

Mental Health and Trauma Counselling Module as Strategy to Enhance Counsellors' Competency in Handling Trauma Cases Caused by Flood Calamity

Mohammad Nasir Bistamam¹, Samsiah Mohd Jais^{2*}, Nurul Hasyimah Mat Rani³, Mohammad Aziz Shah Mohamed Arip⁴, Noraini Ismail⁵, Muhammad Bazlan Mustafa⁶

Faculty of Education and Human Development, Sultan Idris Education University, Malaysia

DOI: 10.6007/IJARBSS/v7-i3/2750 URL: http://dx.doi.org/10.6007/IJARBSS/v7-i3/2750

Abstract

Bera and Temerloh are two districts in Pahang with the worst flood calamity recorded within the country towards the end of 2014 and early 2015. This calamity has destroyed not only properties, but also deeply affected the victims psychologically especially the students. Some of the victims show symptoms of crisis and trauma in short terms and long terms which are affecting the wellbeing of their lives. These victims might suffer Post Traumatic Stress Disorder (PTSD) if their symptoms of crisis and trauma are not treated accordingly. As such, the presence of counselling teachers competent in mental health and trauma counselling are essential in such critical moment. However, most counselling teachers are not well-trained particularly in handling mental health counselling in order to help the victims. There are four main objectives of the Knowledge Transfer Program (KTP): i) to develop human capital among the Graduate Interns (GI) who would be competent in handling and transferring the mental health and trauma counselling knowledge; ii) to enhance knowledge and competency level of the counselling teachers in managing mental health and trauma counselling; iii) to increase support, coping skills and resilience of the community to bounce back and recover from the symptoms of crisis and trauma caused by the flood; and iv) to acquire recognition to the academicians as experts in mental health and trauma counselling through the Mental Health and Trauma Counselling module (MHTC). The knowledge transfer program is implemented through workshops and practical training to 80 counselling teachers in Bera and Temerloh districts in Pahang. Results from the program show that: i) the GI have high competency level in handling the delivery of mental health and trauma counselling which includes mental healthcare, assessing the symptoms of crisis and trauma, managing the crisis and trauma intervention, and managing the trauma counselling; ii) the counselling teachers are competent in managing the mental health and trauma counselling which includes mental healthcare, assessing the symptoms of crisis and trauma, and trauma counselling; iii) the community members particularly the students who were traumatized by the flood received help through crisis intervention and trauma counselling by the counselling teachers who offered support to increased their coping skills and resilience; and iv) the academicians have received recognition



from various parties especially from the Districts Education Offices of Malaysia, Police, and the International Counsellors Association of Malaysia or PERKAMA International.

Keywords: Mental Health and Trauma Counselling Module, Counselling Teachers, Flood Calamity.

1. Background of the Program

The program which handles the skills and knowledge transfer of mental health counselling, namely the Mental Health and Trauma Counselling module or MHTC is suggested to be implemented in two districts in Pahang, namely Bera and Temerloh as they have both been terribly affected by the massive flood calamity. The flood tragedy has not only taken innocent lives but also destroyed properties including houses, farms and livestock. This has affected the income of the victims which also directly affects their psychology wellbeing and mental health as well. As such, the roles of school counsellors are important beside the psychiatrists and medical practitioners who are treating the patients experiencing mental disorder and trauma. Moreover, the school counsellors are the main helper to assist clients among students of affected families so that they could achieve and maintain their psychology wellbeing and positive mindset after the tragedy.

This program is carried out by joint venture and collaboration between the National Council of Counselling Teachers or 'Majlis Guru Kaunseling Kebangsaan' (MGKK) of Bera District, the Education Office of Bera District, and the Education Office of Temerloh District. The trainees consist of two Graduate Interns (GI) and 80 school counsellors from both districts. 20 of them are made up of district and school counsellors who are also members of the Smart Support Team (SST) established by the Education Ministry of Malaysia; while the other 60 school counsellors are from the secondary and primary schools in both Bera and Temerloh districts in Pahang.

