

## THE IMMEDIATE AND POST FLOOD MID-TERM OF FLOOD VICTIMS- PSYCHOSPIRITUAL MODULE

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### **Abstract**

*The exploration of the psychological aspect of flood victims and the needs for development of a psychological module for such victims is vital especially after a major flood incident. However, there are no consensus on the availability of interventions that could be applied at an instant to address the traumatic experiences immediately or a short while after a flood incident. The purpose of this study is to develop a Flood Victims-PsychoSpiritual Module (Modul PsikoSpiritual-Mangsa Banjir; MPS-MB) that will be applied to flood victims in Sabah and Sarawak as well as Peninsular Malaysia. A total of 14 flood victims in Gua Musang, Kelantan and Kuching, Sarawak have been recruited in this investigation. Participants were selected from recorded victims registered under the flood victim relocation center. The study has adopted the exploratory sequential design which includes Phase 1: Qualitative study, the Interim Phase: Module development process, and Phase 2: Validation of the module by an expert of disaster psychology. There are five strategies which serve as the core of the development of the MPS-MB which are 1) understanding trauma, 2) the psycho-social strategies in combatting trauma, 3) the hope strategy, 4) the spiritual/religious strategy, and 5) the counseling and therapy strategy. The content validity of the MPS-MB were conducted by an expert in psychology. The MPS-MB is able to generate an in-depth understanding of the authentic psycho-spiritual experiences of flood victims. The module would empower the society, especially flood victims to take precaution in managing and minimizing the psychological impacts of flood incident.*

**Keywords:** Module, psycho-spiritual, disaster, flood victims, post-flood, traumatic incidents, psychological trauma

### **Introduction**

Flood disaster occurs in Malaysia yearly, however, the heavy flood in 2014 and early 2015 has devastated many states in Malaysia. The Malaysian National Security Council (MKN) has reported a total of 23,874 flood victims, which affected 6,434 families in Sabah and Sarawak [1]. Various government and non-government agencies have extended their help to flood victims which includes clean water, foods, clothing's, and others to those who were in the relocation center.

Although there is a clear needs of the disaster victims to receive support like urgent medical attention, shelter, rations, or finances which are categorized as material provision, many disaster victims also require socio-emotional support, as well as effective rehabilitation [2]. The absence of

urgent socio-emotional support for post-disaster victims would lead to long-term negative psychological consequences such as depression.

### ***The Urgency of Interventions for Disaster Victims***

There are several psychological and social modules that have been developed in the context of Malaysian society such as the Group Counseling Module CTRT [3], The Adolescents' Happiness Module [4], The Family @ Work Module [5], The Persons with Disability Entrepreneurship Development Module [6], The Students' Socio-Emotional Intelligence Module [7], The Manual for Positive Youth Development (PSY4LIFE) Programme [8], and The Child Marriage Interactive Module: Preventing Child Marriage [9]. Notwithstanding, there are no modules in Malaysia that are catered for post-disaster victims.

With that being the case, the needs for interventions for disaster victims is imperative and should be given the attention by researchers especially in decreasing psychological distress. For instance, one study has suggested the importance of self-efficacy in facing difficult circumstances [tends] to prevent long-term psychological distress. In this case, there is a dominant impact of self-efficacy coping strategy on post-traumatic symptoms. There is also an investigation that stresses the importance of avoiding non-effective interventions and thus, developing effective services to assist disaster victims in the future [11]. Hence, there is a desperate need for the development of interventions that are effective for disaster victims in order to inhibit long-term psychological distress [10, 11].

There are a few methods that could possibly be applied as an early intervention [12]. For instance, the use of behavioral-cognitive focused technique for individuals experiencing traumatic stress although there are no signs of recovery. Other than that, there are interventions for improved safety, establishing relationships, as well as immediate physical and emotional support. A psycho-social intervention program ideally, is crucial in disaster management plans. The researcher propose that a staged or stratified treatment module provide a solution in post-traumatic management with the objective of providing education and information for those impacted by trauma, as well as identifying individuals that have benefitted from the interventions.

