The impact of bullying and cyberbullying on mental health: a systematic review

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Article Info

ABSTRACT

Bullying, including cyberbullying, has a devastating impact on mental health, particularly among adolescents. This literature study aims to identify mental health issues caused by bullying and cyberbullying. A systematic review was conducted in the last five years using the keywords "bullying, cyberbullying, mental health, adolescent" and the population, intervention, comparison, outcome, study design (PICOS) framework within Scopus (29 articles), ProQuest (187 articles), Science Direct (193 articles), and SAGE (58 articles) published databases in the last five years using the keywords of "bullying, cyberbullying, mental health, adolescent". The selected articles are those applying quantitative and longitudinal studies published in 2018-2022 in which study participants were adolescents who had experiences as victims of bullying and cyberbullying. The 25 articles met the inclusion criteria for review. Based on the results of the review of the article, it was found that mental health problems can occur in all roles in bullying and cyberbullying, but the highest is in the role of victim. Mental health problems that occur in victims include anxiety, stress, depression, low self-esteem, suicidal ideation, and suicide attempts. Based on these results, different interventions are needed for the roles involved in bullying and cyberbullying, especially for victims, because psychological problems are more common in victims.

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1. INTRODUCTION

In recent years, teenagers have spent a lot of time on social media and internet use, which can have an impact on physical health through the appearance of physical complaints and mental health. The information written down needs to be added to data or facts that have occurred before so as to strengthen the urgency of the problem to be studied in this research. High use of social media can increase the risk of cyberbullying in adolescents, which is a serious problem [1]. Research shows that bullying has a prevalence that varies between traditional bullying and cyberbullying across countries and periods [2]–[4]. Adolescents who are involved in cyberbullying (perpetrators, witnesses, and victims) have a high risk of psychological problems, especially for victims [2]. The results of the study explain that adolescents who have been victims of cyberbullying have had problems with the school experience (school satisfaction), mental health problems (low self-esteem), and personal relationships (social relations) such as peer rejection, increasing the risk of

depressive symptoms and suicidal ideation, as well as higher anxiety than victims of face-to-face bullying (traditional bullying) [2] and than perpetrators of bullying. The incidence of victims of traditional bullying ranges from 16.9% to 26.1% [5]–[8] and cyberbullying victims range from 7.02% to 56.88% [3], [8].

In the world, suicide is the third biggest cause of mortality, accounting for almost 800,000 fatalities annually, according to a World Health Organization report from 2019 at the age of 15 to 19 [9]. The causes of suicidal ideation vary, including internal factors such as hopelessness and low self-esteem [10] and interpersonal factors such as loneliness [11], social anxiety, and bullying [12]. Victims of bullying were found to have internalisation problems, including depression [13], anxiety [10], and low self-esteem, as well as higher levels of psychological distress, anxiety disorders, and suicidal behavior [1].

Health problems in adolescents that arise as a result of bullying and cyberbullying need serious attention from parents, teachers, school officials, and the relevant government because adolescents are a productive age with high opportunities for achievement, so their welfare needs attention. According to the WHO (2021), the second most common reason for death is suicide, among teenagers throughout the world [14]. This means that there has been an increase in the number of adolescent deaths caused by suicide from the previous year. Some research results explain that the risk factor for suicide in adolescents is victimisation by bullying and cyberbullying, which endanger mental health [11], [15]–[24]. Prosperous youth are expected to be able to become a generation with character, high innovation, responsibility, and value. Therefore, based on the problems described above, the researchers conducted a literature review on health problems that occur as a result of bullying and cyberbullying, which will be used as follow-up that can be carried out by adolescent mental health nurses in providing education about skills in dealing with stressors such as bullying and cyberbullying.

2. METHOD

Synthesis of pertinent studies on the effects of bullying and cyberbullying on teenage mental health is done through systematic reviews. The Centre for Review and Dissemination and the Joanna Briggs Institute Guidelines were used to evaluate the quality of the research using the PRISMA checklist. Keyword to be used using the Boolean operator (AND, OR NOT, or AND NOT). Approval of the research's ethical feasibility was obtained from health research ethics commission, faculty of nursing, Airlangga University with number 2726-KEPK on December 22, 2022.

2.1. Search strategy and inclusion criteria for systematic reviews

SCOPUS, PROQUEST, SAGE, and SCIENCE DIRECT were used as electronic databases to do a thorough literature search for published studies. Then, additional articles were found by searching through the reference lists of the articles that had already been found. The inclusion criteria were studies that i) used quantitative or qualitative research designs, ii) were written in English over the previous five years (2018–2022), and iii) included teenagers. In the search, the terms "bullying," "cyberbullying," "mental health," and "adolescent" were used. Following the search procedure, articles are chosen based on the inclusion and exclusion criteria listed in Table 1.

