## The Construction of Optimal Compassion Fatigue Model Based on the Preliminary Findings of Two Studies of Professionals Exposed to Secondary Trauma

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#### **Abstract**

The purpose of this article is to construct the Optimal Compassion Fatigue Model based on the preliminary findings of two studies of professionals exposed or exposed-suspect to secondary trauma.

At first, the author reviewed the research of Fujioka (2011b, in Japanese) for investigating the relationship between Compassion Fatigue and Functioning. And the second purpose of this article is to investigate the influence of activities in Disaster Zone to professionals on the standpoints of Compassion Fatigue and Satisfaction, and Burn Out. 5 professionals attended this research program. We considered the influence of experiences in disaster zone to Compassion Fatigue/Satisfaction and Burnout.

As a result, we got the important finding as follows; 1. They enhanced Traumatized experiences in Childhood or Adulthood. The case studies suggest that they are negatively affected by pre-deployment traumatic experiences. 2. Deployment does not appear to cause burnout. That is, almost no change of burnout risk during activities in disaster zone.

3. The importance of any change can be detected through the 8 compassion fatigue and compassion satisfaction factors. Personal important change of each 4 factors of Compassion Fatigue and CS. 4. Deployments elevate the risk of third (or tertiary) traumatic stress reactions among family members of the deployed professionals. I emphasized the risk of Severe Third Traumatic Stress (Families, Friends, Colleagues of Professionals) . 5. Deployed professionals have benefits from sharing their experiences with others. Needs to share experiences in Disaster Zone (Area). As the important conclusion, Optimal CF scores are moderately low scores but not the lowest (need more detail here). No big change of Total CF/CS (keep each Optimal CF) in the disaster zone.

Key words; Compassion Fatigue, Compassion Satisfaction, Optimal Compassion Fatigue Model, Third Traumatic Stress

### 1. Compassion Fatigue and Satisfaction

#### 1) Meaning of Compassion Fatigue

An Care giver has "Compassion Fatigue" by being an care giver, and, by balance with "Compassion

satisfaction" which is joy by being an care giver, which protect a risk to burnout changes (Figley, 2002 et al). Originally, in English of Compassion, there are meanings such as "intense feelings, eagerness, passions such as anger, intense love" in Passion. Compassion, means that Com - says to "Compassion with", (feel passion) with together. Passion means martyrdom. Compassion means "become a martyr with hurt persons/maltreated abused children".

#### 2) Meaning of Fatigue

Originally, in English of Fatigue, there are meanings such as "a feeling extremely tired, usually because of hard work or exercise". Pierre Janet (French Psychologist) described; It seemed that dissociation was related to a wide range of causes, and a fatigue is specifically caused by emotional fluctuation. ..........explain collapses which come from traumatic memory, we would find that there are various causes of psychological fatigue ("La médecine psychologique (1923)" Fatigue and Trauma).

#### 3) 4 factors in each Compassion Fatigue and Satisfaction

From the standpoint of many research on Compassion Fatigue/Satisfaction, Fujioka (2010) examined some support programs in relation with burnout measures and compassion fatigue and satisfaction. As a result of data analysis of 212 persons, he was able to get a result similar to Fujioka (2007). About Compassion Satisfaction, four factors were extracted. Four factors were named as follows; "satisfaction in relations with fellow workers", "satisfaction in relations with a child or children", "satisfaction in the nature of care workers or social workers", and "feeling of satisfaction in life"

#### **Table 1 Four Factors of Compassion Satisfaction**

- 1 Satisfaction in relations with fellow workers.
- 2 Satisfaction in relations with clients.
- 3 Satisfaction as a professionals.
- 4 Feeling of satisfaction in whole life containing of private life.

About compassion fatigue, four factors of "compassion fatigue accumulated as a secondary Traumatic stress", "denial feelings", "PTSD-like compassion fatigue" and "a trauma experience of care worker or social worker oneself" were extracted.

#### **Table 2 Four factors of Compassion fatigue**

- 1 "Compassion Fatigue accumulated as "Secondary Traumatic Stress"
- 2 "PTSD-like Compassion Fatigue"

In other words, Primary Trauma-Related Symptoms

3 "Denial Feelings" (·· avoid remembering a hard experience)

This needs to be explained if the Japanese professionals are more troubled by such denial.

4"Past Traumatic experience of Professionals"

Correlation of these factors with Burnout Standard made by Maslach, C. and Jackson proved to be statistically significance. On this basis, the following points were suggested. 1 Compassion satisfaction showed significant negative correlation with "the emotional consumption feeling" that was a lower factor and "de-personification" of standardized burnout measures, and equilateral correlation with "sense of accomplishment of each individual" was suggested. 2 With a feeling of consumption and depersonification, equilateral correlation with Compassion Fatigue was suggested. But Compassion Fatigue was not related with personal sense of accomplishment. 3 A meaningful difference is seen in the number of years in Compassion Satisfaction. It was suggested that for ten years, it was necessary to regard care givers to be a professional care provider. 4 Compassion Fatigue accumulated as a substitution-related trauma (Secondary Traumatic Stress) was related to Third Traumatic Stress of care givers' families. 5 There was an association between Compassion Fatigue or Satisfaction and Burn out. Third Traumatic Stress (TTS) is a key concept for supporting a care giver's family.