### ***Methods of Interventions for Disaster Victims***

Indonesian researchers have utilized the hope approach that is originally applied in the palliative care to manage the emotional and psycho-social state of lava flood victims [13]. The hope approach includes a few sessions for goals identification, as well as developing and enhancing strategies to achieve the goals. The approach has been found to be effective in reducing the rate of depression among disaster victims.

Other than that, psycho-social interventions have been applied on the terrorist victims in Istanbul [14]. The Union of Psychosocial Services in Disasters as carried out psycho-social activities through the "Gungoren Psychosocial Support Centre." Three steps are involved in the psycho-social intervention which includes home visits, clinical interviews, and a referral. The survivors were advised to seek mental health services. The survivors' ability to cope and the inducement of hope in the survivors were improved through the spreading of information, as well as the mobilization of local personnel. The three steps that have been conducted on more than 300 victims have proven the long-term effectiveness of the effort to identify the psycho-social needs and providing psycho-social services. Consequently, an immediate intervention after a disaster indeed is very effective in assisting surviving victims.

Education on the psychological impact after a disaster is a strategy that could mitigate the adverse effects of the disaster, by providing the victims with a cognitive framework of the expected psychological reactions to the event [15]. For example, a psycho-social interventions that has been given to earthquake victims involving parents and children which has been proven to benefit them after they have learned the psychological impacts after a disaster. Furthermore, the findings have

also indicated that the effectiveness of the intervention could be enhanced through the improvement of the methods which the intervention is carried out.

Hence, the needs for intervention modules which are not based on counseling or therapy is relevant for post disaster victims in order to facilitate hopefulness in them, which could assist in restoring the functionality of their lives. This is emphasized in the official website of the American Psychological Association asserting that psychologists involved with post disaster victims will not provide therapy but assist victims to construct their inner strength throughout the recovery process.

Nevertheless, no consensus has been reached on the availability of interventions that could be applied immediately or several months (mid-term) for post flood victims [17]. Several interventions that has commonly applied to post flood victims failed to combat prolonged stress such as PTSD [18]. Consequently, the development of a psychological interventions module for post flood victims is highly needed.

## **Methodology**

### ***Research Design***

The study has applied the exploratory sequential design, which begins with Phase 1: Qualitative study (interviews) and the interim phase (the development of the PsychoSpiritual Module-Flood Victims; MPS-MB), and Phase 2: Evaluating the content validity of the module. This module can be used by government agencies, non-government organizations (NGOs), and volunteers who are involved in post flood management efforts.

### ***Samples***

The study has adopted the purposeful sampling method. Participants were recruited from the victims recorded under the Department of Social Welfare Malaysia (JKM) in Kuching, Sarawak and Gua Musang, Kelantan. A total of 14 participants were involved in this investigation (i.e. Kuching n = 4; Gua Musang n = 10).

### ***Research Location***

The study was taken place in the Gua Musang county of Kelantan and Kuching which is the capital of Sarawak.

### ***Interview Protocol***

During the qualitative study, the researchers has developed an interview protocol which is comprised of open-ended and semi-structured questions. Example of the questions being asked are “During the flood, do you panic, worried, sad, cry, or angry?” and “What activities that you have done after the flood to rebuild a new life?”

## **Results and Discussions**

### ***Phase 1: Qualitative Study***

The purpose of the first phase is to identify the activities and programs to be included in the MPS-MB. Five themes have been constructed based on the analysis which are a) understanding trauma, b) the psycho-social strategy in combatting trauma, c) the hope strategy, d) the spiritual/religious strategy, and e) the strategy of counseling and therapy.

