

Relationship between Previous Traumatic Experience, Post-Traumatic Growth, Coping Strategy to Mental Health State on Refugees in Sidoarjo Camp

Era Catur Prasetya, Nalini Muhdi*, Atika Atika

Faculty of Medicine Universitas Airlangga

*corresponding author: nalinimuhdi.md@gmail.com or linikj2003@yahoo.com

ABSTRACT

Background: Refugees face a problems of loss of residence, loss of work, education, alienation from the community, and limited access to health services which indirectly cause mental health problems for refugees. This study aimed to analyze the relationship between previous traumatic experience, post traumatic growth and coping strategy to mental disorders among refugees in sidoarjo camp. **Method:** This study was a cross sectional study with total 97 refugees in sidoarjo camp which choosen with simple random sampling. They were asked for fulfilling post traumatic, previos traumatic experience and coping strategis questionnaire. The result was analyze using SPSS. **Result:** This study found that there was no significant relationship between coping strategy ($p=.237$) and post traumatic experience ($p>.05$) with mental disorders and there was no significant relationship between previous traumatic experiences ($p>.05$) with post-traumatic growth. But there is significant relationship between coping strategy ($p<.05$) and post traumatic growth **Discussion:** Need further research on the same topic with qualitative methods to explore results, especially with regard to post-traumatic growth dynamics and flexibility in coping and social support in refugees. In addition, cultural variables in this study can also be related to the cultural context

Keywords: coping strategy; mental disorder; previous traumatic experience; post traumatic growth; refugees

Correspondence:

Nalini Muhdi

Faculty of Medicine Universitas Airlangga

*corresponding author: nalinimuhdi.md@gmail.com or linikj2003@yahoo.com

INTRODUCTION

In a recent report announced by the United Nations Agency for Refugees (UNHCR), in 2015, more than 65.3 million people were forced to flee their homes due to violence, persecution and conflict. This number includes at least 32 million refugees who are forced to leave their homes and communities but still live in their home countries. The number of refugees related to violence is currently at the highest level in 20 years, while the number of internal refugees is at the highest level in 50 years [1]. Based on data from June 18, 2002 the number of refugees in Indonesia was 1,355,065 people spread across 20 provinces. 70% of this number consists of women and children, namely those belonging to vulnerable groups to mental health and psychosocial problems [2].

Impacts resulting from loss of residence, loss of work, education, alienation from the community, and limited access to health services indirectly cause mental health problems for refugees. The World Health Organization (WHO) estimates that, in conflict situations around the world, 10% of people who experience a traumatic event will have serious mental health problems and another 10% will develop behaviors that will hinder their ability to function effectively. The most common conditions are depression, anxiety and psychosomatic problems such as insomnia, or back pain and stomach pain [3].

Previous study found several factors related to mental health problems of refugees, namely: young age (children and adolescents) have relatively better results than adults and elderly. Female refugees, rural areas origin, higher education, and socioeconomics status showed worse mental health outcomes [4]. Psychosocial problems distributed in all areas include various forms of psychological complaints and psychiatric disorders related to trauma experiences, such as post-traumatic stress, depression, anxiety and various psychosomatic symptoms; domestic violence; child abuse; alcohol abuse;

aggressive behavior, and other psychosocial problems such as learning problems, child and youth problems, economic problems, pessimism and tendency towards substance dependence [2,5-7].

Sampang refugees who currently live in Sidoarjo refugees camp have experienced force displacement as a result of religious conflict that began with two consecutive family conflicts, namely Arson and physical beatings which caused the move from Omben Village to the Sports Building in the center of Sampang sub-district for almost a year on August 26, 2012. The second forced transfer occurred on the 20th June 2013 which forced Sampang refugees to live in temporary shelters in the Puspa Agro Sidoarjo flat to date. Preliminary research conducted by researchers to determine the degree of quality of life of Sampang refugees using WHOQOL BREF showed poor results on all dimensions of measurement, namely 47.61% in the dimensions of the refugees' environment, 39.51% and 33.43% in the physical and psychological dimensions. While the moderate quality of 32.41% is found in the dimension of social relations [8].

