RESILIENCE OF ADOLESCENT POST-DISASTER: LITERATURE REVIEW

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ABSTRACT

Introduction: Indonesia sits on an active continental plate, surrounded by a series of very active volcanoes called the ring of fire. These conditions make Indonesia very vulnerable to disasters. Adolescent are very vulnerable of the effects of disasters, due to their age and limited experience. The resilience possessed by adolescents can affect when the post-eruption disaster strikes.

Methods: A systematic search of the following electronic databases published since 2017 and 2020 was conducted on the PubMed and Google Scholar databases. Search for journal articles as a source of a literature review using the keyword "Resilience, Survivors, Adolescent, Disaster". At the initial search stage, journal articles were found (PubMed=43, Google Scholar=31 ). After being filtered, 68 articles were not relevant based on the title and abstract. Then obtained as many as 7 articles. Results: Resilience is very important for adolescents in post disaster situations, adolescents who have resilience can survive and never give up in difficult circumstances, adapt to these conditions, and can rise. Most of the adolescents in post-disaster areas have moderate levels of resilience as much as 64% and as high as 63%. This can occur due to several factors, namely individuals, families, and communities. In addition, gender can also affect a person’s resilience. Men are more resilient than women. Conclusion: The existence of sources of support from internal and external as well as knowledge about adolescent disasters can optimize youth resilience after disaster.

INTRODUCTION

Indonesia has a large area and is located at the equator in a cross position between two continents and two oceans, in an area that has geographic, geological, hydrological, and demographic conditions that are prone to disasters with high frequency. Indonesia sits on an active continental plate, surrounded by a series of very active volcanoes called the ring of fire. Indonesia’s nature and geography These conditions make Indonesia very vulnerable to disasters (Ramli, 2010).

Every disaster event will produce a number of victims. Victims who survive of disaster called survivors. Survivors are those who directly experience traumatic/natural disaster and survive the disaster (Pratiwi, et al, 2011). Survivors of natural disaster face very complex situations and conditions, both physically and psychologically event socially (Rusmiati, Chatarina and Enny, 2012). For survivors who are able to adapt well, they will produce a positive performance in their lives, whereas for survivors who are less able to adapt they will remain in these unpleasant conditions. The term that describes personal quality that allows individuals and their communities to grow even though they are in disadvantages is called resilience (Margareth, 2016).

Resilience is the ability of person to survive and not give up on difficult circumstances in his life, and try to learn and adapt to these conditions and then rise to become better (Wildani, 2015). Factors that affect the resilience are by internal and externalprotective factors. Internal protective factor is a protective factor originating from inner self such as self-esteem, self-efficacy, ability to overcome problems, regulation of emotions and optimism. Whereas the external protective factor is a protective originating outside the individual, for example, support from family and the environment (Singarimbun, 2017).

Adolescents are in a period of growth and development. Teenagers are one of the groups that receive the impact of natural disasters, one of which arises from the
experience of living in refugee camps without access to schools (Sandha P, 2012). This is also due to several factors, namely the existence of adolescents is still at risk and endangers their survival, the level of life dependence is still high on adults, lack of much life experience, the ability to protect themselves is still limited, not conditions for self-decision. (Anjani, 2020).

MATERIALS AND METHODS

This study aims to study how the resilience of post-disaster adolescents is. The researcher conducted a study with a literature review research design that used a descriptive design that was in accordance with post-disaster adolescent resilience. The journals used are the latest journals published in 2017 to 2021, which are the last 5 years. A systematic search of the following electronic databases was conducted on the PubMed and Google Scholar databases. Search for journal articles as a source of a literature review using the keyword "Resilience, Survivors, Adolescent, Disaster". At the initial search stage, journal articles were found (PubMed=43, Google Scholar=31). After being filtered, 68 articles were not relevant based on the title and abstract. Then obtained as many as 7 articles.