### 2. The Model of Optimal Compassion Fatigue (Fujioka, 2011b)

I have to introduce the research of Fujioka (2011b, in Japanese) in English for investigating the relationship between Compassion Fatigue and Functioning.

#### 1) Compassion Fatigue and Functioning

Based on the investigation by Japanese edition of questions developed by C. Figley, Fujioka (2011b) examined the optimal level model of Compassion Fatigue that related to Compassion Fatigue and the functioning as a care giver to children with some troubles.

Inspected by the number of people with Compassion Fatigue and relations with other indexes, care givers were divided to main three parts, A, B, C type.

Types A indicated low level on Compassion Fatigue mainly on area 1. Type B indicated middle level on Compassion Fatigue mainly on area 2, 3, 4. Type C indicated High level on Compassion Fatigue mainly on area 5. The burnout risk of Type C was higher than other groups.

Furthermore, I examined differences in 5 groups of Compassion Fatigue.1) Significant difference between Compassion Fatigue High and Low was watched in three factors, Satisfactions with colleagues, Satisfactions with clients or children and Satisfactions in life except for Satisfaction to profession as a care giver.

2) Compassion Fatigue became high related to burnout significantly. So it was suggested that Compassion Fatigue could predict burnout. About differences of support items for care givers in Low and High groups of Compassion Fatigue, many items of supports were high level in Low group of Compassion Fatigue. But some items had high scores in the high Compassion fatigue group. From these findings, he considered the meaning of Optimal Level Model of Compassion Fatigue.

Furthermore, he examined the relationship between Compassion Fatigue and Functioning (Professionalization of care givers and social workers) used FR behaviors questionnaires and Caregiving Behaviors on the stand points of Attachment theory.

As a result, it was suggested that FR behaviors rose in relation to Compassion fatigue in all four factors of FR behaviors On the other hand, Caregiving Behaviors on the stand points of Attachment theory did not have the difference among all groups of Compassion Fatigue. Furthermore, he examined necessity of individual support and made each comment format for individual support as practice example of supports on the standpoint of optimal level model of Compassion Fatigue.

#### 2) The purpose of this study (Fujioka, 2011b)

To the purpose to verify the Model of Optimal Compassion Fatigue, we had three primary research questions:

(1) Is there groups who have Optimal Compassion Fatigue?; (2) Is there an association between High or Low Compassion Fatigue Groups and Coping skills for Compassion Fatigue? : and (3) Does the Optimal Compassion Fatigue group behave as good Care Providers who have good Functioning on the standpoint of FR behavior?

#### 3) Measures

- ◆ Care giver Compassion Fatigue/Satisfaction was measured with the Compassion Fatigue/ Satisfaction Scale (Original version, Figley and Stamm, 2002; Japanese Translated version, Fujioka 2007). The Compassion Fatigue/Satisfaction Short Version is a 66-item self-report instrument
- ♦ Burnout Risk Test by Maslach, C. and Jackson, S.E. (1981)
- Coping Skills Scale for CF, CS and Burnout constructed Originally (Fujioka, 2010)
- ◆ FR behaviors Scale. constructed Originally (Fujioka, 2010) as the new check lists about FR behavior with reference to Main, M., & E. Hesse (1996) and Abrams, K.Y., Rifkin, A. & Hesse, F. (2006).
- ◆ Dissociation Tendency. constructed by Masuda (2002).

#### Coping skills for CF, CS, and Burnout risk

- Intentionalness to separate work time and private life (intentional division). Protect to Dissociation in life.
- Healthy life by refreshing mind and body through movement etc.
- Awareness to Tertiary Traumatic Stress (Family stress).
- Recovering "a connection sense" with a person to believe.
- Talking a bitterness to the person who is familiar at the time when it is very hard to talk.

#### A meaning of FR behavior

FR action (including an expression / a gesture etc.) "frightened or frightening" (FR)

An inappropriate action for parenting, a point to "let you feel fear" abused a child.

a parent who has various "unsolved models" that he or she was hurt (a trauma), and cannot arrange experiences of oneself.

FR behavior/action

An action to be worried about a parent /a parent who "lets a child frightening with ../ frightened" by a child.

#### 4) Sample Characteristics (212)

212 study participants had five age groups; 20's (50%), 30's (30.2%), 40's (8.5%) 50's (9.9%) 60's (1.4%). Gender; male (45.3), female (54.7). The sample had an average of 8.14 years (SD = 8.30) of clinical experience. Scores on the Compassion Satisfaction Scale ranged from 29-119 with a mean of 72.887 (SD = (14.980)). Scores on the Compassion Fatigue Scale ranged from 8-77 with a mean of 34.821 (SD = 13.433). Scores on the Burn out Scale (Figley and Stamm, 2002) ranged from 9-61 with a mean of 35.283 (SD = 10.084).

#### 5) Data analysis

For the purpose of (1), (2), (3) Data were analyzed with the Statistical Package named SPSS. Analysis of Variance (ANOVA) was conducted to assess the characters of each groups of Compassion Fatigue which separated to Low/High or 5 groups by Figley and Stamm (1996) on the stand point of 4 factors of each CF, CS and Burnout risk, and the three factors of FR behavior and Dissociation Tendency.

#### 6) Low and High CF, CS, BR

CF ①26 or less, extremely low risk; ②27-30, low risk; ③31-35, moderate risk; ④36-40,high risk ⑤ 41 or more, extremely high risk.

