

Knowledge in Handling Psychosocial Problems among Nurses on Disaster Response in Banda Aceh Hospitals: A Comparative Study

Cut Husna^{1,2}, Abdurrahman³, Hajjul Kamil⁴, Mustanir⁵, Isna Maulida Roza⁶ and Teuku Tahlil⁷

¹Post Graduate of Mathematic and Applied Science, Universitas Syiah Kuala, Banda Aceh, Indonesia

²Department of Medical and Surgical Nursing, Faculty of Nursing, Universitas Syiah Kuala, Banda Aceh, Indonesia

³Nursing Department, Ministry of Health Republic of Indonesia, Banda Aceh, Indonesia

⁴Department of Nursing Administration and Management, Faculty of Nursing, Universitas Syiah Kuala, Banda Aceh, Indonesia

⁵Professor at Department of Chemistry, Faculty of Sciences, Universitas Syiah Kuala, Banda Aceh, Indonesia

⁶Nursing Student Faculty of Nursing, Universitas Syiah Kuala, Banda Aceh, Indonesia

⁷Department of Community Health Nursing, Faculty of Nursing, Universitas Syiah Kuala, Banda Aceh, Indonesia

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Abstract: Aceh is vulnerable and high risk area of disasters such as floods, fires, earthquakes, tsunamis, landslides and tornadoes. Disasters have a significant impact on physical, psychological and psychosocial of the victims. Some behavioural related psychosocial problems such as suspicion, irritability, withdrawal, smoking, and drug abuse are affected to patients. Nurses who serve an important role in caring for the patients in the event of a disaster are required to have extensive knowledge in handling psychosocial problems that have worse impact on the patients. The aimed of this study was to identify the knowledge differences in handling the patient's psychosocial problems in disaster response between Maternal and Child and Meuraxa Regional Hospitals of Banda Aceh. The research was comparative study with cross sectional approach. The total sampling technique was used to select 295 respondents both of hospitals. The questionnaires developed by the researchers consist of 34 items in dichotomous scales. The questionnaire has passed the validity and reliability testing with a value of 0.811 and 0.958 respectively. Data were analyzed using independent t-test. The result of the study showed that mean value at Maternal and Child Hospital was 91.84 with SD = 8.538 and in Meuraxa General Hospital was 94.84, SD = 7.436 with p-value 0.003 (p<0.05). There is a significant difference between knowledge in handling psychosocial problem in disaster response among nurses in both hospitals. It is recommended for the hospital policy makers to develop the disaster training and disaster simulation to increase nurses' knowledge on psychosocial problems in disaster response.

1 INTRODUCTION

Disaster is a series of events that threaten human life caused by natural, non-natural and human factors which result in the emergence of casualties, environmental damage, loss of property and family and psychological impacts. Disasters can be natural or man-made, ranging from local to large-scale events. Disasters usually occur in stages, namely the pre-event phase, during the event, and after the event. Disasters are unpredictable and can result in chaos, loss of life and loss of property (Achora & Kamanyire, 2016), National Disaster Management Agency, 2008; Houston, Pfefferbaum, and Rosenholtz, 2012).

Indonesia is one of most high risk and vulnerable countries on the world prone to disasters, both natural disasters and man-made disasters. There are several factors that can cause disasters, such as geographical conditions, climate, geology, socio-cultural and political diversity (Ministry of Health, 2007).

Disasters in the 5 years period between 2010 - 2014 reached 1,907 disasters, consisting of 1,124 natural disasters, 626 non-natural disasters and 157 social disasters, while in 2014 the number of disasters was 456 disasters, consisting of 227 natural disasters, 197 non-natural disasters and 32 social disasters. In 2014 the number of disasters reached 1,567 which resulted in 568 deaths and missing, 2,680,133 people suffered and displaced, and

residential damaged 51,577 units (National Disaster Management Agency, 2014).

Disaster impacts on psychosocial well-being such as loss of family members, parents, siblings, work, place of residence and other property. This impact might trigger a mental health disorder, so it is important to be anticipated. Disaster resulting of various psychological problems such as loss of self-confidence, worries, phobias, decreased physical and mental abilities, and reduced adaptive ability (Smith & Grant, 2016). The psychosocial is as the comprehension of behaviours, attitudes, emotions and thoughts of individuals or groups, that involved historical, social and ideological environment and background in order to explain and solve the problems (Hofmeister & Navarro, 2017).

