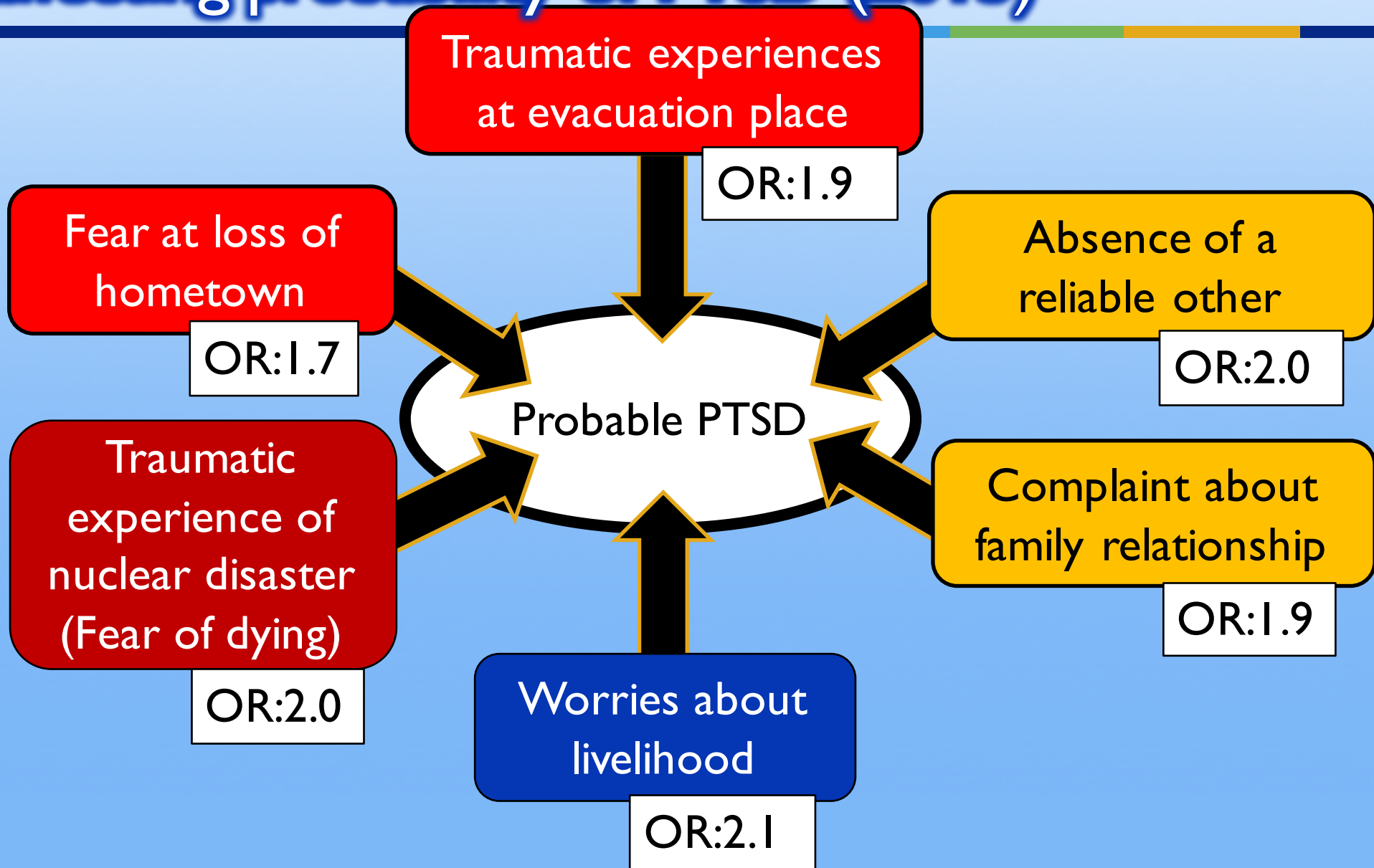
Photo ©T.TSUJUCHI



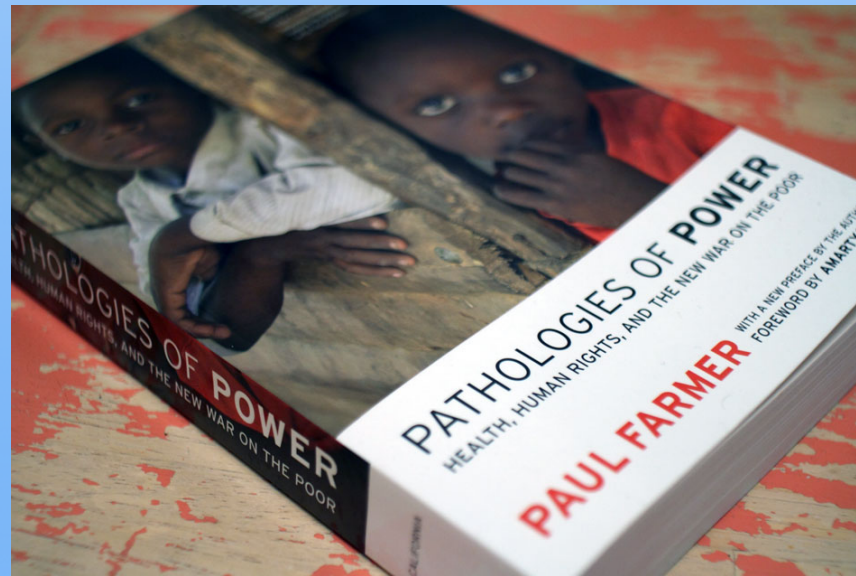
# Trends of Stress Level (2015⇒2016)



# Psychological, social and economic factors affecting probability of PTSD (2015)



# “Structural Violence”



**Paul Farmer: *Pathologies of Power*, 2005**

# “Structural Violence”

- A term proposed by **Johan Galtung** in “Violence, Peace, and Peace Research” (1969).
- Structural violence refers to a form of violence wherein some social structure or social institution may harm people by preventing them from meeting their basic needs.
- Medical Anthropologist **Dr. Paul Farmer** (2003, 2011), analyzes in detail the abuse and structural violence found in poverty and health inequality in Haiti.



# Substructure of the “Structural violence”



## Nuclear Disaster

- ① Postwar economic policies promoting the development of nuclear generation of electricity
- ② The inequity of wealth distribution generated by preferential economic measures for big corporations
- ③ The structural geopolitical exploitation of antagonism between “central” and “country-side”
- ④ The structure of social disparity based on the competition lead by neo-liberalism
- ⑤ The rejection of social responsibility by the self-responsibility theory of medical and social services
- ⑥ The postwar use of National Security as a justification for the peaceful use of nuclear energy

# Case 1 (forced evacuee)

- **67 y.o. female, evacuated from Futaba Town, Futaba County, Fukushima Prefecture to Saitama Prefecture Soka City living in a small apartment with her 90 y.o father and 85 y.o.mother.**
- **She herself needing elderly care is compelled to provide her parents' elderly nursing care.**
- **Her father sits all day at the kotatsu (a Japanese low covered table with a heat source) and her mother after sweeping in the early morning sleeps underneath it.**





- ▣ **“No one is expected to come, there is no place to go, and we just eat three times a day and sleep. There is nothing to do”.**