CS ①118 and above, extremely high potential; ②100-117, high potential; ③82-99, good potential; ④ 64-81,modest potential; ⑤below 63, low potential.

BR ①36 or less, extremely low risk; ②37-50,moderate risk; ③51-75, high risk; ④76-85, extremely high risk.

## 7) Results Main results of Fujioka (2011) are as follows.

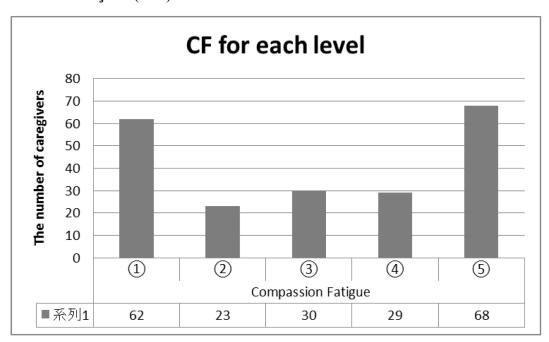


Fig.1 Compassion Fatigue for each level Low-High. (Fujioka, 2011b)

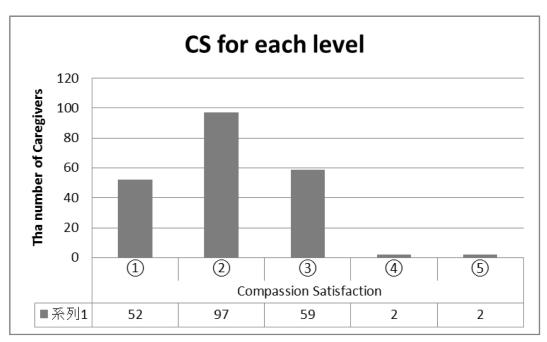


Fig.2 Compassion Satisfaction for each level Low-High. (Fujioka, 2011b)

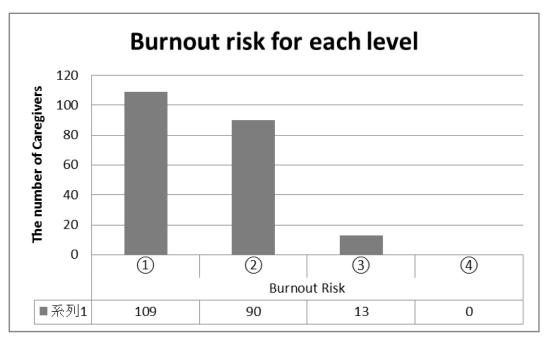


Fig.3 Burn out for each level Low-High. (Fujioka, 2011b)

#### 8) Discussion 1

CF is divided into polar regions of, ⑤and①. The approximately same numerical number of people is included in the middle domain. There is CS in approximately good virtuality. A burnout risk is in an approximately low risk. It is suggested that Compassion Fatigue measures lead to the burnout prevention.

# 9) 4 Factors of CF for CF/Low and CF/High CF/Low is ① group and CF/High is ⑤ in Figley and Stamm (1996)

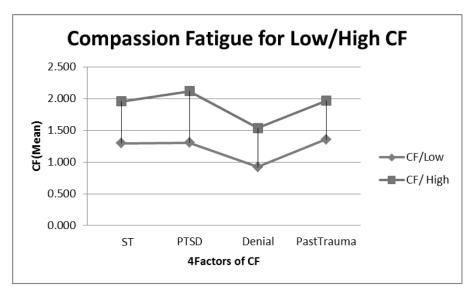


Fig.4 4 factors of Compassion Fatigue for Low/High Compassion Fatigue CS for Low/High CF (Fujioka, 2011b)

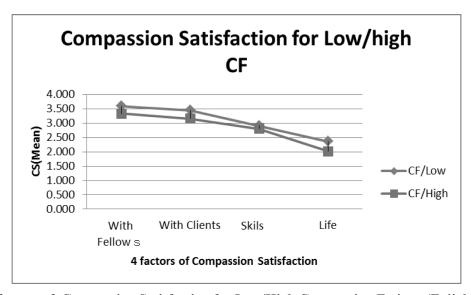


Fig.5 4 factors of Compassion Satisfaction for Low/High Compassion Fatigue (Fujioka, 2011b)

#### BR for Low/High CF

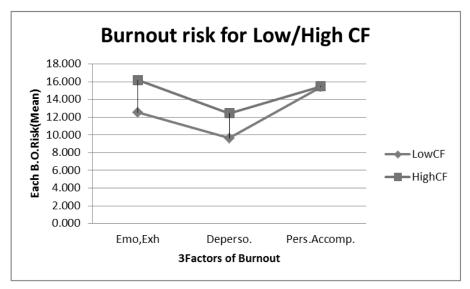


Fig. 6 3 factors of Burn out for Low/High Compassion Fatigue (Fujioka, 2011b)

#### 10) Discussion 2

As for the compassion fatigue, in all 4 factors, High Fatigue groups were high showed high numerical values. As for CS, satisfaction was high on 3 CS factors in low CF groups, except for skills. For Burnout risk, on the emotional exhaustion and depersonalization, compassion fatigue was low. A feeling of reception was high with a friend, a family, the boss, by measures in Low CF. On the other hand, a feeling of reception was high with a fellow worker in High CF groups.

