Article

The prevalent anxiety disorders among elementary students in Bandung, Indonesia

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Abstract

Background: Anxiety constitutes one of the most prevalent childhood mental health problems. It affects social functions, academic functions and increases the risk of mental health problems at the next stage of development among elementary school children. Besides, psychopathologic disorders in teenagers appear in form of emotional symptoms. Early anxiety screening is important for elementary students as anxiety disorders incur huge financial treatment costs, meanwhile, related data are needed to provide early and adequate interventions. This study is expected to be the basis for developing mental health programs at the elementary school level. Furthermore, aims to identify types of anxiety disorders among grade 4 and 5 students at the elementary level.

Design and Methods: The study was conducted using a quantitative method with a descriptive design. Meanwhile, the Screen for Child Anxiety Related Disorders (SCARED) model consisting of 41 questions was used, while the instrument's Reliability and Validity was 0.81 and 0.67 respectively. A total of 135 students from the private elementary schools participated in this study.

Results: Among the 135 elementary students aged 10 to 11, 48.9% were males while 51.1% were females, 79.3% had anxiety consisting of generalized anxiety 40%, panic disorder 48.1%, separation anxiety 40%, social anxiety 65.9%, while 28.9% experienced school avoidance.

Conclusions: Based on the results, health workers, teachers and parents need to work together to manage anxiety in elementary students. In addition, nurses as health workers at community primary health need to work together with counselling and guidance teachers to provide preventive and promotive interventions through the school's mental health services.

Introduction

Elementary students with poor mental health, usually experience difficulties in school performance and social relations.[1] Besides, anxiety disorders are the most common mental health problems experienced by children. It is associated with impaired academic, social, health functions as well as increased risk for continued or recurring anxiety later in life.[2] Anxiety disorders have lifetime prevalence rate up to 30%, and when unremitted in childhood, it leads to additional psychopathology and interfere with social, emotional, and academic development.[3]

Childhood anxiety disorders are the most prevalent psychopathology as 31% of cases fufilled the criteria for an anxiety disorder. It is associated with significant functional impairments and increased risk for other psychiatric disorders.[4] The prevalence in community samples of children ranged between 5.7–17.7 %.[5] Meanwhile, several children with anxiety remain undiagnosed and untreated.[6] Parents and teachers find it difficult to identify anxiety disorders among children, hence, only a minority of affected children have access to professional assistance.[2] Furthermore, parents tend to engage in more rejective and psychological controlling behavior during interactions. This potentially results in low self-esteem, decreased emotional regulation and increased sensitivity to anxiety.[7] A cohort study in Canada, identified the structure of emotional symptoms among elementary school girls in relation to anxiety disorders or major depression in adolescents.[8] Moreover, a survey on 10,123 American adolescents aged 13 to 18 years reported that about 3–9% of the participants had generalized anxiety disorder and social phobia.[9] Another research reported social phobia (12.7%) among 6–18 years old students in Qatar.[10]

Generally, the prevalence of emotional disorders in Indonesia is 9.8%, while the prevalence based on the 15–24 age group is 10%. However, this value is higher compared to the national rate in West Java, one of Indonesian province with a prevalence of 12.1%.[11] A study on 315 elementary students at Manado reported that 13.02% had mild anxiety, 6.67% had moderate and 2.22% had severe anxiety.[12]

Anxiety is a subjective experience of an individual and is not observed directly as an emotional state without a specific object. It occurs as a result of threats to self-esteem which is fundamental to the existence of individuals. Anxiety that is communicated interpersonally generates valuable warning important to maintain balance and protect life.[13]

Significance for public health

Given the prevalence of anxiety among elementary students, this study reflects significant data on mental health problems in children. The data demonstrate the number of children with distinct type of anxiety. Hence, the findings are applicable as basis for important anxiety prevention programs and also show the need for anxiety management among school children for optimal growth and development. The anxiety prevention and management programs for children needs to be implemented in schools to reduce anxiety problems.

Besides, anxiety is an emotional feeling that arises as an initial response to psychological stress and threats to important values of an individual.[14] Anxiety disorders are characterized by excessive worry, uneasiness, and fear of future events; hence, it affects social and occupational functions. Based on distinct phenomenological patterns, the DSM-V identified several forms of anxiety namely generalized, social, and panic anxiety disorder.[15] It also include separation anxiety disorder, and social phobia, which are characterized by excessive fear and relative behavioural disturbances.[11]

Childhood anxiety disorders are associated with both inability to flexibly perceive relevant emotional stimuli and dysregulated expression of emotional experiences. Children with anxiety have intensified emotional experience, inability to modulate arousal, impaired emotional control, avoidance of emotion eliciting situations and inadequate management.[16] Moreover, these individuals experience pressure to perform at school. This pressure to thrive have both positive and negative effects. The negative effects such low self-esteem and excessive worry affects psychological well-being. School related pressure is a major feature of children's narrative, especially in relation to difficulties in carrying out schoolwork in the classroom as well as homework.[17]