This program involves six phases:

First Phase – conducting preliminary meeting with the National Council of Counselling Teachers in Bera District of Pahang particularly concerning the operating program and the roles of each party.

Second Phase — conducting training workshops; and skills and knowledge transfer to the Graduate Interns (GI) particularly concerning two aspects which involve understanding the MHTC module and managing the MHTC module.

Third Phase – conducting the training program of MHTC module whereby through the supervision and guidance from the academicians, the GI would carry out the program to the 80 counselling teachers from Bera and Temerloh districts. This phase involves four parts:

- A. Seminar on mental healthcare.
- B. Workshops and training on the assessment of crisis and trauma symptoms.
- C. Workshops and training on the management of crisis intervention.
- D. Workshops and training on the management of trauma counselling.



Fourth Phase – the school counsellors conducting series of talks on the importance of mental healthcare to all of the students; while giving mental health and trauma counselling sessions to students who show symptoms of crisis and trauma.

Fifth Phase and Last – collecting the outcome of program and report writing. The academicians, GI and Council of Counselling Teachers are responsible for this task.

2. Problem Statement

The massive flood tragedy which hits the east coast of peninsular Malaysia, particularly the state of Kelantan, Terengganu and Pahang towards the end of 2014 and early 2015 has brought increasing amount of stress to the affected victims, be it at home, school, workplace or many other different social settings; thus, affecting their psychology wellbeing and mental health. In Pahang, three districts namely Bera, Temerloh and Lipis are badly affected. The flood has not only taken innocent lives but also destroyed properties including houses, farms and livestock; therefore, directly affecting the income of the victims as well.

According to Neria et al. (2008) this critical situation has brought various psychology problems to the victims such as stress, traumatic stress, and crisis which in certain time frame might lead to acute stress reaction that involves emotional, cognitive, attitude and psychological reactions. If prompt assistance whether physically or psychologically are not provided to the traumatized victims, they might suffer Post Traumatic Stress Disorder or PTSD (Galea et al. 2008). Besides, some might even be depressed or lost hope because they cannot find a solution. As such, the professionals such as counselling teachers must equip themselves with knowledge, skills and technique/strategies to manage crisis and trauma cases because their services, whether effective or less effective, would greatly influence the wellbeing of the lives of the traumatized victims.

Smart Support Team (SST) was established by the Education Ministry of Malaysia to help the flood victims at schools by offering psychology support to the traumatized victims. Members of SST are school counsellors and each district has one SST team including in Bera and in Temerloh. However, the team members have never received training whether in theory, practical or clinically in regards to mental health and trauma counselling on how to handle critical cases and trauma from calamity like this.

In order to offer effective counselling, a counsellor must be competence in identifying, assessing the trauma and carry out intervention. If a counsellor does not possess the expertise to a particular problem of a client, the counsellor must refer to the expert related to that particular problem. In the context of mental health, prompt detection is essential so that client can be treated immediately. If the counsellors in local communities are well-trained in regards to skills and knowledge on mental health and trauma caused by calamity, this will surely contribute positively to the victims involved because early psychology assistance can be provided at once. As such, the Mental Health and Trauma Counselling module (MHTC) is designed to enhance the competency of counselling practices of the counsellors particularly on mental health and trauma (Samsiah et al. 2014). This training aims to enable the participants to understand the phenomenon of mental health, diagnose symptoms of crisis and trauma, to conduct trauma counselling and its necessary skills as well as offering the best trauma



counselling practices. At the end of the training, participants will be able to enhance their knowledge, skills and the quality of practices related to mental health and trauma; thus, able to assist the victims among children, adolescent and adults who are traumatized by the flood tragedy and show moderate symptoms of trauma particularly in Bera and Temerloh districts in Pahang.

