# The Effectiveness of the "POKBAYA ASALKENA" Model Based on Transcultural Nursing in Disaster Risk Reduction Preparedness in the Community by Haris Sofyana

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# ORIGINAL ARTICLE

# The Effectiveness of the "POKBAYA ASALKENA" Model Based on Transcultural Nursing in Disaster Risk Reduction Preparedness in the Community

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### ABSTRACT

**Introduction:** The lack of standard guidelines in efforts to increase community capacity in disaster management is one of the factors that causes these efforts to run ineffective. In fact, the community should be equipped to have the awareness to be proactive in disaster management in their area. As professional nurses are expected to be able to take strategic steps in empowering the community in disaster management in line with the values held by the community in each area with the Transcultural Nursing approach. This study aims to identify, develop, and implement a Peer Group (Kelompok Sebaya=POKBAYA) empowerment model through the Disaster Recognition School Children (Anak Sekolah kenal bencana = ASAL KENA) program in strengthening disaster preparedness in vulnerable areas using the Transcultural Nursing Approach. **Methods:** This study uses a mixed method approach between quantitative research and qualitative research which consists of 3 stages of research. Namely the exploration stage, the model preparation stage and the model development stage. **Results:** The three intervention groups had an increased average preparedness index and had a significant effect. The value of  $p = 0.000 \le 0.05$  in the three measurement domains shows that there is a significant effect of Pokbaya "Asalkena" training in increasing knowledge, attitudes and skills. **Conclusion:** The Asalkena-TN Pokbaya training model has improved the peer group preparedness of high school students in the West Bandung.

Keywords: Transcultural nursing, Disasters, Peer group, Preparedness, Students

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# INTRODUCTION

There have been many scientific reviews of the role of community group em17 verment in preparedness efforts. Implementation of the role of community nurses in disaster management is part of the application of Community Health Nursing (CHN) concept. The results of the Marutani et al studies explain that Nursing actions based on cultural considerations by Community nurses must consider the attachment of the community around the island to cultural influences that change through the disaster phase (1). In addition, research by Powert R and Daily E, explains that nurses play many roles in multidisciplinary teams, and assist in the implementation of community disaster plans in times of crisis, including assessment, policy development, and assurance that the conditions in which we live are conducive to health (2).

One of the groups that became the focus of the study was the group of school children and adolescents. The results of Sofyana and Kusmiati's research show that there is an effect of training for Disaster Recognition School Children "Asal Kena" on the knowledge, attitudes and skills of junior high school students in disaster management in Banjaran District (3). The results of Setiawan and Sofyana's research recommend the importance of training in empowering rural communities who live in disaster-prone areas in order to normalize physical and psychological problems of victims of natural disasters (4). The results of the Bsearch by Salasa, Murni and Emaliyawati explained that the empowerment process through the contingency planning approach was affect to increase the preparedness of late adolescents to the

threat of death due to disasters (5). In line with this, community capacity building in disaster management still does not have standard guidelines, so that the efforts made were not effective in awakening the community as the spearhead in disaster management which should be proactive. Nurses, as health professionals are expected to play a strategic role. Nursing practice and services at the community level begin to touch on specific areas that will develop nursing science.

Community empowerment programs in the context of nursing are developed in line with the values held by community groups in each region, so that they are culturally sensitive and uphold local customs. One of the nursing theories that pays attention to developments in society is Transcultural Nursing which focuses on comparative studies and analysis of cultural and subcultural differences by respecting caring behavior, nursing care and heth-illness values. The goal of transcultural nursing is an awareness and appreciation of cultural differences. This means that professional nurses have knowledge and practical based on community culture. For this reason, it is necessary to develop an empowerment program for peer groups that is able to reach and facilitate other community groups to initiate community-based disaster management programs. The program will be more applicable if it is designed with the principle of empowering peer groups as a pilot group through an empowernment model that refers to the government program for disaster risk reduction by the community (PRBOM), namely by mobilizing human resources at the high school level (SMA), especially in vulnerable areas. disaster (6). Another research result, conducted by Kulatunga consects cultural factors with Disaster Reduction Risk (DRR) activities, that in some ways, culture has become one of the factors of community survival in the disaster cycle. Therefore, it can be said that culture has the power to increase or reduce the vulnerability of communities toward disasters (7).