The most vulnerable groups to psychosocial disorders are children, adolescents, women and the elderly. In children and adolescents who experience traumatic events will lead to lack interest in social and school activities, children become rebels, eating disorders, sleep disorders, lack of concentration, posttraumatic stress disorder (PTSD) and alcohol abuse or prostitution. Psychosocial conditions for women resulting in a variety of psychological shocks such as loss of self-esteem, worries and even phobia symptoms that are excessive fear. While, the elderly decrease in physical and mental abilities. Several studies report that the involvement of nurses in handling psychosocial issues in disasters is still lacking, ignorance of roles, insufficient knowledge, lack of prior disaster experience and education and training related to handling the issue (Ranse, Lenson, & Nursprac, 2012).

Psychosocial is a dynamic relationship in the interaction between humans, behaviour, thoughts and emotions of individuals will be influenced by other people or social experiences. Psychosocial problems are social problems that have a negative impact to patients' well-being and influence to the emergence of mental disorders, such as post-traumatic stress disorder (PTSD). The Psychosocial problems may cause withdrawal, dependence, hostility and self-destruction (Forbes et al., 2011; ICN and WHO, 2009, Laluyan & Nurrachman, 2007; Schultz, Koenig, Whiteside, & Murray, 2012).

Disasters can cause some emotional reactions that can be influenced by biological factors (stress response), psychology (fear, anger, shock, sadness, etc.), and sociocultural (support and assistance for victims). Some behavioural and appearance responses related to psychosocial problems due to disasters can be manifested by suspicion, irritability, withdrawal, silence, loss/increase in appetite,

smoking, drug abuse, and others. Feelings and emotions are manifested by anxiety, feelings of guilt, grieving, denial, panic, fear, feelings of failure, blaming others, etc. Whereas thoughts, beliefs and perceptions are manifested by confusion, nightmares, disorientation, impaired concentration, memory disorders, difficulty making decisions, etc. (Gorman & Sultan, 2008).

Psychosocial problems are often occurred in disasters. Many countries have focused on physical services and financial problems rather than handling the psychosocial impacts of victims (Zokaefar, Mirbeigi, Eskash, & Dousti, 2015). The results of the study by Witteveen et al. (2012) state that the psychosocial problem results of screening there are 42-65% of adults at risk of post-disaster trauma, and those diagnosed with trauma by 50-62%, while the results of screening are 9-31% of children who are at risk of trauma, and 13-21% are diagnosed with post-disaster trauma.

Nurses are the largest population and frontline in hospitals that have roles and responsibilities in helping disaster victims. Nurses are required to have adequate competencies including knowledge, skills, and attitudes in responding to disasters through education and training programs and research related to hospital preparedness and disaster response (Thobaity et al., 2017). During and after disasters, the role of nurses is to provide psychological care, first aid mental health, and psychosocial care (Ranse et al., 2012). Nurses are not only limited to providing nursing care at the hospital but also must be able to work in disaster response so that they must be able to act according to competence in caring for disaster victims (Hammad, Arbon, Gebbie, & Hutton, 2017).

According to The European Network for Traumatic Stress/TENTS (2008) for psychosocial care following disasters and major incidents, described that the competencies of nurse classified: 1) Management of preparation and planning, 2) Immediate response (<1 week), 3) Response in the week first post disaster, 4) Response at 1 month after the disaster, 5) Response at 1-3 months after the disaster, 6) Response >3 months after the disaster.

Nichols (2003) interventions in caring psychosocial problems for injury/trauma patients including disaster victims consisted: 1) informational or educational care) 2) emotional care, 3) counselling care, and 4) provide support, advocacy, and referrals. Furthermore, the skills that must be possessed in monitoring patients' psychological conditions: 1) patient centered communication, 2) open versus closed questions,

and 3) good listening skills. Caring for disaster victims more be focused on physical problems and illnesses of patients, but psychosocial problems are often overlooked when a major problem when a disaster occurred. Several study report that many nurses have inadequate knowledge in recognizing psychosocial problems and less ability to respond to disasters properly (Suserud & Haljamäe, 2003).