3. Literature Review

According to Associate Professor Dr Intan Hashimah Mohd Hashim, a lecturer of Social Psychology at the Social Sciences Research Centre of USM, any calamity would caused huge psychology impact to the victims; children, adults or even elderly. Moreover, even those who are not involved directly (only observing) could be affected as well. Besides, the effect is not necessarily rapid, but could also happen in long term after the tragedy. The psychology impact could be emotional trauma such as fear, depression, anxiety, feeling of guilt, insomnia or withdrawal from family and friends. Situation could be worst for those who have lost their loved ones (Nursyamimi Saidi; Utusan Malaysia, 6 January 2015). Apart from that, Nur Hafiza Ishak (2008) has conducted a case study on children of the flood calamity in Johor which happened towards the end of 2006. Findings of the study indicated that there were emotional reactions caused by the flood among the victims. The emotional reactions were related to their experience of losing their loved ones and shipwreck during the flood.

Ira Erwina (2010) has recorded the effect of the horrible tsunami in Aceh in 2004 which have left deep psychological scars. The study conducted among the residents of Aceh in September 2006 after the tragedy shows that 65% of them experienced depression, 69% were distressed while 34% have PTSD. A repeated study in 2007 conducted in 14 districts in Aceh shows that 35% of the victims suffered from depression, 10% have PTSD and 39% were distressed (Frankenberg et al. 2008).

Solomon and Green (1992) on the other hand, made a review based on 49 articles of studies and books on the psychological effect of calamity. They found out that most scholars recorded negative psychological effect towards both men-made and natural calamities. Norris et al. (2002) agreed after commenting on 177 articles which discussed about 80 different calamities. Furthermore, Norris et al. had listed out the negative effects of the most documented calamities into five categories:

- i. specific psychiatric problem (such as PTSD, depression);
- ii. unspecify stress (symptoms without certain diagnosis, such as demoralization, visible stress, and negative effect);
- iii. health problem and anxiety (complaint on somatic, sleep disorder, increase medical leave);
- iv. chronic problem in life (social disorder, family conflict, financial and work stress); and
- v. loss of psychosocial source (withdrawal from social activity and support).

Norris et al. (2002) also found out that children are more vulnerable to experienced psychological trauma, experienced changes in attitude, failure or feeling of deterioration. Study by Yule et al. (2000) and showed that calamities that happened in young age might result in



long term psychological effect. Based on a study which recorded the development of a group of adolescents who have experienced shipwreck, result showed more than one third of the adolescents experienced PTSD after the tragedy and the effect goes on even after five or eight years later.

Several psychology approaches have proven its effectiveness in treating traumatized victims. Some cognitive techniques which are often practiced such as Stress Inoculation Techniques (SIT) through thought stopping, guided self-dialogue, and psychoeducation (Resick and Calhoun, 2001) have proven its effectiveness in reducing the symptoms of maladaptive stress. According to Foa et al. (2000), SIT has proven its effectiveness in reducing the symptoms of PTSD among victims of sexually assaulted women. Based on the research, the nine sessions of SIT which were held once a fortnight have shown positive outcomes compared to the usual support counselling sessions. Besides, it also showed similar effect with the prolonged exposure technique, and the combination of SIT/ prolonged exposure.

According to Riethmayer (2002), a traumatized experience would cause the individual (victim) to see the world as insecure, unpredictable, bad and hopeless. Moreover, trauma often destroyed the lives of the victims in which the normal world before the incident no longer exist and seems impossible. As such, trauma counselling is a process of exploration and of working through the loss so as to recover the lives of the victims before the tragedy. In order to achieve that, one of the main tasks of trauma counselling is to help clients discover their new definition of 'normal'. Their definition of lives must be redefined, not as before but as it is presently.

The roles of school counsellors are important beside the psychiatrists and medical practitioners who are treating patients with mental disorder and trauma. Moreover, the school counsellors are the main helper to assist clients so that they could achieve and maintain their psychology wellbeing and positive mindset after the tragedy. As such, counselling services is an essential alternative which could help an individual achieve a healthy state of mind and emotion. Besides, counselling also enable a person to realize the importance of maintaining a good mental health as in congruent with the objectives of Health Ministry of Malaysia as well as the objectives of the World Health Organization (WHO). Furthermore, a competent counsellor can also help the traumatized victims regain their emotional stability; thus, enhance mobility (Samsiah et al. 2014).