The five themes constructed are inter-related. Specifically, understanding traumatic experiences is crucial for flood victims to better adapt to trauma. The understanding of trauma will empower victims to identify necessary steps to take after experiencing traumatic events as there are victims who felt trapped due to the loss of vital resources such as life necessity, relationships with others, as well as emotional disturbances like sadness and trauma. This might due to the victims’ lack of understanding of traumatic experiences, resulting in the inability to cope with the event. With that being the case, proper understanding of trauma is necessary for flood victims, or those who are at risk to facilitate their recovery from traumatic experiences [19].

In general, traumatic experiences affect the psycho-social states of flood victims which means, social supports for victims is crucial. An immediate social support services can be conducted immediately by the community by gathering affected members in a safe place and conduct joint activities such as grouped prayers or providing assistance to those who are in need. The study has discovered that flood victims that grouped together has the tendency to discuss their experiences as well as sharing their available resources with others. This indicates that victims require social supports amongst themselves, other individuals, as well as from support providers. On that account, an intervention strategy need to be setup in a way that enhance the existing capabilities of the community to form an immediate post flood psycho-social support system [20].

Major flood incidents have a critical impact on the victims psycho-social well-being especially when it involved the loss of love ones and properties which led to the feeling of despair. Consequently, the hope intervention is a much needed approach in the effort of restoring the victims lost reverie. Various actions could be applied to replenish the spirit of flood victims. Spending time and listening is an easy approach for flood victims to express their hope and feelings such as the hope for a miracle despite the fact that losing their loved ones is definite [21]. This intervention is suitable for flood victims who give up easily after a disaster as they would be able to strive for the future through their thoughts and expressions on how life should be continued. Thus, the hope intervention has been identified as a key ingredient to assist flood victims to have a more positive perspective on the future.

Spiritual or religious intervention is one of the important element to aid in the recovery of flood victims since the majority of the respondents have stated that what has happened is the power of God. However, unresolved stress remain a disruptor to the victims' lives. Since spiritual beliefs influence how individuals perceive the world [22], victims may attempt to seek comfort from their beliefs. The spiritual beliefs could assist victims to cope and develop resilience to traumatic events. Likewise, disaster could also strengthen spiritual connections as victims would try to find the meaning of the disaster. The spiritual connections are mostly attributed to the victims' negative emotions, as well as physical symptoms related to the disaster in which the victims will use spiritual principles to cope. Findings have also indicated that religious or spiritual practices could facilitate children to develop resilience to traumatic events. Cultural practices and values enable children to cope within their capabilities [23].

For some flood victims, especially younger ones, they tend to experience critical stress such as sleep disturbances, extreme shock, as well as lack of resilience. Therapy and counseling is perceived as a useful tool for flood victims especially for those who are difficult to adapt and cope with the stress experienced. Studies have proven that disaster victims suffers from various psychological problems such as PTSD, anxiety, symptoms of depression, as well as physical and emotional weaknesses [24, 25] although the manifestation of these symptoms might differ between individuals. Some victims might also experience sleep disturbances which are accompanied by nightmares with flashbacks of the poor living conditions they are in now, for which the symptoms are only temporary; the needs to express one's personal experience of the disaster; fear and worried about personal safety and loved ones; sadness over the loss one, as well as loss of valuable properties. Victims might also experience difficulties in fulfilling tasks that require personal efforts without the help from others [24].

One possible way to assist such victims is through cognitive rehabilitation and grouped counseling as there is the tendency for individuals to group together to reach a common goal. In a group, individuals are able to communicate and achieve a goal in an innovative and productive manner [26]. It is not a doubt that an individual could not live well or thrive without any involvements in a group. With this being the case grouped counseling can be viewed as an effective tool in assisting the recovery of flood victims.

Cognitive therapy could also be applied to flood victims which is a psychotherapy based on the cognitive model. The main characteristics of cognitive therapy is the emphasis on irrelevant

thoughts and unrealistic cognitive assessment of an event on a person's feelings and behaviors [27]. Studies have discovered that cognitive therapy is highly effective in reducing symptoms of various psychiatric disorders such as depression, anxiety, phobia, and panic [28]. Deductively, counseling and cognitive therapy are approaches that could reduce stress and trauma experienced by post flood victims.