Tabel 1. Inclusion and exclusion criteria with PICOS

Criteria	Inclusion	Exclution
Population	Adolescent	Non adolescent age
Intervention	There are no intervention	There are no criteria exclusion
Comparisons	There are no comparison	There are no criteria exclusion
Outcome	Mental health, emotional problems, psychosocial	No relevant mental health, emotional problems, psychosocial
Study type	Cross sectional, longitudinal study	A randomized controlled trial, a clinical trial, or a quasi-experimental design systematic or qualitative study, literature reviews
Publication type	Peer reviewed original studies	Non peer-reviewed studies
Publication years	2018–2022	Pre 2018
Languange	English	Language ather than English

2.2. Study selection, data extraction, and management

We conducted a review based on the year of publication, the database searched, the study population, and the effect of bullying and cyberbullying on adolescent mental health based on the review results for each full text. Authors independently screened the title, abstract, and entire content of papers, and used full-text versions to determine their ultimate inclusion in the review based on relevance to the question,

study quality, level of evidence, and a number of other factors. Each defended article was evaluated, and significant material was extracted into evidence tables that provide a description of the publication's procedures and findings. A supplementary table summarises the characteristics, including methodology, findings, and recommendations.

2.3. Outcome measures

The target of this literature review is to explain mental health problems in adolescents caused by bullying and cyberbullying. The mental health problems that will be described are mental health problems that are most often experienced by adolescents who are victims of bullying and cyberbullying. The problems to be described are determined based on data from the literature review.

3. RESULTS

Self-harm, suicide, and other mental health issues have grown to be significant public health issues that add to the overall burden of disease [15]. According to the study's findings, bullying victims-both traditional and online-are more likely to experience psychological issues like anxiety, stress, sadness, a sense of worthlessness, self-harm, and suicide thoughts and behavior [1], [2], [25]–[29]. According to the findings of a survey of 25 papers in the literature as shown in Figure 1, bullying and cyberbullying can lead to the following health issues: i) Anxiety, stress, and depression, ii) Low self-esteem, iii) Suicidal ideation and attempts.
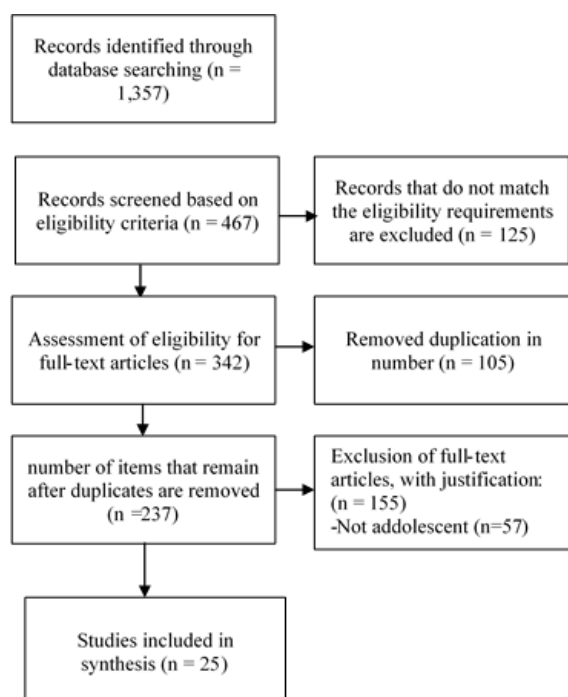

Figure 1. PRISMA flow diagram

4. DISCUSSION

Several studies have explained that psychological problems can occur in all roles in bullying and cyberbullying, but significant psychological problems occur in victims. Based on the results of research, adolescent victims of bullying and cyberbullying will tend to experience psychological distress, depression, anxiety, low self-esteem, suicidal ideation and attempts, and loneliness [1], [2], [25], [26] in both males and females [1]. All adolescents who are involved in cyberbullying and traditional bullying have negative mental health problems. Various problems related to psychology will affect the psychological well-being of adolescents, especially those who are victims of bullying and cyberbullying [30], and will be related to quality of life [31].

4.1. Anxiety, stress and depression

The highest emotional stress occurs for victims and perpetrators of cyberbullying [27], [32] than traditional bullying. Other studies explain that emotional disturbances and even psychiatric disorders are highest among victims of cyberbullying, such as depression [33]. The experience of negative events experienced by adolescents and certain characteristics of adolescents will contribute to excessive stress when adolescents face bullying and cyberbullying [34]. Teenagers who are victims of bullying and cyberbullying will experience changes, namely social anxiety that encourages teenagers to limit interactions by withdrawing so that they feel lonely. This will encourage teenagers to prefer to interact online, which in turn will increase the risk of cyberbullying. In this case, anxiety and depression are not only a mental health impact due to cyberbullying but also one of the factors that put adolescents at risk of becoming victims of cyberbullying [26]. Anxiety and depression in adolescent victims of cyberbullying are higher in female adolescents. In connection with this explanation, it is in accordance with several research results that explain that bullying and cyberbullying will be related to anxiety, stress, and depression, and this has a reciprocal relationship [25], [26], [35]–[44].