Sampang refugees in Sidoarjo camp since June 2013 experience unclear settlement with population identity which until now has not been given, access to limited health facilities, transfer of educational status to children who are unclear, difficulties in getting work because previously working as a farmer, as well as severing relationships with extended families in Madura increase the risk of mental health problems. Stress that lasts continuously or can not be solved coupled with psychosocial stress to new problems that arise post migration can cause delayed post traumatic stress disorder (PTSD). Based on complex epidemiological data PTSD can occur after six months after the event can even appear after seven years. The symptoms that arise can be PTSD that persists or is a symptom that arises due to experiencing stress just after migration or is cumulative

Relationship between Previous Traumatic Experience, Post-Traumatic Growth, Coping Strategy to Mental Health State on Refugees in Sidoarjo Camp

trauma [9].

Besides causing mental disorders, traumatic events can also lead to *post-traumatic growth*. *Post-traumatic growth (PTG)* is defined as a positive change experienced by someone after struggling with traumatic living conditions. Traumatic events require individual efforts to understand and interpret themselves and their lives that change due to the events experienced. Post-traumatic growth aspects include: 1) a great appreciation for life, this is achieved by interpreting life well every day, focusing on what is owned and enjoying it; 2) close relationships with other people. In this aspect, individuals are better able to recognize the meaning of relationships with friends and family, spend more time with others and increase the ability to empathize; 3) new possibilities in life; 4) increased personal growth allows individuals to have coping abilities with pressing conditions such as trauma to foster self-efficacy; 5) spiritual change. Some of the factors identified as contributing to PTG are age and gender, traumatic events, personality, coping, social support such as family, friends, and organizations [10]. This study explored the relationship between previous traumatic experience, post-traumatic growth, coping strategy to mental health state on refugees in sidoarjo camp.

METHODS

This research is an observational analytic with cross sectional study approach.

The study was conducted in a flat rented Puspa Agro Sidoarjo owned by the Regional Government of East Java Province. When the study was conducted in November - December 2019. Research subjects who met the criteria were taken data through questionnaire instruments and

statistically analyzed.

The target population of research is internal refugees (*Internal Displaced Person*) di Indonesia. The population of this research is the Sampang refugees who live in the Evacuation Center of Agro Sidoarjo Flat Housing owned by the Regional Government of East Java Province from June 2013 - December 2019 (6.5 years).

Based on data obtained (2016) a total of 332 people became refugees due to the conflict. Consists of 154 school-age children and 9 toddlers (0-3 years old) and the author was at the site, only about 234 inhabitants lived in Sidoarjo camp with 99 adults while the remaining 135 were school-age children some of them even on attend school in Islamic boarding schools in some towns. Of the 99 people, 2 people refused to be interviewed so that the research subjects were 97 people. This study had been approved by health study ethical committee of Faculty of medicine Universitas Airlangga number 300/EC/KEPK/FKUA/2019.

RESULTS

This study found that most refugees were in the age group of 18-30 years (40.2%), were women (53.6%), uneducated (50.5%) and work (59.8%). The most frequent manifestations of mental disorders occur in the age group 46-60 years (47.8%) with depressive episodes (17.4%). Refugees who experienced mental disorders mostly have elementary school background (48.1%). This study result showed no significant relationship between age groups, education level and mental disorders ($p > 0.05$). There was a relationship between occupation and sex with mental disorders. From the table 1 also showed that there was no relationship between age, sex, and education level with post-traumatic growth but occupation status was related (Table 1).

Table 1 Demographic data of Sampang refugees in Puspa Agro Sidoarjo, December 2019

Variable	N(%)	Mental Disorder		p	r	PTG	
		Yes (n=38)	No (n=59)			p	r
Age (year)				0,436	0,436	0,714	1,33
18-30	39 (40,20)	16 (41,00)	23 (59,00)				
31-45	35 (36,10)	11 (31,40)	24 (68,60)				
46-60	23 (23,70)	11 (47,80)	12 (52,20)				
Sex				0,032*	0,032*	0,206	1,85
Man	45 (46,40)	12 (26,70)	33 (73,30)				
Women	52 (53,60)	26 (50,00)	26 (50,00)				
Education level				0,513	0,513	0,067	1,45
Uneducated	49 (50,50)	17 (34,70)	32 (65,30)				
Elementary school	27 (27,80)	13 (48,10)	14 (51,90)				
Junior/senior high school	21 (21,60)	8 (38,10)	13 (61,90)				
occupation				0,008*	0,008*	0,039	2,40
Occupied	58 (59,80)	16 (27,60)	42 (72,40)				
Jobless	39 (40,20)	22 (56,40)	17 (43,60)				