## 11) Compassion Fatigue as a predictive measure of burnout BR for each CF level ( (1 - 5) )

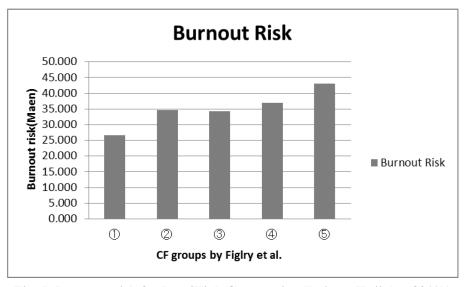


Fig. 7 Burn out risk for Low/High Compassion Fatigue (Fujioka, 2011b)

#### 12) Discussion 3

As for the measures to compassion fatigue, what could prevent burnout was inspected here. In secondary trauma, PTSD, denial, trauma experience of the past, all, there is a same difference to CF 1 and 5. If a person would have compassion fatigue in five domains, it seemed for him or her to make efforts to cope with CF in 4 factors. CF 3 group shows the highest compassion satisfaction only in the graph. It may be easy for CF 3 groups to feel compassion satisfaction with compassion fatigue moderately. Difference to 1 and 5 in Frightened behavior. The degree of Compassion fatigue affected to a negative functioning as a care giver. Supports for Each Professional. From the results of Compassion Fatigue, Compassion Satisfaction, Burnout Risk, it was investigated that Low or High CF, CS, BR have each Optimal Level. I think that Tailored supports are very effective to each Professional. It is very important for care givers to take direct supports as Professionals by a interview.

#### 13) "Optimal Compassion Fatigue" Model

Fujioka (2011b) presented "Optimal Compassion Fatigue" Model. The concept of Trauma contains not only primary, but also secondary, and third (tertiary) trauma. Supports for Care givers or SW mean the support to clients. I think we have to construct Bio-Psycho-Social-Spiritual Approach to CF. Functioning is connected to CF, just as Harmony with Colleagues, Families and Friends ...

Next part, I examined that the influence of experience in disaster zone to Compassion Fatigue, Satisfaction and Burnout.

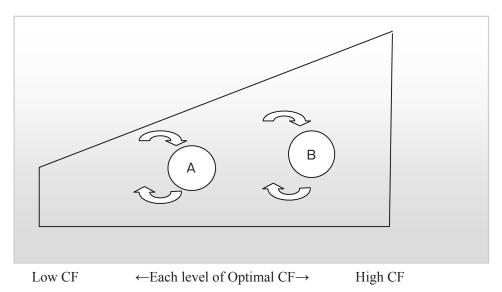


Fig.8 The Optimal Compassion Fatigue Model (Fujioka, 2011b) (The degree of Compassion Fatigue, Case A; moderate level Case B; high level)

#### 3. The Triple Disaster in Japan

#### 1) Earthquakes and Tunami

At first I explain that the The Triple Disaster in Japan. Regarding the disasters affecting my country of Japan, we have to express deepest appreciation to peoples in many countries who are sending us Japanese warm words and great support. The expressions and efforts of support of among staffs, professors, and student in many Universities are wonderful expressions of great support to Japan. Thank you from a country thankful for outside help.

As for our disasters, we have three, which happened at the same time. The many earthquakes, Tsunamis and the accident in nuclear power plants in Fukushima started on March 11th.

Quickly we recognized that these triple disasters stressed the Japanese well beyond the range of our planning. Most of the destruction from earthquakes and Tsunamis were experienced from Tohoku and North Kanto area. Fortunately in these areas are mostly those Japanese who have the most advanced disaster prevention plans and offer many training programs to prepare them for natural disasters.

We were not prepared for an earthquake of this magnitude (9.0 MMS), one of the highest records on record and the worst disaster in Japanese history. The resulting Tsunami overwhelmed our capacity to prevent the destruction. For example, although we constructed levees that far exceed our standards, this Tsunami was like no other and far more than the assumptions we made when they were planned. The Tsunami destroyed many houses and buildings over the embankment and the levees.

The first big earthquake occurred at about 2:46 pm on March 11 leaving little time to evacuate. The first waves of the Tsunami occurred about 3:00 p.m. and were between 6 and 10 meters (20-32 feet) high. The second wave came at 4:30pm but it was rarely more than 6 meters.

There are many places where water soaked in on the roof of the third floor of buildings and houses. People and things in its path appear to be rolled up in the tsunami while they tried to escape, most often with the help of others who slowed down to help. The water was indiscriminate; it washed patients from hospitals, beds and all. Most Japanese houses are built of wood and why they were swept away by the water with only the foundations left.

#### 2) The Nuclear Power Plant Disaster

The third disaster emerged Sunday, March 12th with destruction of portions of the Fukushima Daiichi Nuclear Power Station caused by the multiple waves from the Tsunami. Subsequent explosions and leaks of radioactive gas took place in three reactors at the one Station. No one was harmed by the radioactive gases since the dosage was so very low. The reactors suffered partial meltdowns, while spent fuel rods at another reactor overheated. Many efforts were made to keep the Plant under control, especially in efforts to resupply the nuclear fuel with water to keep cool and avoid further disaster.

One part of fire engines using for drainage is one of US military forces. Inhabitants living near the Plant were moved to shelters. Some were urged to stay in their home until it was safe to move to the shelters.