Table 1

*Units and Activities in the Flood Victims-PsychoSpiritual Module (MPS-MB)*

Unit	Activities
Unit 1 Understanding Trauma	This section aims to assist flood victims to understand the definition of trauma, how to measure trauma, causes of trauma, and responses to trauma. Activity 1: "What is trauma?" Activity 2: "How to measure trauma?" Activity 3: "What led me to experience trauma?" Activity 4: "What are my responses/reactions to trauma?"
Unit 2 The Psycho-Social Strategy in Combatting Trauma	Activity 5: "Talking and listening." Activity 6: "How to save yourself?" Activity 7: "Do not panic" (breathing exercises). Activity 8: "Relax" (progressive muscular relaxation exercises). Activity 9: "Emergency plans for family."
Unit 3 The Hope Strategy	This section aims to assist flood victims in identifying what they are trying to achieve even though they have been hit by flood disaster. Activity 10: "The hope intervention."
Unit 4 The Spiritual/Religious Strategy	Activity 11: "Accepting God's provision." Activity 12: "Spirituality and faith." Activity 13: "Religious practices" (remembering God, prayers, reading religious scriptures).
Unit 5 The Counseling and Therapy Intervention	This section involves CBT therapy and grouped counseling. Activity 14: "Trauma reactions management." Activity 15: "Promoting constructive thinking." Activity 16: "Restoring healthy social connections." Activity 17: "Grouped counseling" (cognitive approach).

***The Interim Phase: The development process of the Flood Victims-PsychoSpiritual Module (MPS-MB)***

After the activities and programs required have been identified, a draft of the MPS-MB has been made. A module is developed based on various rules and procedures in order to produce a module that is effective in its applications [3]. A module is considered effective when it is able to assist the clients in mastering the objectives forwarded by the module. The ability to master the module's objectives by the client is heavily related to creation procedures followed by the module developer(s) [29]. The development of the MPS-MB is based on the procedures outlined in the Module Construction Manual [3].

The Flood Victims-PsychoSpiritual Module (MPS-MB) were divided into five units which are comprised of 17 activities. This module serves as a guidance for volunteers in conducting trauma reduction programs amongst post flood victims. Programs of the module includes lecture, grouped discussion, interviews or questionnaire, storytelling, and games. The units and activities of the MPS-MB are presented in Table 1.

*The Flood Victims-PsychoSpiritual Module Workbook*

In addition to the MPS-MB, a workbook has also been developed which contains tasks and activities to assist flood victims in understanding and managing trauma through psychological and spiritual approaches. The contents of the workbook is in order with the activities in the MPS-MB. Activities in the workbook are divided into five units and 17 activities which include open-ended questions, questions that requires imagination, and problem solving.

### ***Phase 2: The Content Validation for the Flood Victims-PsychoSpiritual Module (MPS-MB)***

The second phase of the investigation focuses on validating the contents in the MPS-MB which is conducted by an expert in disaster psychology. Content validity is a systematic assessment of the quality and accuracy of contents in a module [30]. The MPS-MB has been reviewed by Professor Dr. Adi Fahrudin, who is a professional social worker, as well as a social work professor in Department of Social Welfare, Faculty of Social and Political Sciences, Muhammadiyah University of Jakarta. His expertise includes the psycho-social aspect of disaster, micro social work practices, social work education and training, children's welfare, psychosocial aspects of chronic and terminal diseases (oncology, mental illness, etc.). The investigation has only appointed one expert reviewers in order to reduce conflicting consensus on the contents [31]. Overall, the comments given by the expert are helpful in improving the module.

### **Conclusion**

The construction of the MPS-MB is based upon qualitative enquiry and would benefit flood victims or potential flood victims. The activities included in the module were based on responses and feedbacks from the victims themselves. The MPS-MB is expected to have a positive impact on the psychological well-being of flood victims.