In fact, there are many obstacles in responding to the results of the above research studies. The main obstacle that are quite felt in community empowerment are socialization program efforts that are still running in one direction from the government to the community, the low performance of disaster management, lack of attention, the need for disaster risk reduction, and the weak role of schools in disaster mitigation education. The community, especially in disaster management and emergency cases caused by disasters, still do not have standardized guidelines, so the efforts made have not been effective to make people aware that they are the spearhead in disaster management that should be proactive.

Based on this statement, This study aims to identify, develop, and implement a Peer Group (Kelompok Sebaya=POKBAYA) empowerment model through the Disaster Recognition School Children (Anak Sekolah kenal bencana = ASAL KENA) program in strengthening disaster preparedness in vulnerable areas using the Trans cultural Nursing Approach

### MATERIALS AND METHODS

This research uses a mixed method or a mix of methods between quantitative research and qualitative research which consists of three stages of research. Namely the exploration stage, the model preparation stage and the model development stage. The exploration stage uses a phenomenological study to identify various efforts that can be made by peer groups or high school students whose areas are pronted disasters. Data collection was carried out through Focus Group Discussions with a 21al sample of 17 people consisting of three members of the Regional Disaster Management Agency (BPBD) and disaster volunteers, seven teachers, and six high school students who are representatives of SMA in the region. Lembang fault and including earthquake-prone areas. The area consists of five Districts in West Bandung Regency, namely Lembang, Parongpong, Ngamprah, Cisarua and Padalarang. The modeling stage was carried out by analyzing literature reviews and expert consultations. In this stage, the research combines the concept of a separate model into a single peer group empowerment model for high school students with the School Children Knowing Disaster approach "Asal Kena". The three models are 1) Disaster Manitoba model: Integrated Disaster Management Model., 2) Trans cultural Nursing Model and 3) Parent-Child instructional model.

The population and sample at this stage are experts in related scientific fields, namely experts in the oneperson community field, one-person expert in the field of child nursing and one-person expert in the field of disaster nursing. In developing the model, there are two activities carried out, namely testing the model and applying the model. The model trial stage was carried out on peer groups of high school students by conducting training related to the understanding needed by high school students about disaster management by the community. The training is conducted as a medium to provide strengthening knowledge, skills and attitudes to high school students to become community empowerment cadres in disaster risk reduction. Meanwhile, the implementation stage of the model is carried out on high school students to assess their performance in the school environment and community in reducing the risk of disaster by the community. The research design in the testing phase is quantitative research with a quasi-experimental design method approach with the Pre - Post test with control groups. This study consisted of three treatment groups. Each group received intervention in the form of disaster training. The first group received a disaster, training intervention using the standard BPBD training approach of the West Bandung Regency. The second group received disaster training intervention using the "Pokbaya Asal Kena" approach, and the third group received the "Pokbaya Asal Kena" disaster training intervention using the Trans Cultural Nursing approach. Each group was measured for disaster preparedness before and after the training intervention. The sample from each group consisted of 30 people, high school students, so that all of them were 90 high school students representing 5 districts in West Bandung Regency, namely SMAN 1 Lembang, SMAN 1 Parongpong, SMAN 1 Cisarua, SMAN 1 Ngamprah, and SMAN 1 Padalarang.

This research was conducted in SMA in West Bandung district, namely SMA 1 Lembang, SMA Islam Al Musyawarah and SMK Nusantara A-Musyawarah Lembang. The research period was carried out in a period of one year in the period January - December 2019. The first stage was carried out in October 2019, the second stage was in October - November 2019 and the third stage in November 2019. The instruments used in this study consisted of Form A (respondent's biodata), Form B (knowledge instrument), Form C (skill observation sheet), Form D (attitude instrument) and Form E (performance checklist). Some examples of question items and statements in the instrument are: Form B : Knowledge (The opinion that must be instilled and shared by all Indonesian people towards the concept of disaster, are: A Conventional, B. Holistic, B. Social Science, C. Progressive, D. Natural Sciences)., Form C: (Schools and communities should consider disasters as extraordinary disasters that must be avoided), Form D: Skills (I will invite my family and friends to get to know disaster management for the community) and Form E : Performance (I have not invited people around me to practice disaster preparedness)

The instrument has passed the validity test with a value of 0.362 - 0.70 and 15 liability with results ranging between 0.60 and 0.67. Data analysis was carried out in stages, starting from univariate, bivariate and multivariate analyzes. Univariate analysis was performed on respondent characteristics and research variables in the form of numeric data by looking at the size of the tendency central for the variables of age, knowledge, and attitude.