The following steps have been taken, namely: a) formulation of the scope of the review and research question, b) literature search thorough, c) detailed data extraction, and d) integration of the main findings and implications. Meta analyzes were not performed due to heterogeneity across studies in terms of sample characteristics (e.g., different stages of treatment) and outcomes measured. The studies selected for inclusion criteria examined aspects of adolescent resilience including (a) subjective (qualitative) or objective assessment of change since the disaster (longitudinal data); or (b) standardized score, or comparison with norm or control group. Studies published in languages other than English and non-empirical (i.e., reviews, case reports, books, book reviews, commentaries, practice guidelines, conference abstracts, and dissertations) are excluded. Full-text article. Reference lists of selected papers were also reviewed to ensure the inclusion of all relevant papers.

RESULTS

Table. 1 Characteristics of Respondents

<table>
<thead>
<tr>
<th>Author</th>
<th>Age</th>
<th>Gender</th>
<th>Resilience level</th>
</tr>
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<tbody>
<tr>
<td>(Asdiwinata &amp; Tresna Anjani, 2020)</td>
<td>11-17 years</td>
<td>Woman</td>
<td>High (35.0%) Medium (64 %) Low (1.0%)</td>
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<tr>
<td>(Widiawati, A. &amp; Pratisti, W. D., 2018)</td>
<td>14-17 years</td>
<td>Woman</td>
<td>Not explained</td>
</tr>
<tr>
<td>(Sasmita &amp; Afriyenti, 2019)</td>
<td>14-19 years</td>
<td>Woman</td>
<td>High (24%) Medium (62%) Low (14%)</td>
</tr>
<tr>
<td>(Salasa et al., 2017)</td>
<td>16-19 years</td>
<td>Woman</td>
<td>High (36.40%) Medium(63.60%)</td>
</tr>
<tr>
<td>(Lu Y et al., 2020)</td>
<td>12-18 years</td>
<td>Woman</td>
<td>High (52.7%) Medium (47.3%)</td>
</tr>
<tr>
<td>(Nian, 2017)</td>
<td>10-12 years</td>
<td>Woman</td>
<td>Not explained</td>
</tr>
<tr>
<td>(Niman, S. &amp; Sari, M., 2021)</td>
<td>Not explained</td>
<td>Not explained</td>
<td>Not explained</td>
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</tbody>
</table>

Every individual can rise from adversity with the resilience factors within them, then this will help them to survive the difficulties experienced, times of life crisis and overcome things that can trigger stress and help individuals to raise more, better than the previous situation so that the previous disaster can be used as a valuable experience when disaster strikes again.

The description of the level of resilience from the table above concludes that most adolescents in post-disaster areas have moderate levels of resilience as much as 64% and high as 63%. This can occur due to several factors, namely individuals, families, and communities. In addition, gender can also affect a person's resilience. Men are more resilient than women (Apriyanto & Setyawan, 2020).
Based on 6 journal articles that have been reviewed, the research location is carried out in different places with different types of respondent.