#### 3)Triple Disaster Consequences

The total extent of the damage will not be known for some time. However, widespread speculation is that more than 90% of those who died of Tsunami-related drowning. Most everyone in Japan has either suffered or sacrificed. Food and fuel shortages were reduced thanks to the sacrifices of those from less affected areas of the country. Those who suffered most are those throughout the region most affected by the Triple Disaster. Public officials are especially distressed. In addition to their own personal suffering, they most take responsibility of policies that may have cost the loss of lives and property or dispatched more help more quickly to those most affected.

Making matters worse, families in the disaster area became separated. Because family members were separated when the earthquake and Tsunami hit in the middle of the day, it complicated efforts for families to reunite. This caused considerable distress until family members were reunited. Japan is very family oriented.

In addition to being separated from family members, the triple disasters also caused wide spread failure of the use of telephones for several days. This added to the anxiety of family members trying to reach loved ones in the affected areas. This confirmation process lasted well over a week after the earthquake and subsequent disasters.

Most of the shelters for those affected by the triple disaster were large buildings including gymnasiums of elementary school and junior high schools nearby, senior high schools. Not surprisingly, life went on in Japan in an orderly and rational manner. Soon supplies arrived at disaster refuge place one after another from many prefectures, the capital and whole country.

However, supplies were unable to reached some stricken areas easily due to block roads and lack of fuel. Only recently have tanker carrying fuel for cars and heating arrived to the areas most in need, along other critical supplies of water and food.

Water is especially welcomed in the disaster zones. To the Japanese water for life such as drinking water, cooking "takidashi" in Japanese: This means such activities as bathing, toothpaste, washing face and hands.

Other items that were in short supply in shelters were dry milk for babies, and paper diapers. In addition there were many in shelters that were ill and required medical attention and fresh supplies of medication for those who had to abandon everything to seek shelter from the disasters, such as in Tohoku. The same is true regarding the needs of survivors missing eyeglasses, contact lens, hygiene supplies, and even underwear. The stricken areas like Tohoku continued to experience very cold, wintry weather that requires blankets and warm clothing after earthguakes.

#### 4) New Construction and Beginnings

There has been an extraordinary outpouring of assistance to the disaster areas from all parts of Japan. Many prefectures (regions) and cities have sent aid or preparing to do so in order to better care of people who need help most. In addition, there were many welfare institution and child welfare facilities have plans for assisting various survivors find longer-term needs, especially the elderly and children.

The Japanese people and the citizens of the world are collaborating to help the people and areas affected

by the historic multi-disaster. There is every reason to believe that Japan will survive this situation and go forward united and moving toward the future step by step.

#### 4. Support for Professionals in Disaster Zone.

Compassion fatigue / Satisfaction in Professionals who help peoples in disaster area.

We have to construct the system of supporting to helpers in disaster zone. We planed several approaches to helpers who went to disaster zone on the standpoint of Compassion Fatigue.

#### 1) Plans for researching on Compassion Fatigue in Disaster Zone.

We made Plans for researching on Compassion Fatigue are as follows.;

1, Professionals in A Prefecture (Shelters in other area of people from disaster area) through two persons. 2, Professionals in B Prefecture to Disastered Area through more than 10 persons. 3, Professionals in C Prefecture to Disaster Area through more than 50 persons. 4, Professionals in D Prefecture to Disaster Area trough more 5 persons

About project 4, we will write the new articles about data of professionals in disaster zone.

#### 2) Purpose of the study.

The purpose of this study is to conduct the case study on 5 persons about Compassion Fatigue/Satisfaction Questionnaires. To that purpose, we had three primary research questions: Is there a change on Burn out and Compassion Fatigue/Satisfaction between baseline and during activities in Disaster zone?

#### Methods

#### Sample and Procedures

For purpose data was obtained from 5 persons who attended supports to peoples in disaster zone. I collected data from 5 persons on Compassion Fatigue/Satisfaction Scale -Short Version - (34 items).

#### **Subjects**

5 persons (A, B, C, D, E) who are social workers in Japan. For protecting privacy of those persons, we cut the information about these persons in details. We got permission of descriptions in this article from 5 persons without private information.

#### **Procedures**

#### Schedule of researching

- 1, Testing Period; Baseline assessment (T1) of Compassion Fatigue (CF), Compassion Satisfaction (CS), Burnout risk (BO), Coping with CF, CS, BO
- 2, During activities in DZ (T2)

- 3, Just after (T3) (1 week during activities in DZ)
- 4, After 1 week (T4) After 2, 3 week (T5, T6)
- 5, 4weeks later (T7)

That is our plans have the chances of 7 times; T1, Baseline. T2, During activities. T3, Immediately Post Deployment. T4, 1 week post-deployment. T5, 2 weeks post-deployment. T6, 3 weeks post-deployment. T7, 4 weeks post-deployment.