The hospital is a public health service center that is most urgent when a disaster occurred. Readiness of services in hospitals to provide health care to the victims is an important indicator of the success of disaster response (Kaji, Langford, & Lewis, 2008). Meuraxa General Hospital (MGH). The MGH is a type B hospital owned by the Banda Aceh City Government which has 210 nursing staff. While, the Mother and Child Hospital is a special type B hospital owned by the Aceh Government, with 95 nursing staff. The MCH is in charge of providing health services to the community, especially mothers and child as well as other health services. The types of medical services include emergency services, outpatient services, inpatient services, surgical services and intensive care. Both of these hospitals located near the coastal area of Banda Aceh were totally damaged by the 2004 tsunami disaster and rebuilt by foreign aid or NGOs as part of the reconstruction phase of Aceh at that time. Recently, both hospitals receive referral patients from various districts and cities in Aceh province with various cases including victims of disasters and mass casualty incidents (BLUD RSIA, 2015; Public Relations RSUDM, 2016; Kemenkes RI, 2016). This research can be recommended for policy makers at both hospitals in preparing nurses' knowledge through education and training in handling patients with psychosocial problems due to disasters.

2 METHOD

The descriptive comparative is used in the study. This research was conducted with respect to the ethical principles in nursing research. It was approved after consideration by the Faculty of Nursing Ethics Committee of Universitas Syiah Kuala Banda Aceh. The respondents were all given all the required information about the research without any form of coercing and were asked to willingly sign the informed consent before commencing the study. The study was aimed to examine differences in nurses' knowledge in caring psychosocial problems in the disaster response at the Maternal and Child Hospital (MCH) the Meuraxa

General Hospital (MGH) of Banda Aceh. A cross-sectional design with a total sampling method of 315 respondents was used in the study. The exclusion criteria for the sample are nurses who did not undergoing annual leave/birth leave. Then, the sample met the inclusion criteria was 295 respondents. The exclusion criterion was the nurses who have been undergoing annually leave, or training and education. The respondents who did not meet the inclusion criteria were not included in the study.

The collection tool is a questionnaire consisting of 2 parts, namely: a) demographic data, including: age, gender, last education, length of work and training that has been attended, b) psychosocial care questionnaire consists of 26 items in a positive statement and 8 items in a negative statement with a total of 34 items using the dichotomous scales. The Instrument passed validity and reliability testing was carried out on 31 nurses at the Regional General Hospital dr. Zainoel Abidin Banda Aceh. The questionnaires passed the validity and reliability testing with a value of 0.811 and 0.958 respectively. The reliability testing used the Kuder Richardson (KR-20) method and Pearson Product Moment for correlation technique. The data was analyzed using independent t-test which tests the significance of the mean difference. A hypothesis testing of the study is accepted with p-value ≤ 0.05 .

2.1 Study Selection

The study was conducted in May-June, 2018 in both of the hospitals. The hospitals are a referral hospital in Banda Aceh located at high risk area of the disaster prone. During the tsunami 2004, both hospitals collapsed and many of nursing staff injured and died by its impact. As a referral hospital particularly in disaster response, the readiness of nurses in handling the psychosocial problems in patients must be the main priority to reduce the long term effect due to disasters.

2.2 Description of Study

The study is focused on the nurses' knowledge in handling the psychological problems as the main problem during disaster response such as lost properties, families' members, livelihoods, and self-esteem that influence on patients' mental disorders. The nurses' knowledge may influent to skill and performance in caring the patients. The study was conducted at the regional hospitals of Banda Aceh as a high risk prone area of disaster such as earthquake

and tsunamis. Limited studies have reported the knowledge of nurses in caring the psychosocial problems in disaster response in hospital setting.

3 RESULTS

3.1 Characteristics of Respondents

The respondents from the Mother and Child Hospital (MCH) and the Meuraxa General Hospital (MGH) were 95 and 200 respondents respectively. The demographic data consist of age, gender, educational level, working experience, attending disaster management training, and kind of disaster training attended. The population in this study is all nurses in MGH and MCH who worked in inpatient ward: aediatric ward, Medical ward, Surgical ward, Intensive Care Unit, and Emergency Department (EDs).