In other words, counsellors must equip themselves with knowledge and skills on mental health and trauma whether through formal or informal education (short term course, training, workshops, forum, etc). As a result, Samsiah et al. (2014) have invented a module of mental health and trauma counselling practices which intergrates the components of mental health and trauma. The MHTC module can serves as a guideline to the counsellors while conducting counselling sessions for clients with problems dealing with mental disorders and trauma. This module has been chosen to enhance the knowledge transfer program. Besides, this module was invented by Samsiah et al. (2014) under the Research Grant of FRGS Higher Research Department of the Education Ministry of Malaysia. The development of MHTC module involved several academic phases, such as:



- i. Through literature review to acquire firm theories as the foundation of this module; to discover the latest approaches and techniques in managing psychology crisis and trauma cases caused by traumatic incidents which are practical for Malaysian culture.
- ii. To acquire feedbacks from local and oversea experts concerning the content and activities within the module.
- iii. To develop the overall content of the module includes the activities to enhance skills, additional notes to improve knowledge and case studies to increase awareness of counsellors on mental health and trauma counselling.
- iv. To test the validity of the module's content through a group of panels consist of local and oversea experts in the field of mental health counselling. Results showed that MHTC module has high content validity with .83.

To test the reliability of the module by using Cronbach Alpha technique based on the written reports of a group of counsellor participants who have undergoned training by using this module. The reliability value of the overall module is high with .947.

4. Objectives and Expected Results of the Program

This program aims to:

- i. Train and enable the Graduate Interns (GI) to cultivate and master the competency of mental health and trauma counselling.
 - Expected result GI competent in managing mental health and trauma counselling based on MHTC module which includes the aspect of mental healthcare, assessing the symptoms of crisis and trauma, crisis intervention and trauma counselling; and competent in transferring knowledge and skills to the counselling teachers.
- ii. Train the counselling teachers to master competency of mental health and trauma counselling.
 - Expected result the counselling teachers are competent in handling the mental health and trauma counselling based on MHTC module which includes the aspect of mental healthcare, assessing the symptoms of crisis and trauma, crisis intervention and trauma counselling.
- iii. Increase support, coping skills and resilience among the traumatized victims through crisis intervention and trauma counselling.
 - Expected result the symptoms of crisis and trauma of the traumatized victims are restored through crisis and trauma intervention provided by the counselling teachers.
- iv. Upgrade recognition to the academicians as experts in the field of mental health and trauma counselling through MHTC module. Expected result academicians are recognized as experts in the field of mental health and trauma counselling by the government agencies and NGO.



5. Types of Knowledge Transferred and Method of Program Implementation

The types of knowledge transferred in this program are:

- i. Knowledge and awareness on good mental healthcare.
- Knowledge and skills on assessing the symptoms of crisis and trauma caused by calamity.
- iii. Knowledge and skills on crisis intervention caused by calamity.
- iv. Knowledge and skills on trauma counselling caused by calamity.

The program is implemented through workshops. There are four workshops in the program implementation include:

A. Graduate Interns (GI) Competency Workshop conducting the MHTC module which involves:

- Orientation of Mental Healthcare
- Assessing the Symptoms of Crisis and Trauma
- Crisis Intervention
- Trauma Counselling
- B. Counselling Teachers Competency Workshop Awareness on Mental Healthcare and Assessing the Symptoms of Crisis and Trauma Based on MHTC Module.
- C. Counselling Teachers Competency Workshop Managing Crisis Intervention Based on MHTC Module.
- D. Counselling Teachers Competency Workshop Managing Trauma Counselling Based on MHTC Module.