Meanwhile, for categorical data, namely gender, percentage stribution was used. Bivariate analysis was carried out to test the difference in mean scores before and after training on each variable (knowledge, skills, attitudes and performance display of the peer group of high school students). The statistical analysis used was the independent mean 2 difference test, the dependent and independent t test and the ANOVA test.

#### 20 ical Clearance

This study was approved by the Institute of Research and Community Engagement, Health Polytechnic Kemenkes Bandung No.34/KEPK/PE/IX/2019. The respondents were first given a written explanation on the objectives and procedure of the study.

# RESULTS

### **Research Respondents Data**

Table 1. Frequency distribution of respondent characteristics
t Phase I (qualitative) Exploration Study

	Variable	Frequency (f)	Percentage (%)
Religion	Islam	17	100
	Non Islam	0	0
	Total	17	100
Role	Student	6	35.3
	Teacher	6	35.3
	Volunteer	2	11.8
	Volunteer BPBD	3	17.7
	Total	17	100
Gender	Man	11	64.7
	Woman	6	35.3
	Total	17	100
Training Experience	Ever	7	41.2
Enperience	Never	10	58.8
	Total	17	100
Institution	SMAN I Lembang	4	23,6
	SMAN I Parongpong	2	11,8
	SMAN I Ngamprah	2	11,8
	SMAN I Cisarua	2	11,8
	SMAN I Padalarang	2	11,8
	BPBD KBB	3	17,7
	Volunteer	2	11,8
	Total	17	100

Table I shows that, there were 17 respondents in the exploratory research stage. All respondents are Muslim (100%), with the number of men being bigger, namely 11 people (64.7%). The highest number of teacher and student respondents was 6 people (35.3%), and most of them, namely 10 people (58.8%) had never attended disaster training. The responses from SMAN I Lembang mostly followed this stage, namely 4 people (23.6%).

# **Qualitative Data**

Thematic Analysis of Qualitative data was carried out on respondents' answers to qualitative data collection through written interviews and focus group discussions. The qualitative data analysis stage gave rise to themes that were used as the basis for researchers to intervene. The results of the thematic analysis found four themes related to disasters in peer groups as follows: 1) Information dissemination about disasters to schools in the Disaster-prone West Bandung area has not been sufficiently carried out., 2) It is necessary to train high school children on disaster management in the health sector 3) Students need knowledge and skills in saving themselves and others. 4) The materials needed include

how to save themselves, how to help the victims (evacuation, rescue breathing and basic life support, wound care, monitoring of health and vital signs, bandaging fracture)

#### Quantitative Data

1. Characteristics of Respondents

Table II. Frequency distribution of respondents in the three treatment groups based on the distribution of respondents, training experience, gender, and age.

	Vari able	Group 1	Group 2	Group 3	Total
Respo ndents	Distrib ution of Respo ndents	30 (33,3%)	29 (32,2%)	31 (34,4%)	90 (100%)
	Total	30 (33,3%)	29 (32,2%)	31 (34,4%)	90 (100%)
Exper ience	Ever	8 (18,2%)	16 (36,4%)	20 (45,5%)	44 (48,9%)
Train ing	Never	22 (47,8%)	13 (28,3%)	11 (23,9%)	46 (51,1%)
	Total	30 (33,3%)	29 (32,2%)	31 (34,4%)	90 (100%)
- I	Men	13 (37. 1 %)	14 (40.0%)	8 (22.9%)	35 (38.9%)
Gend er	Woman	13 (30. 9 %)	15 (27.3%)	23 (41.8%)	55 (61.1%)
	Total	30 (33.3 %)	29 (32.2%)	31 (34.4%)	90 (100%)
	15	6 (40.0%)	7 (46.7%)	2 (13.3%)	15 (16.7%)
	16	16 (36.4%)	16 (36.4%)	12 (27.3%) 11	44 (48.9%)
Age	17	7 (29.2%)	6 (25.0%)	(45.8	24 (26.7%)
	18	1 (14.3%)	0 (0.0%)	%) 6 (85.7%)	7 (7.8%)
	Total	30 (33.3%)	29 (32.2%)	31 (34.4%)	90 (100%)