Table 1: Demographic Data at MCH and MGH Hospitals of Banda Aceh (n = 295).

Demographic data	MCH		MGH	
	(f)	(%)	(f)	(%)
1. Age (year)				
20-35	56	58.9	162	81.0
36-50	36	37.9	38	19.0
51-65	3	3.2	-	-
2. Gender				
Male	13	13.7	50	25.0
Female	82	86.3	150	75.0
3. Education				
Diploma III	78	82.2	140	70.0
Diploma IV	6	6.3	10	5.0
Nurse profession	11	11.5	50	25.0
4. Working experience (year)				
< 5	23	24.2	64	32.0
6-10	52	54.7	117	58.5
> 10	20	21.1	19	9.5
5. Attending disaster training				
Yes	51	53.7	62	31.0
No	44	46.3	138	69.0
6. Disaster training attended:				
Never	44	46.3	138	69.0
BTCLS	43	45.3	-	-
Fire management	6	6.3	13	6.5
Disaster emergency	-	-	3	1.5
Disaster drill	-	-	40	20.0
Youth alert disaster	-	-	1	0.5
DASIPENA	-	-	1	0.5
Emergency	-	-	1	0.5
BTCLS	-	-	1	0.5
Fire and disaster drill	-	-	2	1.0
Triage	2	2.1	-	-

Table 1 indicates that both hospitals indicated the age range of respondents between 20-35 years, majority gender was female, diploma for education level, 6-10 years for working experience, and attended in disaster training (MCH = 53.7%; MGH 31%).

Table 2: Nurses' Knowledge in Handling Psychosocial Problems in Disaster Response (n=295).

Hospital	Mean	SD	SE	p-value	N
MCH	91.84	8.53	0.87	0.003	95
MGH	94.84	7.43	0.52		200

Table 2, it shows there is a difference in nurses' knowledge of MCH with a mean ± SD (91.8 ± 0.87) and MGH Hospitals (94.84 ± 0.52) at p-value 0.003.

4 DISCUSSIONS

Disasters are associated with a substantial psychosocial burden for affected individuals, families and communities. Nurses' knowledge about how to address these risks and problems is valuable for the nurses in the hospital. Psychosocial care aims to address mental health problems and patients' needs. It covers all the support and care directed at the psychological well-being and health of people affected during and after disaster (Gouweloos, Dückers, te Brake, Kleber, & Drogendijk, 2014).

The psychosocial problems that occur in a disaster event, such as loss of residence, loss of family, loss of livelihood until losing self-esteem as an individual have influence on patients' mental disorders. Hence, social support is needed in the disaster response to reduce the long-term impact on these psychological problems (Gorman & Sultan, 2008). Psychosocial support is defined as processes of accompaniment on an individual, family, community and social level, aimed at preventing, addressing and confronting the consequences of the impact of a specific event such as a disaster. These processes promote well-being, social and emotional support for the disaster victims and contribute to re-establishing integrity, strengthening dignity and stimulating the victim in actions in the search of truth, justice and integral reparation. Psychosocial support considers the reconstruction of those social support networks to restoring the dignity of the victims and their families in society life (Hofmeister & Navarro, 2017).

According to Sundram et al., (2008) stated that there are some general principles of psychosocial disaster intervention that must provide by the nurses

such as (1) Assessment of disaster, extant service systems and incoming resources, (2) Assessment of help-seeking pathways and cultural models of illness, (3) Facilitation and support for family reunion, identification of the dead and cultural and religious practices to address death and grief, (4) Foster and bolster community group activities where possible, (5) Psychosocial training of community, (6) Promote general community psychoeducation, (7) Train medical and health staff in basic psychiatric and psychological assessment and intervention for post-traumatic stress, mood and anxiety disorders, (8) Minimize risk factors for psychiatric morbidity such as displacement and loss of gainful activity and (9) Reshape mental health systems recognizing the long-term psychiatric sequelae of disaster.