- ▣ **“Actually this condition is as distressing as dying. We understand the feelings of those who committed suicide. But dying is easy. Those being released of pain by death may go in peace, yet for those who remain not having a clear future and without the possibility of dying there is only pain. Therefore it is better to live and share the adversity together. However the truth is, it is as hard as dying”.**



- **“We can’t go back. My parents are 90 and 85y.o., and in their conditions, they can’t go back. I feel awful, we don’t have any settlement, we are condemned to wait for death without any hope. Our actual savings don’t allow us to buy land.”**
- **“My husband worked for TEPCO, that is why we don’t like to point out bad things. I have heard those who move to Iwaki have built fine houses, yet they are not-well considered by local people. Those were originally rich people that quickly settled down in Iwaki. Common people like us can’t do the same. Therefore, our future is uncertain.”**



# Case 2 (voluntary evacuee)

- **36y.o. male evacuated from Koriyama city Fukushima Prefecture to Aomori City, Aomori Prefecture. He is a so-called “voluntary evacuee”.**
- **The following quotation is his account on the suffering of one of his relatives who committed suicide after getting divorced.**



- ▣ **“It is tough, some days I feel down, some others irritated”**
- ▣ **“I understand very well the feelings of those who committed suicide. I haave come close to it myself. My cousin committed suicide one year and a few months ago. Like me, he became an evacuee because of the nuclear accident, later he divorced and in the end committed suicide. His memorial photo reminds me myself, we had no choice. Even now I hate TEPCO. TEPCO has committed manslaughter.”**



**■ To the reinforced propaganda of the central government and Fukushima Prefecture about safety and security in spite of the emergence of contamination levels of radiation that preclude safely raising children, he wrote “Repeatedly they speak of safety and security, yet until those improved safety conditions are reached their talk is meaningless. I want to go back to a safe hometown”.**