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### **References**

- [1] Majlis Keselamatan Negara. (2015). *Statistik Mangsa Bencana Banjir*. Putrajaya: Majlis Keselamatan Negara.
- [2] Md Akhir, N., & Azman, A. (2014). Intervensi Psikososial Berasaskan Pendekatan Kerja Sosial bagi Komuniti Mangsa Banjir di Malaysia. *In International Social Development Conference 2014 (ISDC 2014)*, 12-13 August 2014, Bayview Hotel Langkawi, Malaysia.
- [3] Jusoh, A. J., Mohamad, Z., Abdul Rahman, A. M., Bistamam, M. N., Mohd. Arip, M. A. S., & Jusoff, K. (2011). Construction, Reliability and Validity of Choice Theory and Reality Therapy (CTRT) Group in Malaysian Problematic Students. *International Journal of Arts & Sciences*, 4(23), 391-404.
- [4] Bullare, F., Ismail, R., Pang, V., Halik, M., Chua, B. S., Madlan, L., Mutang, J. A., & Chan, A. (2012). *Pengujian, Penilaian dan Pembentukan Modul Psikologi Kebahagiaan Remaja Berumur antara 13-19 Tahun*. Laporan Penyelidikan FRG0252-SS-2/2010. Kota Kinabalu: Unit Penyelidikan Psikologi dan Kesihatan Sosial, Universiti Malaysia Sabah.
- [5] Gandhi, A. D., Lai, F. H., Lee, W. M., Md. Nor, M., Juhari, R., Ramachandran, V., & Woo, P. J. (2007). *Modul Keluarga @ Kerja*. Kuala Lumpur: Lembaga Penduduk dan Pembangunan Keluarga Negara.
- [6] Bahari, F. B., & Abd. Rani, F. (2016). *Modul Pembentukan Usahawan Orang Kurang Upaya*. Kota Kinabalu: Unit Penyelidikan Psikologi dan Kesihatan Sosial.
- [7] Madlan. M. (2016). *Modul Kecerdasan Emosi Sosial Pelajar*. Kota Kinabalu: Unit Penyelidikan Psikologi dan Kesihatan Sosial.