Categorical variables are expressed in n (%)

PTG=post traumatic growth

This study found that 39.2% refugees experienced mental disorders including depressive episodes (17.50%), global anxiety disorders (8.2%), and post-traumatic stress disorder (5.20%). A number of 58.8% of refugees had high post-traumatic growth (PTG) scores with the highest dimension was spiritual change (83.5%), while

dimension openness to new opportunities (45.4%) was the lowest score. Most refugees using Emotional Focused Coping (62.9%) to solve their problems. Refugees with mixed coping style are the most experienced mental disorder (48,3%). (Table 2).

Table 2 Description of types of mental Disorders, dimension of post-traumatic growth, coping strategy and previous traumatic experience in Sampang refugees in Puspa Agro, Sidoarjo, December 2019.

Variables	N(%)
-----------	------

Relationship between Previous Traumatic Experience, Post-Traumatic Growth, Coping Strategy to Mental Health State on Refugees in Sidoarjo Camp

Types of mental disorders	
Agoraphobia	4 (4,1)
Distymia	4 (4,1)
Depression episode	17 (17,5)
Global anxiety disorders	8 (8,2)
Post traumatic stress disorders	5 (5,2)
No disorders	59 (60,8)
Dimensions of PTG	
Relationships with other people	
High	61 (62,9)
Low	36 (37,1)
Openness to new opportunities	
High	53 (54,6)
Low	44 (45,4)
Personal strength	
High	72 (74,2)
Low	25 (25,8)
Spiritual change	
High	81 (83,5)
Low	16 (16,5)
Appreciation in life	
High	64 (66)
Low	33 (34)
Coping strategy	
EFC	61 (62,90)
PFC	7 (7,20)
EFC dan PFC	29 (29,90)
Previous traumatic experience	
Experiencing	94 (96,9)
None	3(3,1)

PTG = Post traumatic growth; EFC= Emotional Focused Coping; PFC=problem focused coping

Table 3 The relationship between coping strategy and previous traumatic experience with mental disorder and post traumatic growth

variables	Mental disorder			PTG		
	Yes	No	p	r	p	r
Coping strategy			0,237	0,65	0,0208*	1,92
EFC	23 (37,70)	38 (62,30)				
PFC	1 (14,30)	6 (85,70)				
EFC dan PFC	14 (48,30)	15 (51,70)				
Previous Traumatic experience			1,000 ^b	1,30	1,000 ^b	0,71
Experiencing	37 (39,40)	57 (60,60)				
None	1 (33,30)	2 (66,70)				

This study found that there was no significant relationship between coping strategy with mental disorders ($p > 0,05$). Refugees with emotional focused coping (EFC) strategies are more likely to have low PTG than refugees who use Problem Focused Coping (PFC). There was a significant relationship between coping strategy and post traumatic growth among refugees. Most of refugees in this study had experienced psychological trauma, but only 39.40% stated that their condition was currently experiencing mental disorders. The results of the bivariate test showed that there was no significant relationship between previous traumatic experience and mental disorders ($p > 0,05$). Most of the study subjects had experienced psychological trauma, although 58.5% of them had a high post-trauma growth rate, the rest they had a low post-trauma growth rate. The results of the bivariate analysis showed that there was no significant relationship between psychological trauma experiences and post-traumatic growth ($p > 0,05$)

DISCUSSION

This study result showed no significant relationship between age groups, education level and mental disorders. There was a relationship between occupation and sex with mental disorders. This finding is not inline

with previous studies from Porter & Haslam (2015), Riley et al (2017) which found that there was a significant relationship between age, sex and education on the incidence of mental disorders in the refugees. Older age, female gender and higher education were some of the predictors of mental disorders in refugees [12]. We assumed possibly because the little number of samples and the refugees in this study were different in range of expulsion period, in addition, this study was induced after six years of the Sampang refugee living in the Puspa Agro rusunawa so that the complaints of mental disorders are likely to have recovered, experienced PTG growth or other forms of mental disorders that may not be diagnosed.