6. Result And Impact of The Program

Results and impact of the program are evaluated based on the following four criteria:

- i. Human Capital Development (marketability of the graduates GI)
- ii. Results to the counselling teachers as the targeted community
- iii. Results to the traumatized victims caused by the flood as the targeted community
- iv. Rewards to the Public Institutes of Higher Learning or IPTA (recognition to the academicians)

6.1 Human Capital Development

This program involves two (2) GI. This program has not only increased the competency level of the GI who are also master degree scholars in terms of knowledge and skills of general counselling, but has also increased their level of competency in specified counsellingknowledge. Moreover, the Knowledge Transfer Program has also enhanced their skills and knowledge in mental health and trauma counselling; therefore, better equipped our graduates for the working world and directly increased their marketability value. Table 1 below shows the results and impact on the GI after they have undergone this knowledge transfer program.



Table 1: Results and Impact of KTP Program on Graduate Interns (GI)

No.	Program Results on GI	Program Impact on GI
1	The Graduate Interns (GI) who are also	The Graduate Interns are
	postgraduates scholars are able to increase their	competent in managing crisis
	knowledge and possess skills about mental health	intervention.
	and trauma counselling to better prepare	
	themselves to enter the working world with	The Graduate Interns are
	higher confidences and skill level; hence, directly	competent in managing mental
	increased their marketability value as counsellors	health and trauma counselling.
	whether in private or public sectors.	
2	The Graduate Interns are able to manage the real	The Graduate Interns are
	situation in workplace whether handling,	competent in managing
	discussing or training as well as monitoring the	workshops on:
	local community which shows symptoms of crisis	i. Awareness on Mental
	and trauma.	Healthcare
		ii. Diagnosis of Symptoms of
		Crisis and Trauma
		iii. Crisis Intervention
		iv. Trauma Counselling
3	The Graduate Interns are able to cultivate	The Graduate Interns are able to
	practical and higher level of soft-skills while	demonstrate higher level of soft-
	handling crisis and trauma cases in critical	skills such as:
	situation such as assessing, communication skills,	i. Self-leadership
	critical thinking, problem-solving skills, leadership	ii. Communication Skills
	skills, teamwork, long-term learning, ethics and	iii. Problem-Solving Skills
	professional morale, etc.	iv. Critical and Creative
		Thinking

6.2 Results and Impact to the Counselling Teachers as Targeted Community

This program involves two GI and 80 counselling teachers from Bera District and Temerloh District who would directly be benefited from this knowledge transfer program. Besides, students with psychology problem in Bera District and Temerloh District who suffered from mental disorders and trauma caused by the flood calamity in these districts would also gain benefits through the mental health and trauma counselling sessions and program at schools provided by the counselling teachers.

The results and impact of this program towards the community could be observe in three (3) aspects, namely GI's competency in transferring knowledge to the community, counselling teachers' competency in managing mental health and trauma counselling, and the traumatized victims as the community members. Both monitoring processes include the fieldwork monitoring and program outcomes monitoring are still ongoing until May 2017; therefore, the results and impact towards the community could only be evaluated objectively by looking into



two aspects, namely GI's competency and counselling teachers' competency. Table 3 below shows the results and impact towards the counselling teachers as the community after they have undergoned this knowledge transfer program.