#### **Measures**

#### Compassion Fatigue/Satisfaction Scale -Short Version - (34 items)

Care giver Compassion Fatigue/Satisfaction was measured with the Compassion Fatigue/Satisfaction Scale (based on Figley and Stamm, 2002; Fujioka 2007, 2010). The Compassion Fatigue/Satisfaction Short Version is a 34-item self report instrument that instructs respondents to indicate how frequently they experienced each of 34 symptoms during the previous week using a 5-choice, Likert-type response format ranging from never (1) to very often (5). The 34 items of the Compassion Fatigue/Satisfaction are designed to be congruent with the 17 symptom criteria of Compassion Satisfaction and 17 symptom criteria of Compassion Fatigue by factor analysis of 66 original items of Compassion Fatigue/Satisfaction self check lists (Figley and Stamm, 2002). These Compassion Fatigue/Satisfaction Scale -Short Version - have 8 factors; 4 factors on Compassion Fatigue, (1, Secondary Traumatic Stress or compassion fatigue accumulated as a substitution-related trauma, 2, PTSD-like compassion fatigue, 3, Denial Feelings, 4, Trauma Experience of care worker or social worker oneself) and 4 factors on Compassion Satisfaction (1, satisfaction in relations with fellow workers, 2 satisfaction in relations with a child or children, 3, satisfaction as nature of care workers or social workers, and 4, feeling of satisfaction in life) by Factor Analysis (based on Figley and Stamm, 2002; Fujioka 2007, 2010).

#### Results

#### 1. 5 Case as professionals in disaster zone.

For investigating purposes 5 study participants attended this study. But we cut the privacy data about age, gender, and the kinds of professionals.

We indicated the results of 5 persons through the Methods of Case Study, maily on T1, T2, T3.

- Case A
- Case B
- Case C
- Case D
- Case E

#### 2. Case study analysis

Fig.9 displays the results of Compassion Satisfaction on case A.

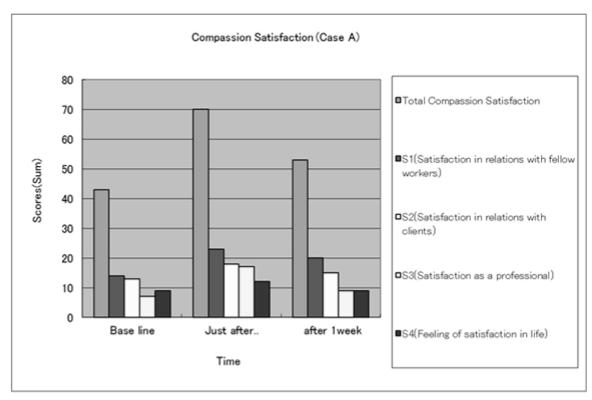


Fig.9 Four factors of Compassion Satisfaction (Case A)

On the compassion satisfaction the score was higher than baseline on all factors. And after 1 week those results got down to usual level.

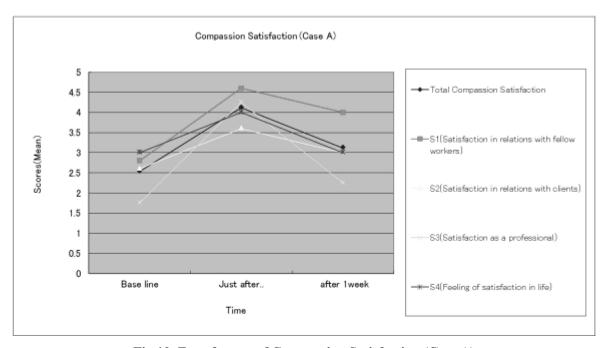


Fig.10 Four factors of Compassion Satisfaction (Case A)

#### Four factors of Compassion fatigue (Case A)

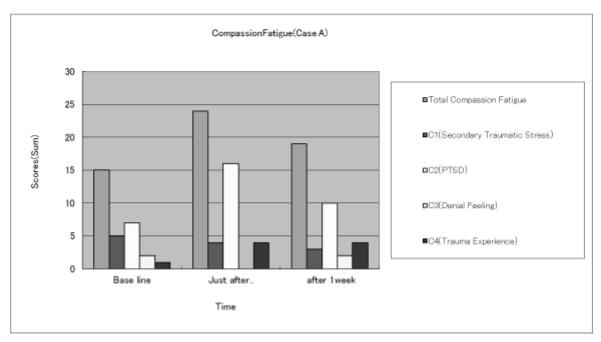


Fig.11 Four factors of Compassion Fatigue (Case A)

On the compassion fatigue the score was higher than baseline on two factors; secondary traumatic stress and past trauma experience. And after 1 week only secondary traumatic stress got down, but the score of past trauma experience continue to be higher rather than usual level.

#### Four factors of Compassion fatigue (Case A) as the liner expression.

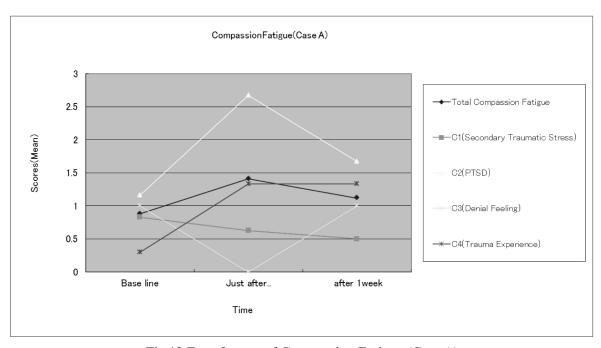


Fig.12 Four factors of Compassion Fatigue (Case A)

#### Burnout scales (Maslach et al, 1981) (Case A)

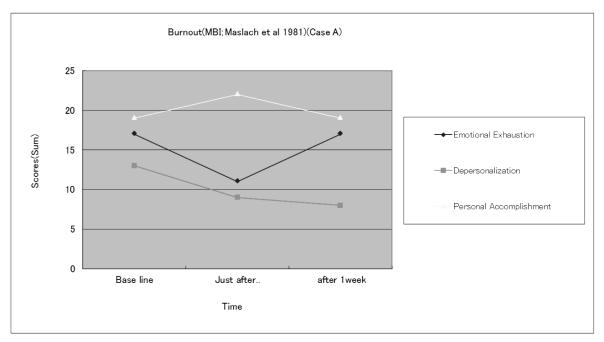


Fig.13 Burnout scales (Maslach et al, 1981) Case A

On the burn out the score was lower than baseline on two factors; emotional exhaustion and depersonalization. And after 1 week only emotional exhaustion got up to usual level, but the score of depersonalization continue to be lower rather than usual level.