The results of the study reveal that there were differences in demographic data of the respondents of both hospitals. It is an important role in handling the psychological problems in disaster response such as age, educational level, working experience, and attending disaster training. The data showed that most of respondents in MGH have 20-35 year old is 81%, and in MCH is 58.9%. At 20-35 year old the respondent has more opportunity to seek and obtain knowledge related to psychosocial problems of disaster victims. The knowledge might obtain through various reading materials such as books, journals, newspaper, and electronic, so that it can have positive impact on the level of knowledge gained in caring disaster victims with psychosocial problems. While, educational level also play an important role in the results of the study that showed that 25.0% of nurses at MGH had nurse profession levels compared to MCH only 11.5% and most of them still diploma level (61.1%). The level of education has an important role in increasing knowledge of nurses to manage the psychosocial problems among patient.

Moreover, the working experience in providing services at the hospital may also has a positive impact on the ability of nurses to determine what kind of knowledge needed in caring for patients with psychosocial problems. In this study, nurses who have 6-10 years of work experience at MGH was 58.5% compared to MCH of 54.7%. Working experience is very important in providing services to patients including knowledge in caring for disaster victims. The 6-10 years working experience provides direct exposure to the nurses to understand the various psychosocial problems experienced by the patients and provide interventions to handle these problems. According to Nichols (2003), the intervention for the treatment of psychological and

psychosocial problems in patients with illness and injury/trauma consist of information support, emotional support, counselling care and support, advocacy, and referrals.

Attending in disaster training is also very crucial to influence nurses' knowledge in disaster response. The results of the study showed that 31% of nurses in MGH had participated in emergency and disaster training program such as basic trauma and cardiac life support (BTCLS), fire management, emergency and disaster drill, youth alert disaster, and triage. These trainings are certainly very helpful in increasing nurses' knowledge in providing health and nursing services to patients regarding emergency and disaster management particularly in handling psychosocial problems. Because through disaster training, especially disaster drills, nurses are taught knowledge and skills in dealing with various psychosocial problems of patients. The results of the study supported by study of Elangovan and Kasi (2014) mentioned that teachers who were provided training on psychosocial disaster preparedness had better knowledge than the control group. The teachers who have good knowledge of disaster preparedness about psychosocial problems, revealed that better children's knowledge after being given the same training compared to children in the control group.

Psychosocial support is needed to reduce anxiety, depression, stress, and PTSD post-disaster. According to Thordardottir, Gudmundsdottir, Petursdottir, Valdimarsdottir, and Hauksdottir (2018), psychosocial support have a high level on patient' and family' satisfaction (16-37%) in the affected population in the year 1995-2010. Psychosocial support might be conducted with collaboration with various cross-sectors in caring disaster victims. The study also reported that PTSD symptoms negatively associated with utilization of psychosocial support to the disaster victims.

In the study of Hughes, Grigg, Fritsch, and Calder (2007) mentioned that the nurses as the largest component of the emergency response team must be able to ascertain how the patient reacts normally or not and can contribute to the recovery of psychosocial problems in patients. Nurses also provide effective social interventions to minimize the potential for serious mental illness. Ransie, Hutton, Wilson, and Usher (2015) stated that the recovery of psychosocial problems not only be focused on patients, but also on nurses who help to psychosocial problems as a result of disasters. Psychosocial problems are not only about the

support given but also the physical condition of the victim may affect to patients' mental status.

One thing to support the psychological problem among patient in disaster response is provide cultural, belief and spiritual approaches in handling the problems. The results of the study supported by answered of the respondents for the statement "Nurses support patients in conducting religious activities" was 100% the nurses in MGH and 96.8% of nurses in MCH answering did it. In addition, in the statement "Nurses respect the cultural practices believed by patients", nurses answered correctly in MGH and MCH were 97,5% and 88.4% respectively. Based on the results of the study, there is a difference in nurses' knowledge in handling psychosocial problems in disaster response between MCH and MGH hospitals.

In addition to considering spiritual and belief, the nurse's experience in handling trauma will have an impact on the strength of the knowledge and experienced gained. This is in line with the opinion by Bugge et al., (2019) mentioned that traumatic experiences was mostly perceived as positive and linked to various helpful outcomes. To engaging in the trauma narrative, the nurses needed to comprehend and address how the traumatic experiences and the hospitalization resulted in the survivors' extended fear and changed appraisals about themselves. The nurses are needed available a lot of time to stay physically and mentally close to the patients as a part of nursing intervention in the handling psychosocial problems. The nurses played a significant role in strengthening the survivors' confidence in own capabilities and trust in others.