- [8] Cosmas, C., Chua, B. S., & Iqbal, S. H. (2016). *The Manual for Positive Youth Development (PSY4LIFE) Programme (Youth Psychological Well-Being and Life Effectiveness)*. Kota Kinabalu: Universiti Malaysia Sabah.
- [9] Bahari, M. I. B., Mad Kassim, A., Chong, C., Sedan, D. S. R., Adenan, S. H., Piny, S., & Muyong, E. (2018). *Modul Interaktif Perkahwinan Kanak-Kanak: Tangani Perkahwinan Kanak-Kanak*. Kota Kinabalu: Penerbit Majlis Penasihat Wanita Sabah.
- [10] Bosmans, W. G. M., & van der Velden, G. P. (2015). Longitudinal interplay between posttraumatic stress symptoms and coping self-efficacy: A four-wave prospective study. *Social Science & Medicine*, *134*, 23-29.
- [11] Witteveen, A. B., Bisson, I. J., Ajdukovic, D., Arnberg, K. F., Johannesson, B. K., Bolding, B. H., ... Olf, M. (2012). Post-disaster psychosocial services across Europe: The TENTS project. *Social Science & Medicine*, *75*, 1708-1714.
- [12] Roberts, N. (2009). Early intervention following traumatic events. *Psychiatry*, *8*, 297-300.
- [13] Retnowati, S., Ramadiyanti, D. W., Suciati, A. A., Sokang, Y. A., & Viola, H. (2015). Hope Intervention against Depression in the Survivors of Cold Lava Flood from Merapi Mount. *Procedia-Social and Behavioral Sciences*, *165*, 170-178.
- [14] Akman, P. (2010). Psychosocial intervention in response to bombings in Istanbul. *Procedia Social and Behavioral Sciences*, *5*, 1716-1720.
- [15] Sahin, H. N., Yilmaz, B., & Batigun, A. (2011). Psychoeducation for Children and Adults after the Marmara Earthquake: An Evaluation Study. *Traumatology*, *17*(1), 41-49.
- [16] American Psychological Association (2005). *What Do DRN Responders Do at Disaster Sites?* Retrieved on August, 11 from <http://www.apa.org/practice/programs/drn/index.aspx>.
- [17] Garson, G. D. (2005). *Discriminant Function Analysis*. Retrieved August, 11 from <http://www2.chass.ncsu.edu/garson/pa765/discriminat.htm>.
- [18] Rose, S., Bisson, J. & Wessely, S. (2003). *A Systematic Review Of Brief Psychological Interventions ("Debriefing") For The Treatment Of Immediate Trauma Related Symptoms and The Prevention Of Post-Traumatic Stress Disorder*. In R. Orner & C. U. Schnyder (Eds.) *Constructing Early Intervention after Trauma*. Oxford: OUP.
- [19] Australian Psychological Society (2018). Very frightening or distressing events may results in a psychological wound or injury. This trauma can result in difficulty in coping or functioning normally. Retrieved on May, 18 from [www.psychology.org.au/for-the-public/Psychology-topics/Trauma](http://www.psychology.org.au/for-the-public/Psychology-topics/Trauma)
- [20] Goyet, S., Rayamajhi, R., Gyawali, B. N., Shrestha, B. R., Lohani, G. R., Adhikari, D., ... Samuel, R. (2018). Post-earthquake health-service support, Nepal. *Bull World Health Organ*, *96*, 286-291.
- [21] Brymer, M., Jacobs, A., Layne, C., Pynoos, R., Ruzek, J., Steinberg, A., Vernberg, E., & Watson, P. (2006). *Psychological first aid: Field operations guide (2<sup>nd</sup> ed.)*. United State: National Child Traumatic Stress Network & National Center for PTSD.
- [22] Aten, J., & Boan, D. (2013). *Spiritual first aid: Disaster chaplain guide*. Wheaton, IL: Humanitarian Disaster Institute, Wheaton College.
- [23] Taylor, H., & Peace, R. (2015). Children and cultural influences in a natural disaster: Flood response in Sukarta, Indonesia. *International Journal of Disaster Risk Reduction*, *13*, 76-84.
- [24] Dudley-Grant, G. R., Mendez, G. I., & Zinn, J. (2000). Strategies for anticipating and preventing psychological trauma of hurricanes through community education. *Professional Psychology: Research and Practice*, *31*, 387-392.
- [25] Norris, F., Perilla, J., Ibanez, G., & Murphy, A. (2001). Sex differences in symptoms of posttraumatic stress: Does culture play a role? *Journal of Traumatic Stress*, *14*, 7-28.
- [26] McClure, B. A. (1990). The group mind: Generative and regressive groups. *Journal for Specialists in Group Work*, *15*, 159-170.
- [27] Beck, A. T., Rush, A. J., Shaw, D. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford.

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- [28] Knapp, P., & Beck, A. T. (2008). Cognitive therapy: Foundations, conceptual models, applications and research. *Re3v Bras Psiquiatr*, 30(Suppl II), 54-64.
- [29] Mohd. Noah, S., & Ahmad, J. (2005). *Pembinaan Modul: Bagaimana Membina Modul Latihan dan Modul Akademik?* Serdang: Penerbit Universiti Putra Malaysia.
- [30] Anastasi, A., & Urbina, S. (1997). *Psychological testing*. Upper Saddle River: Prentice-Hall.
- [31] Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, A-R. (2015). Design and implementation content validity study: Development of an instrument for measuring patient-centered communication. *Journal of Caring Sciences*, 4(2), 165-178.

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