This study found that there was a relationship between occupation status with mental disorders. This result was inline with previous study [13] which found that work provides opportunities for refugees to become a social part of society and reduces alienation due to physical and non-physical restrictions. Economic opportunities (right to work, access to employment, maintenance of socioeconomic status) have a linear relationship with better mental health [4]. Unemployed refugees are likely to deal not only with the psychological impact of a lack of

recognition of their skill level, but also with the unhealthy physical and psychosocial environment that often accompanies low-skilled work [14].

In this study, the group age of 31-45 year had the highest average PTG score compared to other groups. This result inline with previous studies which found that the adult study subjects had higher PTG scores than the adolescent group, and the elderly group [15,16]. Other study found that age was not related with post traumatic growth [17]. Age was associated with personality maturity and was stable after 30 years of age and personality traits can change in response to life transition events during middle and late adulthood. Life transition events could be a work, relationship, or health related [18,19]. PTG score were higher in refugees with education level above elementary school. This result in accordance with previous study which found that refugees with lower education level had lower PTG score [16] even another studies had different results that there was no relationship between education level with PTG score [20,21]. We assumed that in this study, refugees had no formal education background but almost all of them have received basic Islamic boarding school education so that the transformative values they use come from their religious knowledge and social interactions in daily life.

In the study, it was found that the post traumatic growth score was high in refugees who worked more than those who did not work. The results of this study is similar with the previous study [16]. Work occupies an important social role due to two things; the first is in the social system of society and is a form of diversion to the traumatic experience that occurs which if done continuously and consistently will reduce recurring thoughts related to trauma and transform it into a positive psychological condition [22,23]. Refugees in this study used *Emotional Focused Coping* which focused on emotional which involves more thoughts and actions aimed at dealing with stressful feelings resulting from stressful situations [24,25]. This result inline with previous studies [26,27]. Coping strategies choice is more because there are no other resource choices when individuals are under pressure, besides that the choice of emotion-focused strategies is considered easier and automatic [28,29]. There was no significant relationship between coping strategies and mental disorders but there is a significant relationship between coping strategy with post traumatic growth. This result in accordance with previous studies [30][31].

Most of refugees in this study had previous trauma experience. This study similar with other studies [11,32,33]. UNHCR has documented that, unlike economic migrants, most refugees of conflict have experienced brutal armed conflict, been subjected to persecution, and violence, some have witnessed the death of family members or the massacre of entire communities [34,35]. This causes trauma in several studies to be the strongest predictor of mental illness in refugees [1,11,32,33], although in several studies it was found that there was no link between previous psychological trauma and the manifestations of mental disorders of the refugees. Some of the factors that are thought to be the cause are the duration of the event, the coping strategies of the refugees, and post migration psychosocial stress [17,36].

REFERENCES

1. Miller K E, Rasmussen A, Miller K E and Sciences P 2016 The mental health of civilians displaced by

armed conflict: an ecological model of refugee distress *Epidemiol. Psychiatr. Sci. - Cambridge J.* 1 1-10