#### **Comapssion Satisfaction total (Case A-D)**



Fig.14 Comapssion Satisfaction total (Case A,B.C.D)

#### **Compassion Fatigue total**

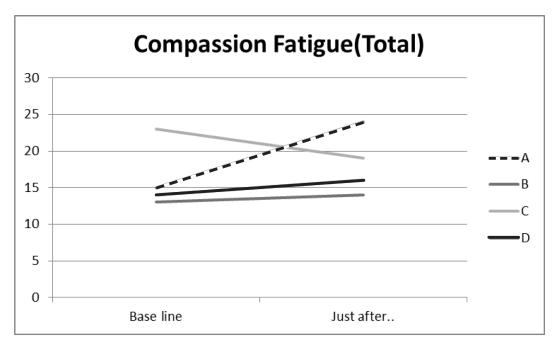


Fig.15 Compassion Fatigue total

#### **Burnout 3 Factors**

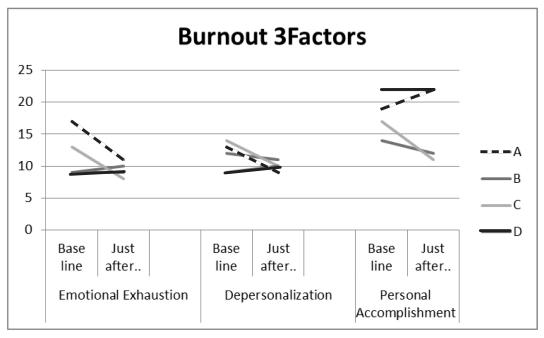


Fig.16 Burnout 3 Factors (Case A, B, C, D)

#### Satisfaction 1 (withPeer), 2 (withClients)

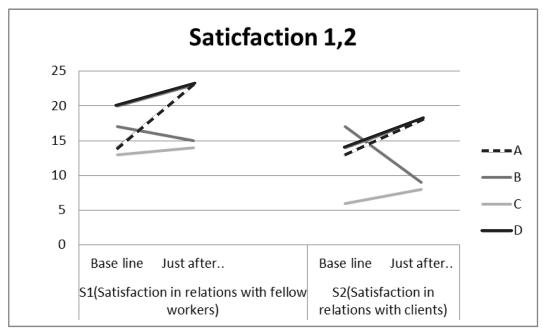


Fig.17 Satisfaction 1 (withPeer), 2 (withClients) (Case A, B, C, D)

#### Satidfaction 3 (as a Pro), 4 (Life)



Fig.18 Satidfaction 3 (as a Pro), 4 (Life) (Case A, B, C, D)

#### Fatigue 11 (Scondary Trauma). 2 (PTSD-like)

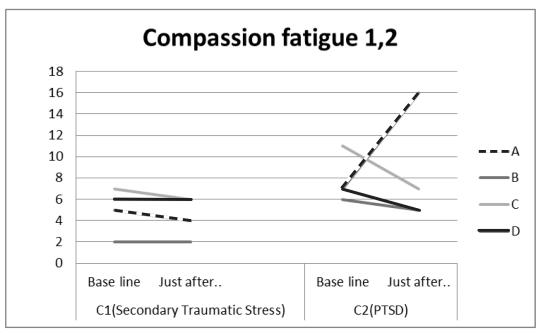


Fig.19 Fatigue 1 (Scondary Trauma). 2 (PTSD-like) (Case A, B, C, D)

#### "Denial" "Past Traumatic experience of Professionals"

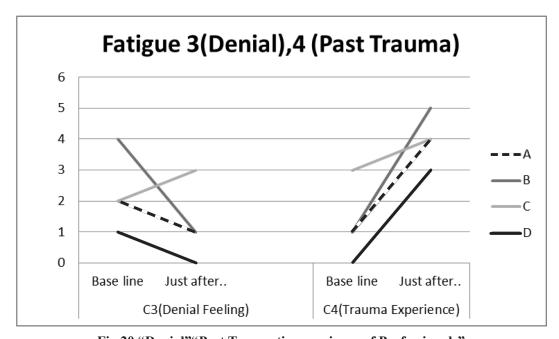


Fig.20 "Denial" "Past Traumatic experience of Professionals"

On the 1 factor of compassion fatigue, past trauma experience incerese just after activities in disaster zone compareed with base line.