<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Title</th>
<th>Design and sample</th>
<th>Intervention</th>
<th>Results</th>
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<tbody>
<tr>
<td>1</td>
<td>Asdiwinata &amp; Tresna Anjani, 2020</td>
<td>The Relationship of Self-esteem with Resilience of Teenagers Survivors of Mount Agung Eruption</td>
<td>A descriptive correlational with cross-sectional approach was used in this study. Samples 203 teenagers who lived in the affected area</td>
<td>This study showed alteration of psychological state from survivors rely on internal and external protective factors. The higher the level of the resilience survivors the higher they would have self-esteem.</td>
<td>Self-esteem and resilience of teenagers was mostly in the moderate category (74.9% and 64.0% respectively).</td>
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<td>2</td>
<td>Widiawati, A. &amp; Pratisti, W. D., 2018</td>
<td>Resiliency in Adolescents Who Live in Disaster Area: Phenomenology Study</td>
<td>qualitative methods and phenomenology study. Six informans were participated in this study. They were 2 adolescents from Kampung Sewu, 2 adolescents from Gunung Kidul, and 2 adolescents who live in Sleman.</td>
<td>This study used purposive sampling to determine the informans and content analysis to analyzed the data.</td>
<td>The results showed that resilieces in adolescents who was living in disaster areas was indicate by the ability to adapt in various situations, keep doing school task at the times of disaster, and maintain healthy life.</td>
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<td>3</td>
<td>Lu Y, Yang D, Niu Y, Zhang H, Du B, Jiang X (2020)</td>
<td>Factors associated with the resilience of Tibetan adolescent survivors five years after the 2010 Yushu earthquake.</td>
<td>This cross-sectional survey was conducted in the area hit the hardest by the Yushu earthquake. Data were collected from 4681 respondents</td>
<td>The age of adolescents in this study is defined as middle school students aged 12–18 years; this definition is also used in other studies from China. Measurements included the participant characteristics, traumatic earthquake experience, the Connor-Davidson resilience scale (CDRISC), and the social support</td>
<td>The mean resilience score of the Tibetan adolescent survivors was 55.0±12.3. Thirteen variables were entered into the regression equation. The three dimensions of social support (from family, from friends, from others than family/friends) were positively associated with resilience (all P&lt;0.001).</td>
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<tr>
<td>Study</td>
<td>Title</td>
<td>Methodology</td>
<td>Population</td>
<td>Scale/Variables</td>
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<tr>
<td>(Sasmita &amp; Afriyenti, 2019)</td>
<td>Post-Tsunami Resilience</td>
<td>quantitative. The population is 50 people.</td>
<td>The scale used is the Resilience Scale from Reivich which amounted to 56 items but in this study only used 21 items. Data analysis using multiple regression yielded 0.92 percent to the resilience variable.</td>
<td>emotion regulation, impulse control, optimism, causal, self-efficacy, reaching out, can help the victims' resilience tsunami, but it is not the case with empathy because it does not have a significant effect on resilience victims.</td>
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<td>(Salasa et al., 2017)</td>
<td>Empowerment in Youth Groups through Approach Contingency Planning in Improving Preparedness against Death Threats from Disaster</td>
<td>quasi-experimental design method with The research population is SMK students in areas that are at risk of disaster. The number of samples is 33 respondents with the technique of proportional random sampling taken from four schools in the red zone.</td>
<td>one group pre-post test design approach.</td>
<td>The results of the study indicate that the empowerment process through a contingency planning approach can to improve youth preparedness against threat of death due to disaster, so that it can be recommended for all activists disaster to empower youth with contingency planning in an effort to increase preparedness for the threat of death.</td>
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<td>(Nian, 2017)</td>
<td>Model of increasing resilience of school-age children after the eruption of Mount Kelud based on disaster nursing competency</td>
<td>Explanatory research and the sample used is 41 students</td>
<td>Resilience questionnaire with CYRM-28 questionnaire and PTSD measured PTSD Checklist-Civilian Version (PCL-C)</td>
<td>The results show that respondents have a significant effect on the resilience and incidence of PTSD in students.</td>
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<td>(Niman, S. &amp; Sari, M., 2021)</td>
<td>Post Disaster Children Resilience: Literature Review</td>
<td>Based on the characteristics of the studies reviewed, all the studies reviewed were quantitative, with most of the studies using longitudinal</td>
<td>The literature review is based on a quantitative method using the PRISMA model for this study. The dependent variable is the child's resilience. The independent</td>
<td>Key psychosocial factors associated with resilience. These key psychosocial factors include the importance of positive bonding with primary caregivers during resilience responses.</td>
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studies (66.6%). The sample size varied from 195 to 757 children and adolescents. Various research times since the occurrence of the disaster were included in the study, namely the disaster occurred after 8 months to 20 months.