2. Kementrian Kesehatan Republik Indonesia 2006 Pedoman penanggulangan Masalah kesehatan jiwa dan psikososial pada masyarakat akibat bencana dan konflik *Keputusan Menteri Kesehat. Republik Indones. no 48* 14-7
3. Murthy R S and Lakshminarayana R 2006 Mental health consequences of war: a brief review of research findings. *World Psychiatry* 5 25-30
4. Porter M and Haslam N 2015 Predisplacement and Postdisplacement of Refugees and Internally Displaced Persons *J. Am. Med. Assoc.* 294 602-12
5. Syafwan R A, Simbolon M J and Camellia V 2019 The correlation between the level of anxiety according to the hospital anxiety and depression scale-anxiety subscale with the duration of illness, the age of the caregiver, and the age of first illness in the biological mother who takes care of boys with schizophrenia *Open Access Maced. J. Med. Sci.* 7 2656-60
6. Nur R and Mallongi A 2016 Impact of violence on health reproduction among wives in Donggala *Pakistan J. Nutr.* 15 980-8
7. Chee K-Y, Tripathi A, Avasthi A, Chong M-Y, Xiang Y-T, Sim K, Si T-M, Kanba S, He Y-L, Lee M-S, Fung-Kum Chiu H, Yang S-Y, Kuga H, Udormatn P, Kallivayalil R A, Tanra A J, Maramis M, Grover S, Chin L-F, Dahlan R, Mohamad Isa M F, Ebenezer E G M, Nordin N, Shen W W, Shinfuku N, Tan C-H and Sartorius N 2015 Country variations in depressive symptoms profile in Asian countries: Findings of the Research on Asia Psychotropic Prescription (REAP) studies *Asia-Pacific Psychiatry* 7 276-85
<https://doi.org/10.1111/appy.12176>
8. Prasetya E C 2017 Poster kongres nasional psikiatri komunitas: Gambaran Quality Of Life Pengungsi Sampang yang tinggal di pengungsian sementara Sidoarjo (Banjarmasin)
9. Shalev A Y 2010 Posttraumatic Stress Disorder (PTSD) and Stress Related Disorders *Psychiatry Clin. North Am.* 32 687-704
10. Tedeschi R G and Calhoun L G 2004 Posttraumatic Growth: Conceptual Foundations and Empirical Evidence *Psychol. Inq. An Int. J. Adv. Psychol. Theory* 15 37-41
https://doi.org/10.1207/s15327965pli1501_01
11. Riley A, Varner A, Ventevogel P, Hasan M M T and Welton-mitchell C 2017 Daily stressors , trauma exposure , and mental health among stateless Rohingya refugees in Bangladesh *54* 304-31
12. Brewin C R, Andrews B and Valentine J D 2000 Meta Analysis of Risk Factors for Posttraumatic Stress Disorder in Trauma Exposed Adults *J. Consult. Clinical Psychol.* 68 748-66
<https://psycnet.apa.org/doi/10.1037/0022-006X.68.5.748>
13. Beiser M and Wickrama K 2004 Trauma, time and mental health : a study of temporal reintegration and depressive disorder among Southeast Asian refugees *Psychol. Med.* 34 899-910
14. Mawani F 2014 Social Determinants of Refugee Mental Health *Refuge and Resilience - Promoting Resilience and Mental Health among Resettled Refugees and Forced Migrants* pp 27-50
15. Kimhi S, Eshel Y and Zysberg L 2010 Postwar Winners and Losers in the Long Run : Determinants

Relationship between Previous Traumatic Experience, Post-Traumatic Growth, Coping Strategy
to Mental Health State on Refugees in Sidoarjo Camp