The results of the study supported by Ranse, Hutton, Jeawody, and Wilson (2014) indicated that psychosocial aspects in disaster nursing were ranked highest and main issues to be handled. This result indicates that in the future disaster nursing research should focus on psychosocial aspects to minimize problems of the victims.

According to The European Network for Traumatic Stress/TENTS (2008) mentioned that every area should have guidelines and competencies on the provision of psychosocial care in emergencies including knowledge to address psychosocial problems. In term of response, the nurses should promote a sense of safety, self and community efficacy/empowerment, connectedness, calm and hope. Responses should provide general support, access to social support, physical support and psychological support to the victims. Regular training for nurses related to handling psychosocial problems is needed to improve the competencies in

respond to disaster. Recent study by Zokaefar *et al.*, (2015) found that hold regular educational programs are needed in order to create and maintain readiness and response to disasters.

5 CONCLUSIONS

The conclusion of the study is there was a significant difference mean score of knowledge among nurses in handling psychosocial problems in disaster at MCH and MGH in Banda Aceh (p-value = 0.003). The result of the study recommended to the hospital policy makers to arrange the disaster training and disaster simulation regularly in increasing nurses' knowledge in handling psychosocial problems in hospital setting.

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REFERENCES

- Achora, S., & Kamanyire, J. K. (2016). Disaster Preparedness: Need for inclusion in undergraduate nursing education. *Sultan Qaboos University Medical Journal*, 16(1), e15-19. <https://doi.org/10.18295/squmj.2016.16.01.004>
- Bugge, I., Jensen, T. K., Nilsen, L. G., Ekeberg, Ø., Dyb, G., & Diseth, T. H. (2019). Psychosocial care for hospitalized young survivors after the terror attack on Utøya Island: A qualitative study of the survivors' experiences. *Injury*, 50(1), 197–204. <https://doi.org/10.1016/j.injury.2018.10.024>
- Elangovan, A. R., & Kasi, S. (2014). Psychosocial disaster preparedness for school children by teachers. *International Journal of Disaster Risk Reduction*, 12, 119–124. <https://doi.org/10.1016/j.ijdr.2014.12.007>
- Forbes, D., Lewis, V., Varker, T., Phelps, A., Donnell, M. O., Wade, D. J., ... Creamer, M. (2011). Psychological First Aid Following Trauma: Implementation and Evaluation Framework for. *Psychiatry*, 74(3), 224–240. <https://doi.org/10.1521/psyc.2011.74.3.224>
- Gorman, L. M., & Sultan, D. F. (2008). *Psychosocial Nursing for General Patient Care* (3 rd). Philadelphia: F.a Davis Company.