Table 2: Results and Impact of KTP Program towards Community

No.	Program Results on Community	Program Impact on Community
1	The Graduate Interns (GI)' competency level has increased in managing MHTC module which involves:	The GI could deliver awareness on mental healthcare. The GI could demonstrate the ways to
	- Orientation of Mental Healthcare	assess the symptoms of crisis and
	- Assessing the Symptoms of Crisis and	trauma.
	Trauma	The GI could demonstrate the ways to
	- Crisis Intervention	apply crisis intervention skills.
	- Trauma Counselling	The GI could demonstrate the ways to
		apply trauma intervention skills.
2	The counselling teachers' awareness	The counselling teachers have the skills
	towards mental healthcare has	to deliver talks on mental healthcare to
	increased.	the students at school.
3	The knowledge and skills of the	The counselling teachers have the
	counselling teachers in assessing the	knowledge and skills to assess the
	symptoms of crisis and trauma have	symptoms of crisis and trauma among
	increased.	students who show specific symptoms of
		crisis and trauma.
4	The knowledge and skills of the	The counselling teachers are competent
	counselling teachers in managing crisis	in managing crisis intervention sessions
	intervention sessions have increased.	among students who show symptoms of crisis.
5	The competency level of the	The counselling teachers are competent
	counselling teachers in managing	in managing trauma counselling sessions
	trauma counselling sessions have	for students who show symptoms of
	increased.	trauma.
6	Program results to the traumatized	Program impact to the traumatized
	victims caused by flood – could not be	victims caused by flood – could not be
	objectively evaluated yet because the	objectively evaluated yet because the
	monitoring for both fieldwork and	monitoring for both fieldwork and
	outcome processes are still ongoing	outcome processes are still ongoing until
	until May 2017.	May 2017.

6.3 Results and Impact to the Traumatized Victims as Targeted Community

The results and impact of this program towards the traumatized victims as targeted community are evaluated by observing the flood victims among students who suffered from symptoms of



crisis and trauma. However, the results could not be objectively evaluated yet because the monitoring for both fieldwork and outcome processes are still ongoing until May 2017.

Table 3: Results and Impact to the Traumatized Victims as Targeted Community

No.	Program Results to the Victims	Program Impact to the Victims
1	Program results to the traumatized	Program impact to the traumatized victims
	victims caused by the flood – could not	caused by flood – could not be objectively
	be objectively evaluated yet because the	evaluated yet because the monitoring for
	monitoring for both fieldwork and	both fieldwork and outcome processes are
	outcome processes are still ongoing until	still ongoing until May 2017.
	May 2017.	

6.4 Rewards to the Public Institutes of Higher Learning (Recognition to the Academicians)

This program involves four (4) academicians. After the implementation of knowledge transfer program in Temerloh, Pahang, the academicians have received recognition through the results and impact as indicated in Table 4 below.

Table 4: Rewards to Public Institutes of Higher Learning

No.	Recognition Results to the	Recognition Impact to the Academicians	
	Academicians		
1	Become the experts in the field of	Able to provide consultation services on	
	mental health and trauma counselling	mental healthcare and assessing the	
	for the Education Offices of Kuantan,	symptoms of crisis and trauma.	
	Pekan, and Jerantut districts in Pahang;		
	for the Education Office of Hulu	Competent in managing consultation	
	Selangor District in Selangor; for the	services in crisis intervention.	
	Education Office of Middle Perak		
	District in Perak; for the Education	Competent in managing consultation	
	Offices of Kota Star and Alor Star	services in mental health and trauma	
	districts in Kedah; the Education Offices	counselling.	
	of Tawau and Lahad Datu districts in		
	Sabah; the Police College; as well as for		
	the Counselling Association of Malaysia		
	(PERKAMA) in the following aspects:		
	i. Awareness on Mental Healthcare		
	ii. Assessing the Symptoms of Crisis		
	and Trauma		
	iii. Crisis Intervention		
	iv. Trauma Counselling		



7. Summary

The Knowledge Transfer Program which was implemented through the Mental Health and Trauma Counselling Module to the counselling teachers of two districts in Pahang, namely Bera and Temerloh has benefited various parties with plenty of outcomes and impact such as the development of human capital, targeted community and rewards to the IPTA. The results and impact to the development of human capital has increased the marketability value of our graduates through higher level of competency in managing and transferring knowledge and skills while conducting the mental health and trauma counselling. As for the community, this program has enhanced the competency level of the school counsellors in managing crisis and trauma cases caused by the massive flood calamity which had hit the country towards the end of 2014 and early 2015. Furthermore, the traumatized victims among students have benefited a lot when their school counsellors have assisted them in overcoming the symptoms of crisis and trauma caused by the flood. Besides, this program has also led to rewards to the IPTA especially to the Sultan Idris Education University whereby the academicians involved in this program have received recognition as consultants in the field of mental health counselling. So far, Districts Education Offices all around Malaysia, the Police College and the Counsellors Association of Malaysia (PERKAMA) have consulted our academicians regarding this matter.