- ▣ **“By any means we must go back to the state before the nuclear accident. Therefore at least, we expect responsibility to be taken and compensation provided. Japan`s constitution assures preeminent respect for the human person rather than companies or the state. Nonetheless, Japan is protecting TEPCO and the country above the human person. It is a deplorable situation; I am worried about the future of such a Japan”.**



# Case 3 (mother-children evacuee)

- **37y.o. female, evacuated from Futaba Town, Futaba County, Fukushima Prefecture to Iwaki City in the same Fukushima Prefecture.**
- **She got divorced just before the disaster and became an evacuee with her two kids.**
- **Due to the intense psychological pressure she had suicidal thoughts. Several times she thought to go back to their hometown of Futaba and commit suicide.**



- ▣ **“I would like to die. I would like to be killed. There is no sense of living in my life, rather I am thinking of organ donation. In any case I would like to disappear”.**
- ▣ **“I understand the feelings of longing for suicide. I myself have thought of going back to Futaba and committing suicide... then my children’s faces appear to me. I can’t do it... next year my elder daughter will be a sophomore....it is enough, please allow me to die”**





- ▣ **“I got divorced one month before the disaster. Instead of the monetary support for raising our children I remained living at the house which was still in his name, because of loan payment still going on, and he would take care of the home loan repayments. He promised after loan payment would be complete he would change the title deeds to our son. But after he got the monetary compensation I have not heard from him, he is evading me.**
- ▣ **I told this to TEPCO, to the lawyer, they said that sometimes this happens...I wish they would do something about it.”**



- ▣ **“Moreover I dislike the word “evacuee.” It is easy to get harassed. I came here (Iwaki City), and worked part-time at night at Family Mart, so I could look after my children during the day-time. I do receive some compensation money.”**
- ▣ **“Though I am living in this way, people say ‘Treat me to dinner!’ ‘You are getting rich!’ I got this kind of verbal harassment at work, uncountable foolish words, therefore I quit. Because I became afraid to work, I can’t work”.**



# Conclusion I

- The analysis of the circumstances of the victims of the nuclear accident lead us read between lines a **“Social abuse by structural violence”**.
- Social abuse is immersed in the political, economic, social and cultural structure and emerges as social inequity, unequal social opportunities, disparity and discrimination.
- The structural violence of the nuclear disaster uprooted and deprived people of “life, living and environment” – a dislocation made worse by the policies of “Return” and “Compensation”.



# Conclusion 2

- ▣ Also by the traumatic experiences at the living evacuation places, hiding their evacuee status, the victims are hindered from integrating social activities getting into neglect, isolation and social exclusion. Indeed this state can be called **”Social abuse”**.
- ▣ Leaving unattended this kind of psychological, social, economical state is a contradiction to social justice that demands legal assistance.



# References

- Tsujiuchi T, Yamaguchi M, Masuda K, Tsuchida M, Inomata T, Kumano H, Kikuchi Y, Augusterfer EF, Mollica RF:  
**High prevalence of post-traumatic stress symptoms in relation to social factors in affected population one year after the Fukushima nuclear disaster.** *PLoS ONE* 11(3): e0151807.  
doi:10.1371/journal.pone.0151807, 2016
- Tsujiuchi T, Komaki K, Iwagaki T, Masuda K, Yamaguchi M, Fukuda Cm, Ishikawa N, Mochida R, Kojima T, Negayama K, Ogihara Am Kumano H:  
**High-Level Post-traumatic Stress Symptoms of the Residents in Fukushima Temporary Housing: Bio-psycho-social Impacts by Nuclear Power Plant Disaster.** *Japanese Journal of Psychosomatic Medicine* 56(7), pp723-736, 2016
- Yamaguchi M, Tsujiuchi T, Masuda K, Iwagaki T, Ishikawa N, Fukuda C, Hirata S, Inomata T, Negayama K, Kojima T, Ogihara A, Kumano H:  
**Social Factors Affecting Psychological Stress of the Evacuees Out of Fukushima Prefecture by the Cause of Nuclear Accident after the Great East Japan Earthquake: Suggestion from Longitudinal Questionnaire Survey.** *Japanese Journal of Psychosomatic Medicine* 56(8), pp819-832, 2016

***Thank you for kindly listening to  
my presentation.***

Waseda Institute  
of Medical Anthropology  
on  
Disaster Reconstruction



早稲田大学  
災害復興医療人類学研究所