- Gouweloos, J., Dückers, M., te Brake, H., Kleber, R., & Drogendijk, A. (2014). Psychosocial care to affected citizens and communities in case of CBRN incidents: A systematic review. *Environment International*, 72, 46–65. <https://doi.org/10.1016/j.envint.2014.02.009>
- Houston, J. B., Pfefferbaum, B., & Rosenholtz, C. E. (2012). Disaster News: Framing and Frame Changing in Coverage of Major U.S. Natural Disasters, 2000–2010. *Journalism & Mass Communication Quarterly*, 89(4), 606–623. <https://doi.org/10.1177/1077699012456022>
- Hammad, K. S., Arbon, P., Gebbie, K., & Hutton, A. (2017). Moments of disaster response in the emergency department (ED). *Australasian Emergency Nursing Journal*. <https://doi.org/10.1016/j.aenj.2017.10.002>
- Hofmeister, U., & Navarro, S. (2017). A psychosocial approach in humanitarian forensic action: The Latin American perspective. *Forensic Science International*, 280, 35–43. <https://doi.org/10.1016/j.forsciint.2017.08.027>
- Hughes, B. P., Degregory, C., Elk, R., Graham, D., Hllal, E. J., & Ressallat, J. (2017). *Spiritual Care and Nursing : A Nurse ' s Contribution and Practice* (pp. 1–24).
- International Council of Nurses, & World Health Organization. (2009). *Framework of Disaster Nursing Competencies*.
- Kaji, A. H., Langford, V., & Lewis, R. J. (2008). Assessing Hospital Disaster Preparedness: A Comparison of an On-Site Survey, Directly Observed Drill Performance , and Video Analysis of Teamwork. <https://doi.org/10.1016/j.annemergmed.2007.10.026>
- Kemenkes RI. (2007). Undang-undang Republik Indonesia Nomor 24 Tahun 2007 tentang Penanggulangan Bencana, (1), 1–5. <https://doi.org/10.1007/s13398-014-0173-7.216/j.forsciint.2017.08.027>.
- Nichols, K. (2003). *Psychological care for ill and injured people; a clinical guide* (1st ed.). Philadelphia: Open University Press.
- Ranse, J., Lenson, S., & Nursprac, M. S. N. (2012). Beyond a clinical role : Nurses were psychosocial supporters , coordinators and problem solvers in the Black Saturday and Victorian bushfires in 2009. *Australasian Emergency Nursing Journal*, 15(3), 156–163. <https://doi.org/10.1016/j.aenj.2012.05.001>
- Ranse, J., Hutton, A., Jeeawody, B., & Wilson, R. (2014). What are the research needs for the field of disaster nursing? An International Delphi Study. *Prehospital and Disaster Medicine*, 29(5), 448–454. <https://doi.org/10.1017/S1049023X14000946>
- Ranse, J., Hutton, A., Wilson, R., & Usher, K. (2015). Leadership opportunities for mental health nurses in the field of disaster preparation, response, and recovery. *Issues in Mental Health Nursing*, 36(5), 391–394. <https://doi.org/10.3109/01612840.2015.1017062>
- RSUD Meuraxa. (2017). *Rencana Strategis RSUD Meuraxa Kota Banda Aceh*.
- Smith, S., & Grant, A. (2016). Nurse Education Today The corporate construction of psychosis and the rise of the psychosocial paradigm: Emerging implications for mental health nurse education. *Nurse Education Today*, 39, 22–25. <https://doi.org/10.1016/j.nedt.2016.01.007>
- Schultz, C. H., Koenig, K. L., Whiteside, M., & Murray, R. (2012). Development of national standardized all-hazard disaster core competencies for acute care physicians, nurses, and EMS professionals. *Annals of Emergency Medicine*, 59(3), 196–208. <https://doi.org/10.1016/j.annemergmed.2011.09.003>
- Suserud, B. O., & Haljamäe, H. (2003). Acting at a disaster site: Experiences expressed by Swedish nurses. *Journal of Advanced Nursing*, 25(1), 155–162. <https://doi.org/10.1046/j.1365-2648.1997.1997025155.x>
- Sundram, S., Karim, M. ., Ladrigo-Ignacio, L., Maramis, A., A.Mufti, K., Nagaraja, D., ... Somasundaram, D. (2008). Psychosocial responses to disaster: An Asian perspective. *Asian Journal of Psychiatry*, 1(1), 7–14.
- The European Network for Traumatic Stress. (2008). *The TENTS Guidelines for Psychological Care Following Disaster and Major Incidents* (pp. 1–6). Wales.
- Thobaity, A. Al, Plummer, V., & Williams, B. (2017). What are the most common domains of the core competencies of disaster nursing ? A scoping review. *International Emergency Nursing*.
- Thordardottir, E. B., Gudmundsdottir, B., Petursdottir, G., Valdimarsdottir, U. A., & Hauksdottir, A. (2018). Psychosocial support after natural disasters in Iceland-implementation and utilization. *International Journal of Disaster Risk Reduction*, 27(November 2017), 642–648. <https://doi.org/10.1016/j.ijdr.2017.11.006>
- Witteveen, A. B., Bisson, J. I., Ajdukovic, D., Arnberg, F. K., Bergh, K., Bolding, H. B., ... Olf, M. (2012). Social Science & Medicine Post-disaster psychosocial services across Europe: The TENTS project, 75, 1708–1714.
- Zokaefar, A., Mirbeigi, S., Eskash, H., & Dousti, M. (2015). Assessment of Counseling and Psychosocial Support maneuvers in Natural Disasters in Hormozgan. *Procedia - Social and Behavioral Sciences*, 185, 35–41. <https://doi.org/10.1016/j.sbspro.2015.03.429>