Calamity such as flood often hits our country especially towards the end and early of the year. As such, places with frequent flood calamity such as Bera and Temerloh are bound to experience the same tragedy again in the future. When calamity hits, prompt assistance such as the basic needs like food, drinks and security could have arrive late; hence, support particularly in the form of psychology is much needed from the support team in the local community in such crisis and critical situation. As such, the counsellors from the local community who have acquired knowledge and skills on mental health and trauma caused by calamity through specified training in this matter could have leave a deep impact and provide early psychology support to the victims involved.

Acknowledgement

After the main body of paper please insert acknowledgement of all those (personals or institutions) that have helped in conducting this study.

- Knowledge Transfer Program was funded by Department of Higher Education, Ministry of Education Malaysia
- 2. National Council of Counselling Teachers of Bera District,
- 3. Education Office of Bera District,
- 4. Education Office of Temerloh District,
- 5. International Counselling Association of Malaysia (PERKAMA INTERNATIONAL)

Corresponding Author

Samsiah Mohd Jais[,] Department of Psychology and Counseling, Universiti Pendidikan Sultan Idris, samsiah@fppm.upsi.edu.my



References

- Foa, E. B., Keane, T. M., & Friedman, M. J. (2000). *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies* (Eds.). New York: Guilford.
- Frankenberg, E., Friedman, J., Gillespie, T., Ingwersen, N., Pynoos, R. (2008). Mental health in Sumatra after the tsunami. *American Journal of Public Health*, *98*, 1671-1677.
- Galea, S., Nandi, A. K., & Vlahov, D. (2005). The epidemiology of post-traumatic stress disorder after disasters. *Epidemiologic Reviews*, *27*(1), 78-91. Retrieved from http://dx.doi.org/10.1093/epirev/mxi003
- Ira, E. (2010). Pengaruh Cognitive Behavior Therapy terhadap Post Traumatic Stress Disorder pada penduduk pasca gempa di Kelurahan Air Tawar Barat Kacaatan Padang Utara Propinsi Sumatra Barat. Tesis Program Magister Ilmu Keperawatan. Universitas Indonesia.
- Neria Y, Nandi A, Galea S. (2008). Post-traumatic stress disorder following disasters: A systematic review. *Psychological Medicine*, 38 (4):467–80.
- Norri,s F.H., Friedman, M.J., Watson, P.J., Byrne, C.M., Diaz, E., Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981–2001. *Psychiatry*, 65: 207-39.
- Nur Hafizah, I. (2008). *Pengalaman dan reaksi emosi kanak-kanak mangsa banjir*. Latihan Ilmiah yang tidak diterbitkan. Universiti Malaysia Sarawak.
- Nursyamimi, S. (1/2015). Jangan abai kesan psikologi mangsa banjir. Utusan Malaysia
- Resick, P.A. and Calhoun, K.S. (2001) Posttraumatic Stress Disorder, in Harlow (ed.) *Clinical handbook of psychological disorders*, 3rded. The Guilford Press.
- Riethmayer, J. (2002). Working with the impact of trauma. In D. Bass & R. Yepp (Eds.), *Terrorism, trauma, & tragedies: A counselors' guide to preparing and responding* (pp. 27-31). Alexandria, VA: American Counseling Association
- Solomon, S.D., Green, B.L. (1992). Mental health effects of natural and human-made disasters. *PTSD Research Quarterly*, 3(1): 1-8.
- Yule, W., Bolton, D., Udwin, O., Boyle, S., O'Ryan, D., Nurrish, J. (2000). The long-term psychological effects of a disaster experienced in adolescence: I: The incidence and course of PTSD. *Journal of Child Psychology and Psychiatry*, 41(4): 503-11