Based on Table II above, it appears that the respondents were evenly distributed in the three treatment groups, namely between (29-31) respondents. Based on the experience of participating in disaster training, the respondents were equally distributed among those who had attended and had never attended (44: 46), while based on gender, there were more respondents with the proportion of (55: 35). Based on the age level, all respondents are evenly distributed in the age range of (15-18) years.

2. Knowledge, Attitudes and Skills 4 Table III shows that overall there is a change in the average value of knowledge, attitudes and skills before and after the intervention with the three training modules. The value of  $p = 0.000 \le 0.05$  in the three measurement domains shows that there is a significant influence of training in increasing the knowledge, attitudes and skills of high school students in the West Bandung Regency. The most significant effect was seen in the third treatment group using the Pokbaya-Asal Kena module, with a change in the mean value of knowledge from 42.05 to 55.33 (p = 0.000  $\leq$  0.05), the mean value of attitude from 50.59. to 59.19 (p = 0.000  $\leq$  0.05) and the mean score of skills from 74.66 to 86.83 19 (p = 0.000  $\leq$  0.05). At the intervention group. The first and second groups showed an increase in the three measurement domains, only the average change was not statistically significant in the aspects of attitude and knowledge.

#### 4

# Table III. Changes in the average value of knowledge, attitudes and skills before and after the intervention in the three

reath	nent gr	0 8 S							
Varia	ble	Group	1	Group	2	Group	3	Total	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Kno wle	Be- fore	58.33	13.62	49.73	9.41	42.05	11.27	49.95	13.29
dge	After	61.41	12.43	53.84	11.53	55.33	10.30	56.88	11.78
	P-Va lue	P= 0.15	2	P= 0,04	18	P=0.00	00	P= 0.0	00
Attit udes	Be- fore	66,00	5,90	65,01	5,88	50,59	8,03	63,34	7,29
	After	66,72	8,17	66,01	7,01	59,19	6,10	60,94	10,33
	P-Va lue	P= 0,50	2	P = 0,2	92	P = 0,0	00	P = 0,0	06
Ski Ils	Be- fore	80,37	10,58	78,30	12,81	74,66	17,03	77,74	13,84
	After	90,53	9,68	84,26	10,38	86,83	11,79	87,24	10,86
	P-Va lue	P = 0.00	00	P = 0,0	21	P = 0,0	00	P = 0,0	00

3. Disaster Resilient School Preparedness

# Table IV. Change in mean school preparedness Disaster preparedness before and after the intervention In the three treatment groups

		8							
Varia		Grou	ıp 1	Gro	up 2	Gro	up 3	To	otal
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Disas- ter Pre-	Be- fore	74,32	12,48	75,80	12,21	72,64	12,55	74,22	12,35
pared- ness School	Af- ter	84,30 9	9,11	79,26	11,05	81,70	8,46	81,78	9,69
P-va	ue	P = 0,0	000	P = 0, 1	15	P = 0,0	00	P = 0, 0	000

Table IV shows that, overall, there was an increase in the average value of the school disaster preparedness index in the three intervention groups with an average increase from 74.22 to 81.76 (( $p = 0.000 \le 0.05$ ). In further analysis, in the second group, the average increase in disaster preparedness school preparednes 18 from 75.80 to 79.26 was not sufficient to provide a statistically significant value (( $p = 0.115 \ge 0.05$ ). And the third change in average shows a significant value in improving disaster preparedness school preparedness ( $p = 0.000 \le 0.05$ ).