Psychological problems such as anxiety, stress, and depression occur because adolescents do not have the right coping strategies, so they are unable to survive for a long time when faced with stressful conditions. Coping strategies used by adolescents who face bullying can become adaptive coping strategies that can only last in the short term [45]. Adolescents with certain characteristics and maladaptive coping styles tend to feel excessive stress when faced with unpleasant situations. Therefore, teenagers need to have the right coping strategies that help them survive in the face of bullying and cyberbullying.

4.2. Low self-esteem

The study's findings explain that there is a significant connection between bullying and cyberbullying and self-esteem and coping skills among victims and non-victims [46], [47]. This implies that an increase in bullying and cyberbullying results in a decline in teenagers' self-esteem and coping mechanisms [46], [47]. When teenagers experience bullying and cyberbullying, they feel inferior, depressed, afraid, anxious, and worthless [39], [47]–[51]. Bullying victims experience loneliness and sadness at school and have a harder time making friends. This condition causes adolescents to feel uncomfortable at school and tends to decrease academic achievement. The consequences of this experience cause adolescents to experience having poor self-esteem and a negative view of themselves because they are unable to combat the problem because of bullying, which will damage their coping abilities.

Adolescents who are victims of bullying and cyberbullying are at risk of having poor peer evaluations, resulting in social exclusion and negative evaluations of themselves. The existence of social exclusion causes victims of cyberbullying and traditional bullying to have low self-confidence, trust in others, emotional competence, and subjective well-being [37]. Cyberbullying in adolescents has a higher risk of low self-esteem than traditional bullying [29], but several studies explain that traditional bullying and cyberbullying have a relationship with low self-esteem [26], [46], [47], [52]–[55]. Adolescent girls with psychosocial problems tend to be more prone to strengthening negative self-evaluations by demeaning themselves when they become victims of cyberbullying [26]. Adolescents who have negative self-evaluations and high internalisation of stressors will tend to be at risk of self-harm and self-injury, which will then lead to suicidal ideation and attempts [1]. Several studies explain that self-esteem, in addition to being the impact of bullying and cyberbullying, can henceforth also be a mediator of bullying and cyberbullying [39], [51], [56]–[58].

4.3. Suicidal ideation and attempts

All forms of bullying in adolescents are at risk for psychological problems and suicide [15], [23], [24], [28], [59], [60] but psychological problems and suicide attempts are higher in cyberbullying than traditional bullying [29]. Suicidal ideation in adolescents who are victims of bullying and cyberbullying occurs due to high feelings of shame, guilt, fear, and hopelessness and adolescents lack support from peers. In addition, the presence of anxiety and depression in adolescents and the lack of support from family and friends [49] are risk factors for adolescents to have suicidal ideation and attempts. This is congruent with study findings that social disengagement and problem avoidance are related to greater internalised symptoms such as anxiety and depression, both of which are risk factors for the formation of suicide thoughts [61]. According to research's conclusions, statistically significant correlation exists between anxiety and depression and a higher risk of suicide [62]. Furthermore, a meta-analysis and a systematic review of longitudinal research discovered that anxiety disorders are a significant risk factor for suicide [63].

The results of the study explain that female adolescents have a tendency to experience high psychological pressure and suicidal ideation due to internalization of excessive cyberbullying stressors than male adolescents [64]. According to the findings of a study on teenagers aged 13 to 20, female adolescents are twice as likely as male adolescents to have suicidal thoughts or attempt suicide [65]. There are various

plausible explanations for the gender disparities in suicidal thoughts and suicide attempts, including mental health (for instance, female individuals were more likely to experience despair and anxiety) and Public shame (For instance, more stigma associated with suicide in males compared to females) [66]. Furthermore, women's personalities have a tendency to over-identify, blame themselves, and feel alone in the face of stressful situations such as bullying and cyberbullying, which leads to negative self-evaluations and self-harm [67]. This is consistent with the idea that teenagers with strong emotional regulation and self-compassion are less likely to develop depression [68]. Suicidal thoughts, according to the study, are a strong predictor of suicidal behaviour. As a result, adequate action is required to notice these ideas in order to prevent suicide behaviour. Furthermore, interventions focused on overcoming problems with emotional regulation and developing resilience in the face of stressful events in life, such as bullying, cyberbullying, or other situations that are stressors in life that cannot be avoided, are required. This is important to reduce the death rate among teenagers due to suicide.

5. CONCLUSION

Anxiety, stress, despair, low self-esteem, attempts at suicide, and suicidal thoughts are adolescent mental health problems caused by bullying and cyberbullying. Adolescents who are involved in bullying and cyberbullying, especially those who act as victims, need to get serious attention from health workers, especially mental health nurses. Mental health nurses need to develop appropriate interventions that are given to adolescents who experience mental health impacts due to bullying and cyberbullying. Bullying and cyberbullying are events that cannot be avoided and can happen to anyone, including adolescents, therefore mental health nurses need to train adolescents to be able to deal with bullying and cyberbullying and overcome their impact on mental health, one of which is by practicing the ability to regulate emotions with oneself affection. With these abilities, adolescents will be able to independently increase self-esteem and subjective well-being.

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