**DISCUSSION**

Resilience is a person's ability to survive and never give up in difficult circumstances in life, adapt to these conditions, and be able to rise to be better than before. The results of the research by Asdiwinata & Tresna Anjani, 2020 stated that the resilience of adolescents was mostly in the medium category. Adolescents are more vulnerable than adults in receiving the most impact in a traumatic event. Adolescents who are affected by disasters need to carry out a process of adaptation. In adapting, some teenagers are able to survive and recover from negative situations, while others fail because they are unable to deal with the changes. This depends on how far the individual's ability to adapt to changes that occur in his life. Adolescence is a period of transition, one of the characteristics of adolescents is experiencing emotional instability so that adolescents cannot control themselves when faced with suddenly changing situations, adolescents are still very dependent on adults, especially parents, lack of experience, and knowledge in dealing with disaster situations (Asdiwinata & Tresna Anjani, 2020). According to Widawati, A & Prastiti, W.D, (2018), resilience in adolescents living in disaster-prone areas is demonstrated by the ability to adapt, continue to do schoolwork during disasters, and maintain a healthy life.

Resilience is influenced by several factors, the first is a source of social support which includes good relationships with family, a pleasant school environment, or relationships with other people outside the family. The second factor is the individual's ability which includes the strengths contained in the individual such as being confident and proud of yourself, being kind and calm, having faith, loving and empathizing, being independent and responsible. The third factor is social and interpersonal skills which can be sourced from anything that can be done by individuals about social and interpersonal skills. These skills include managing various feelings and stimuli where individuals can recognize their feelings, recognize various types of emotions, be creative, humorous, seek help, have good social skills, and are able to solve problems (Grotberg, 1999 in Nian, 2017). According to Siebert (2005) in (Nian, 2017) there are seven aspects of resilience, namely 1) Emotional regulation, the ability to remain calm in stressful conditions. The results showed that people who cannot regulate their emotions have difficulty building and maintaining relationships with other people. 2) Impulse control, the individual's ability to control desires, urges, likes, and pressures that arise from within. Individuals who have low impulse control abilities, quickly experience emotional changes that ultimately control their thoughts and
behavior. 3) Optimism, Optimism possessed by an individual show that the individual believes that he can overcome difficulties that may occur in the future. 4) Causal analysis, refers to the individual’s ability to accurately identify the cause of the problem at hand. 5) Empathy, empathy is closely related to the individual’s ability to read signs of other people’s emotional and psychological conditions. 6) Self-efficacy, is success in problem solving. Self-efficacy is the belief that we can solve the problems we experience and achieve success (Iffid & Taufik, 2012). Sasmita & Afriyanti, 2019 stated that emotion regulation, impulse control, optimism, causality, self-efficacy, reaching out, can help the resilience of disaster victims, but empathy has no significant effect on the resilience of victims.

According to Widiawati, A & Prastistini, W.D., 2018 adolescents learn the right way to adapt to situations. They realize that every problem has a solution. This can be solved by asking parents for help or trying to solve the problem yourself. Adolescents need support from parents and the government to adapt to the situation. Resilience in adolescents will continue to develop over time (Asdiwinata & Tresna Anjani, 2020). According to Salasa et al., (2017), one of the efforts to improve youth preparedness against the threat of death due to disasters is through an empowerment process through a contingency planning approach.

CONCLUSION
Adolescent resilience is mostly in the medium category. Adolescents who are affected by disasters need to carry out a process of adaptation. Adolescents need support from parents and the government to adapt to the situation. Resilience in adolescents will continue to develop over time. Resilience in adolescents living in disaster areas is demonstrated by the ability to adapt, continue to do schoolwork during disasters, and maintain a healthy life. Resilience is influenced by several factors, including individual characteristics that can be seen from individual readiness in dealing with disasters, social support (from family, from friends, from people other than family/friends). Emotion regulation, impulse control, optimism, causality, self-efficacy, reaching out, can help adolescent resilience after a disaster.

REFERENCES


Korban Bencana Merapi (Social Impact of Psychological Treatment Merapi Disaster Victims), 17.