#### 4. Results of ANOVA test analysis

Table V Distribution of the average value of the knowledge, attitudes, skills and preparedness of the peer group of high school students based on the intervention group

Vari- able	Inter- vention group	Mean	SD	95% CI	P Value
Knowl-	Group 1	61,41	12,43	56,76-66,05	0,03
edge	Group 2	53,84	11,53	49,46-58,23	
	Group 3	55,33	10,30	51,56-59,11	
Atti-	Group 1	66,72	8,17	63,67-69,78	0,000
tudes	Group 2	66,01	7,01	63,35-68,68	
	Group 3	50,59	6,10	48,36-52,83	
Skills	Group 1	90,53	9,68	86,92-94,15	0,081
	Group 2	84,26	10,38	80,31-88,21	
	Group 3	86,83	11,79	82,51-91,16	
Pre-	Group 1	84,30	9,11	80,90-87,71	0,137
pared- ness					
11035	Group 2	79,26	11,05	75,06-83,47	
	Group 3	<u>81,70</u>	8,46	78,60-84,81	

Based on table V above, in the knowledge aspect, there are differences in the average knowledge of the three intervention groups (P = 0.03). Further analysis found that the group that was significantly different was the first group with the second group (P = 0.039), while the first and third groups had no significant difference. In the aspect of attitude, there was a difference in the average attitude of the three intervention groups (P = 0.000). Further analysis found that the groups that were significantly different were the first group with the third, and the second group with the third. Meanwhile, in the aspects of skills and inclusors of disaster preparedness school preparedness, there was no significant difference between the three intervention groups.

## DISCUSSION

1. Model Validation Against peer group knowledge of high school students

High school students' knowledge of disasters in Lembang, Parongpong, Ngamprah, Cisarua and Padalarang Districts has developed since before the training was held. This is indicated by the mean pretest scores in all intervention groups in the range 42.05-58.33 points. This happens due to the distribution of characteristics of high school students who have been exposed to disaster material. In addition, some of the participants, namely 44 out of 90 participants (48.90%) in the three intervention groups were high school students who had experience in obtaining information about disasters through 3 arious organizations and extra-curricular activities. The results of this study are in accordance with the general understanding that a person's behavior is based on knowledge, while one that affects knowledge is education. People who have education are able to get more information, so they have better knowledge than someone who has no additional reperience of informal education. In these conditions, a community-centered to ter-professional educational approach is needed, which focuses on the role of the trainer, caring for officers, paying attention to the needs of training participants, and building a systematic interprofessional education strategy, in line with the culture and being informed of the community (8). It was further explained that the Indonesian people should be equipped with knowledge about the dangers of natural disasters, starting from kindergarten, elementary and junior high and high school children (9).

The training for school children who know disaster with the Transcultural Nursing (Pokbaya Asalkena-TN) approach that has been carried out can increase the knowledge of high school students in five disastersprone Districts due to being in the Lembang fault area. Learning experiences obtained in training through demonstrations, simulations and interesting and educational discussions will provide internalization of the concept of knowledge without realizing it in the memory system of the human brain. The well-designed Pokbaya Asalkena-TN training process will stimulate children's interest to learn more and be active about disasters. This is in accordance with Covan and Fugate-Whitlock (10) that it is important to consider the care community in responding to disasters effectively by involving student assistance, through training as a collective learning system. In addition, the training of Peer Groups for School Children Know Disaster with the Transcultural Nursing Approach (Pokbaya Asalkena-TN) in West Bandung Regency can be a medium for enabling and empowering schools and peer groups in initiating various preparedness plans faced by high school students or peer groups independently at school. This training can bridge the government with various groups in the community in minimizing the risk of a disaster. The correlation between the understanding of Peer Groups of School Children with Disasters and the Transcultural Nursing Approach (Pokbaya Asalkena-TN) about disasters that is reflected in knowledge and student behavior in dealing with disasters is explained in Chaerumni, Sari and Rida's research (11) which explains that human knowledge of the dangers, vulnerabilities, risk and adequate risk reduction activities will be able to create effective community action in dealing with disasters. This supports 5e research conducted by Triyono (12) which states that the greatest influence in calculating the level of preparedness of Acehnese rural communities is the level of knowledge that is considered

good enough for individuals or households, with a household knowledge index value of 72 which can be categorized as ready.