- of War Related Stress Symptoms and Posttraumatic Growth *Community Ment. Health J.* **46** 10–9
16. İbrahim T, Michael D and Ceren E Z 2018 The Prevalence of Post-Traumatic Growth (PTG) in a Sample of Syrian Refugees Residing in İstanbul , Sultanbeyli *Istanbul Sehir Univ. J.*
 17. Siriwardhana C, Adikari A, Pannala G, Siribaddana S and Abas M 2013 Prolonged Internal Displacement and Common Mental Disorders in Sri Lanka : The COMRAID Study *PLoS One* **8**
 18. Seery M D 2015 Resilience : A Silver Lining to Experiencing Adverse Life Events ? *Curr. Dir. Psychol. Sci.* **20** 390–4
 19. Terracciano A, Costa P T, McCrae R R, Jr P T C and McCrae R R 2006 Personality Plasticity After Age 30 *Personal. Soc. Psychol. Bull.* **32** <https://doi.org/10.1177%2F0146167206288599>
 20. Lechner S, Zakowski S, Antoni M, Greenhawt M, Block K and Block P 2003 Do Sociodemographic and disease related variables influence benefit finding in cancer patients? *Psychooncology.* **499** 491–9 <https://doi.org/10.1002/pon.671>
 21. Sears S R, Stanton A L, Danoff-burg S and Armstrong L 2003 The Yellow Brick Road and the Emerald City : Benefit Finding , Positive Reappraisal Coping , and Posttraumatic Growth in Women With Early-Stage Breast Cancer *Heal. Psychol.* **22** 487–97 <https://psycnet.apa.org/doi/10.1037/0278-6133.22.5.487>
 22. Faraby M E 2016 Etos Kerja Islam Masyarakat Etnis Madura *SALAM J. Sos. dan Budaya Syari FSH UIN Syarif Hidayatullah Jakarta* **3** 21–38
 23. Latuperissa G R, Susanti I and Souliisa F F 2020 A Systematic Review of the Effect of Social Support on Post-Traumatic Stress Disorder in Post-Earthquake Adolescents *J. Ners* **15**
 24. Lazarus R S and Folkman S 1984 *Stress, appraisal, and coping* (Universitas Michigan: Springer Pub. Co.)
 25. Sugo M E, Kusumaningrum T and Fauziningtyas R 2019 Faktor Strategi Koping pada Pasien Kanker yang Menjalani Kemoterapi *Pedimaternal Nurs. J.* **5**
 26. Hapsari R A, Karyani U and Taufik 2002 Perjuangan Hidup Pengungsi Kerusakan Etnis (Studi Kualitatif tentang Bentuk bentuk Perilaku Koping pada Pengungsi di Madura *Indig. J. Ilm. Berk. Psikol.* **6** 122–9
 27. Alzoubi F A, Al-Smadi A M and Gougazeh Y M 2017 Coping Strategies Used by Syrian Refugees in Jordan *Clin. Nurs. Res.* **1**
 28. Sari D K, Dewi R and Daulay W 2019 Association between family support, coping strategies and anxiety in cancer patients undergoing chemotherapy at General Hospital in Medan, North Sumatera, Indonesia *Asian Pacific J. Cancer Prev.* **20** 3015–9 [DOI:10.31557/APJCP.2019.20.10.3015](https://doi.org/10.31557/APJCP.2019.20.10.3015)
 29. Khaddafi M R and Amin M M 2019 A case series from rantauprapat, la belle indifference: a coping mechanism or is there something organic behind? *Open Access Maced. J. Med. Sci.* **7** 2675–8
 30. Kroo A and Nagy H 2011 Posttraumatic Growth Among Traumatized Somali Refugees in Hungary *J. Loss Trauma Int. Perspect. Stress Coping* **16:5** 440–58 <https://doi.org/10.1080/15325024.2011.575705>
 31. Mawarpury M 2018 Analisis Koping dan Pertumbuhan Pasca-trauma pada Masyarakat Terpapar Konflik *Psikohumaniora J. Penelit. Psikol.* **3** 211–22
 32. Schweitzer R, Melville F, Steel Z and Lacherez P 2006 Trauma, Post-Migration Living Difficulties, and Social Support as Predictors of Psychological Adjustment in Resettled Sudanese Refugees *Aust. N. Z. J. Psychiatry* **40** 179–87 <https://doi.org/10.1080%2Fj.1440-1614.2006.01766.x>
 33. Good M J, Good B, Grayman J and Lakoma M 2007 *Laporan penelitian kebutuhan psikososial terhadap komunitas-komunitas di 14 kabupaten yang terkena dampak konflik di Aceh 2007* (Banda Aceh)
 34. Geltman P L, Grant-knight W, Mehta S D, Lloyd-travaglini C, Lustig S, Landgraf J M and Wise P H 2015 The “Lost Boys of Sudan” *Arch. Pediatr. Adolesc. Med.* **159** 585–91
 35. Alesyanti 2019 Cultural study on domestic violence in Batak community *Ital. Sociol. Rev.* **9** 97–117 <http://dx.doi.org/10.13136/isr.v9i1.213>
 36. Suhaiban H A and Grasser L R 2019 Mental Health of Refugees and Torture Survivors : A Critical Review of Prevalence , Predictors , and Integrated Care *Int. J. Environ. Res. Public Health* **16** 2–14 <https://doi.org/10.3390/ijerph16132309>