#### CS of Case E

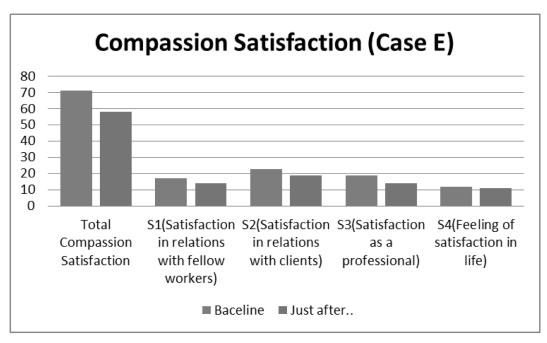


Fig.21 CS of Case

#### **CF of Case E (Social Worker)**

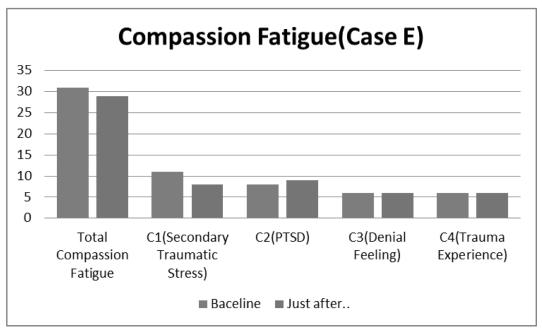


Fig.22 CompassionF fatigue of case E

On compassion fatigue, case E did not change after activirties in disaster zone on all 4 factors.

#### CF of Case E Burn out Risk of CaseE

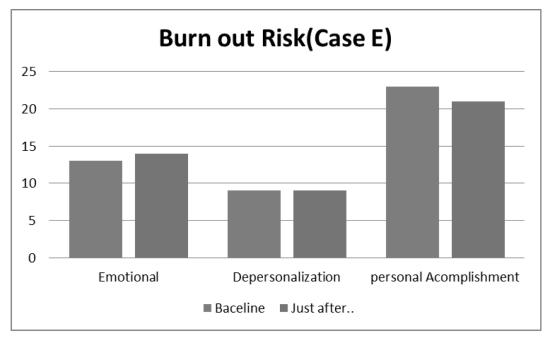


Fig 23 Burn out Risk of Case E

On burn out, case E did not change the score just after activities in disaster zone compared with baseline.

#### 3. Messages for professionals in Disastered area

We gathered many messages from professionals in disaster zone. Parts of messages were introduced in this article after permission from these professionals.

#### Mr/Mrs A

"The most we can do so early after a disaster is to be with the survivors without trying to treat them; being a friend; being a kind person is what they need." So, relax and not worry so much about the right diagnosis and treatment strategy. Do what your heart suggests; be a friend.

#### Mr/Mrs B

I must first make sure I am okay (in body and mind) and not over do it in helping the people in the area affected by the disasters (disaster zone) (DZ). It was easy to avoid, but I thought it was time to support our efforts and go to assist in the DZ. The victims need our help. Mr/Mrs C

Of course concrete support such as the removal of debris or supply of food is important. And victims are thinking to accept many helpers from other area in Japan. But some peoples in disastered area think that "I want you to leave alone". They thank various supporters, and are going to accept them.

I think that we have to ask our mind the question as follows; "This support really necessary to people

in disastered area?"

I felt that we have to continue to help people and make activity having it in our heart as self-question.

#### Consideration

#### 1. Consideration on Case A-E

On Case A, the scores of burn out were lower than baseline on two factors; emotional exhaustion and depersonalization. And after 1 week only emotional exhaustion got up to usual level, but the score of depersonalization continue to be lower rather than usual level. On the compassion fatigue the score was higher than baseline on two factors; secondary traumatic stress and past trauma experience. And after 1 week only secondary traumatic stress got down, but the score of past trauma experience continue to be higher rather than usual level. Sever experience in disaster zone enhanced the trauma experience in professionals.

Case A-D, on the 1 factor of compassion fatigue, past trauma experience inceresed just after activities in disaster zone compareed with base line.

Case E was not influenced on the scores of CF and CS during activities in the area affected by the disasters. Case E has "Optimal Compassion Fatigue" level to keep controlling Functioning as a social worker. This is very interesting result. Case E has no risk on burn out in Disaster Zone. Both (before/during) Burnout risk is in "Safety".

#### 2. Monitoring Professionals Deployed to Disaster Areas

1). The case studies suggest that they are negatively affected by pre-deployment (past) traumatic experiences. 2) Deployment does not appear to cause burnout. 3) The importance of any change can be detected through the 4 compassion fatigue factors and 4 compassion satisfaction factors. 4) Deployments elevate the risk of tertiary (third) traumatic stress reactions among family members of the deployed professionals. 5) Deployed professionals had benefits from sharing their experiences with others. 6) Optimal CF scores are moderately low scores but not the lowest.

#### 3. Conclusions

- 1) Experiences in DZ enhanced Traumatized experiences in Childhood or Adulthood. The case studies suggest that they are negatively affected by pre-deployment traumatic experiences.
  - 2) Deployment does not appear to cause burnout. That is, No change of Burnout risk in DZ.
- 3) The importance of any change can be detected through the 4 compassion fatigue factors and 4 compassion satisfaction factors. There were personal important change of each 4 factors of compassion fatigue and CS.
- 4) Deployments elevate the risk of tertiary traumatic stress reactions among family members of the deployed professionals. There were high risk of Severe Third Traumatic Stress (Families, Friends, Colleagues of Professionals).

5) Deployed professionals had benefit from sharing their experiences with others. We have to think about needs to share experiences in Disastered Zone. Optimal CF scores are moderately low scores but not the lowest (need more detail here) with no big change of Total CF/CS (keep Optimal CF).

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