# 2. Model Validation Against the attitudes of high school student peer groups

The results of the research by the Peer Group for School Children Know Disaster with the Transcultural Nursing Approach (Pokbaya Asalkena-TN) show that the training has a significant effect on the change in the attitude of the Peer Group of high school students in West Bandung Regency in seeing and behaving towards disaster events. The two groups showed a there in the increase in the average attitude score in the pre-test and post-test. This result also shows that the change in attitude is smaller when compared to the change in the knowledge variable.

The explanation of the increase in the attitude aspect can be viewed from a social perspective, namely that the interaction between the components of the attitude is aligned and consistent between the three aspects of attitude, namely cognitive, affective and conative. This is because when faced with an object of the same attitude, the three components (cognitive, affective and conative) should form a uniform pattern of attitudes. Changes in the attitudes of high school students in five sub-districts of West Bandung Regency as training respondents were formed as a result of the process of internalizing various training materials and methods. The training method with practical learning in the form of demonstrations and simulations produces knowledge that is reflected in the form of attitudes. The disaster management simulation method during training is in accordance with Rinanda's opinion (13), which explains that simulation simulation is a person's behavior to depend on like a person, with the fon that that person can learn more about how that person feels and there is something, thus Disaster simulation of reality is a game in overcoming disasters that is lifted from the realities of life.

The attitude of the Peer Group of Schoolchildren Know Disasters with the Transcultural Nursing Approach (Pokbaya Asalkena-TN) in West Bandung Regency which responded positively in this study showed that there was a harmony between the components of cognition, affection and conation of the Peer Group of Children with Disaster Knowing School Children with the Transcultural Nursing Approach (Pokbaya Asalkena-TN). Peer Group Training for School Children Know Disasters with a Transcultural Nursing Approach (Pokbaya Asalkena-TN) in the West Bandung Regency is given a selfhelp education in carrying out mitigation skills in the classroom when an earthquake occurs so that the child can save himself without the help of others. Affective aspects have internalized very well. Perceptions, beliefs and stereotypes based on transcultural nursing about disasters have developed and show a stable level of acceptance. The involvement of educational institutions as student coaches in intervention to foster a positive attitude must last long enough, through various activities that encourage obtaining disaster information for students, thereby affecting the emotional atmosphere, and being able to accept and be more positive.

3. Model Validation Against peer group skills of high school students

The skill variable is an aspect that shows significant changes from the other three aspects. **3** oth groups showed significant changes statistically. The results of this study indicate that the comparison of the two control and intervention groups is **19** ificant, so it is concluded that there is a difference in the average value of disaster **preparedness** skills in the Peer Group of Children with Disaster-Knowing Schools with the Transcultural Nursing (Pokbaya Asalkena- TN) Approach in five disasters-prone districts at West Bandung.

The Pokbaya Asalkena-TN training model can change the skill aspect as a component of the peer group behavior of high school students in responding to disaster preparedness. The results of this study are the same as those of Sulistyaningsih (14), which show that the action to take shelter in a safe place and run outside is an option for students when a disaster occurs. As an illustration, it can be explained that the key word for children when a disaster occurs is the skills to save themselves in various ways, not helping others. However, in the simulations shown, both during the pre-test and post-test, many of these skill items were still neglected by the trainees, so they still prioritized saving goods and other people. Meanwhile, for the Peer Group of high school students, saving others who become victims of disasters is detrimental to priorities, for those who believe in the principle of do ho harm and build back better, which means building back better is the pillar of an effective disaster effort and does not expose children the risks that may arise (15). Training and simulating disasters in the peer group of high school students will increase the students' self-confidence and positive self-concept in preparing for a disaster, in addition to building a strong and strong character in facing any difficulties caused by disasters. The results of this study support research conducted by Nirmalawati which explains that forming self-concepts in primary and secondary education students in dealing with disaster mitigation can change children's skills, attitudes and behavor in dealing with natural disasters (16). In this case, the role of nurses engaged in the field of disaster as educators, caregivers, facilitators, and advocators plays an important role, by incorporating elgnents of cultural values and local wisdom expressed in the concept of the transcultural Nursing model.

4. Model Validation of Disaster Preparedness Schools The Asalkena-TN Pokbaya training model has improved the preparedness of Peer Groups for Children with Disaster Identification Schools in five Districts of West Bandung Regency. In general, in the three intervention

groups the average preparedness index increased and had a significant effect. The preparedness parameter showed the most significant value in the Asalkena-TN Pokbaya training group with a mean increase in changes of 9.60 points.

The results of this study are in line with the research of Salasa, Emiliyawati 7nd Murni which explains that there is an effect of empowerment through a contingency planning approach that can increase preparedness efforts with a value of  $\alpha$  (0.000) in high school students in the District of Samarang Garut. The average increase (36.67%) was found in the factors that initiate preparedness, including the perception of risk, awareness of threats, and decreased anxiety. This factor stimulates the formation of the intention to carry out preparedness by increasing (43.33%), even increasing disaster preparedness planning efforts by (42.00%) sefore and after the intervention. The results showed that the empowerment process through a contingency planning approach was alme to increase the preparedness of high school students agaznet the threat of death due to disasters, so that it can be recommended for all disaster activists to empower high school students with contingenced planning in an effort to increase preparedness for the threat of death.

The various research studies above show that the peer group of high school stillents is an important element in the socialization of the importance of public understanding of disaster management. Peer groups of high school students are popularly called peer groups. According to the 2010 population census, adolescents (10-19 years) are estimated to be 43.5 million or around 18% of the total population (17). In terms of development, age group. Peer high school students have high potential, especially the achievement of rapid development in thinking skills and a shift about new roles in society. In addition, it is also said that the adolescent age group has a good resilience rate after the 2004 Aceh tsunami disaster (18).

Research on the relationship between socio-cultural conditions and community preparedness for disasters has been carried out quite a los although it is not specific to groups of school children. The results of this study are in line with previous studies. A concrete example of the application of culture in community empowerment can be explained through the research of Tsipy Ivry, Rika Takaki-Einyb and Jun Murotsukic in Japan. The results of research by Tsipy Ivry, Rika Takaki-Einyb and Jun Murotsukic showed that 11 deliveries e12ed with the mother and baby safe. Disasters provide a perspective on maternity care by opening up opportunities to examine what happens to labor when technological surveillance stops. Deliveries assisted by trained traditional birth attendants are quite safe, in the most extreme conditions even though deliveries occur in the local techno-medical context disrupted by the disaster (19).

One of the interesting results found in this study is the need for structured and programmed training in providing school children with an understanding of disaster management. Disaster management training must be carried out in a measurable and structured manner. These results support previous reparch conducted by Salman, I., et all (2019) identifying that managerially, it is necessary to complete the legislation, NGOs and sociocultural factors, preparedness, response, retention, relocation, termination and follow-up in each nurse's role, in disaster prone areas (20).

However, not all nurse roles can be easily implemented in disaster ituations. In contrast to coaching for school children, the results of reserct by Ahmadi, et al (2018) explain the existence of obstacles or challenges in daily life after a disaster event for older members of the community (elderly). so efforts are needed to help them reach the recovery stage (21).

PRBOM is the act of preparing the community to always be more familiar with their community, to recognize the various threats that may occur which will result in disasters in their own region or community, than try to explore the capacity of each individual so that the community prepare everything before, during and after a disaster occurs. This is intended so that residents know something that threatens the community, know who are the most vulnerable groups (priority to be helped), know where to go, when and how to evacuate, reduce or minimize the various forms of risk that are likely to occur at any time due to a disaster., and the community knows how to survive after a disaster (22).

### CONCLUSION

Peer Group Training Model for School Children Know Disasters with a Transcultural Nursing Approach (Pokbaya Asalkena-TN) can improve peer group preparedness for high school students in five disastersprone villages in West Bandung Regency are regarding disaster management. Based on this, it is proposed that modules, curricula, and Peer Group Training Models for School Children Know Disasters with the Traditional Nursing Approach (Pokbaya Asalkena-TN) which can be used as research outputs that can immediately be implemented in strengthening and empowering peer group programs in improving disaster preparedness.

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PAGE 2	
PAGE 3	
PAGE 4	
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PAGE 6	
PAGE 7	
PAGE 8	