Anxiety among elementary students interfere with performance of cognitive functions, such as focus, memory, concept formation and problem-solving. Childhood is a preparatory time for the adult roles, in addition, children's achievements are very important for the future. Children achievement are to be focused on cognitive development, abilities, interests, and behaviour of evaluative situations. Moreover, children are to be focused on achieving education performance and hope for progress in the future.[18] The elementary school provides a foundational period of children education. Meanwhile, students deal with a variety of stressors, such as problems with teachers, friends, school duty, exams and parental expectations. When this is not properly managed, it affects the children's mental health. School-age children with mental health problems such as anxiety usually have poor school performance or inability to complete given tasks. Assessing anxiety disorders in elementary children requires the use of multiple resources information. Previous studies on elementary school children measured anxiety based on the level and causes. The Screen for Child Anxiety Related Disorders (SCARED) model is an anxiety measurement tool for children aged 8–18 years, it measures types of anxiety. Based on the literature search, no study has investigated the prevalence of anxiety disorders among elementary students in Bandung. In line with the description of the above phenomenon, this study aims to identify the types of anxiety disorders among private elementary students. This study aims to determine the prevalence and types of anxiety disorders among private elementary school students.

Design and Methods

This was a quantitative research conducted using a descriptive design. It was carried out in February 2019 in two Private Elementary Schools, Bandung, West Java. The study population were 135 elementary school student aged 10 to 11 years, from grades 4 to 5. The nonprobability and purposive sampling technique were used, meanwhile, sampling was carried out to determine specific characteristics in line with the research objectives, and to solve the research problems. Based on the Slovin formula, 135 students were recruited for this study. Moreover, the Screen for Child Anxiety Related Disorders model was used consisting of 41 questions with 0.81 and 0.67 Reliability and Validity respectively. The data were collected in February 2019 by distributing questionnaires to students with the assistance of the teachers. Besides, participants' parents were asked to fill a consent form while the questionnaire were filled in the classroom. The data were analysed descriptively to determine the characteristics based on the distribution frequency. This study was approved by the Institutional Review board with number 1652/STIK-SB/BAAK/pem/XI/2019.

Results

A total of 135 respondents filled the questionnaire with the results of respondents aged 10 years amounting to 102 (75.6%). Meanwhile, based on gender, majority of the respondents were female 69 (51.1%) (Table 1). Anxiety disorder is indicated when the total score is ≥25. Based on the results, 107 respondents (79.3%) have anxiety (Table 2).

Based on the SCARED instrument, the respondents chose 0-2 for each statement item. A score of 7 on items 1, 6, 9, 12, 15, 18, 19, 22, 24, 27, 30, 34, and 38 indicate panic disorder, whereas a score of 9 for items 5, 7, 14, 21, 23, 28, 33, 35, and 37 indicate generalized anxiety disorder. Moreover, a score of 5 for items 4, 8, 13, 16, 20, 25, 29, and 31 indicate separation anxiety, a score of 8 for items 3, 10, 26, 32, 39, 40, and 41 indicate social anxiety disorder, while a score 3 for items 2, 11,17, and 36 indicate school avoidance. The results in relation to the types of anxiety showed that 40% had generalized anxiety disorder, 48.1% panic disorder, 40% separation anxiety, 65.9% social anxiety and 30% school avoidance (Figure 1).

Discussion

Based on the results, majority of the respondents, 107 (79.3%) have anxiety disorder. Meanwhile, the questionnaire analysis showed that 75 respondents had a score over 30, indicating specific anxiety. The highest value of response to questionnaires by respondents was 56, while the lowest was 7. Among the 107 respondents that have anxiety disorders, more than half (55) were female. Hence, anxiety was higher in females compared to males. This is probably because adult females experience significant physical changes. Moreover, the inability to manage daily life situations,

Table 1. Frequency distribution of respondents by age and gender (n=135).

Age	Frequency	%	Gender	Frequency	%
10 years	102	75.6	Man	66	48.9
11 years	33	24.4	Woman	69	51.1
Total	135	100		135	100

Table 2. Frequency distribution of respondents by anxiety (n=135).

	Frequency	%
Not worried	28	20.7
Anxious	107	79.3
Total	135	100

and the lack of experience in dealing with various possibilities that make people less prepared to face new situation, further adds to the incidence of anxiety in female students.

Generalized anxiety

Generalized anxiety is chronic and occurs almost all the time, even though the sufferer might not know the reason for being anxious. Based on the results, less than half of the respondents had generalized anxiety disorder amounting to 54 respondents (40%). In addition, the question regarding being worried about what might happen in the future was correctly answered by 32.6% of the respondents. Individuals with generalized anxiety disorder feel worried about future possibilities as a way to prepare for the bad things that might occur in various events.

Panic disorders

Unlike the usual anxiety, panic disorder often strikes suddenly and shows physical symptoms often mistaken for heart attack. Symptoms of panic disorder include intense fear, chest pain, irregular heartbeat (palpitations), bated breath, dizziness, and abdominal pain. Based on the results, less than half of the respondents (65; 48.1%) have panic disorders. In addition, question regarding respondents' reaction to fear outcomes such as heart pounding was correctly answered by 48% of the respondent.

Separation anxiety

The results shows that less than half of the respondents (54; 40%) had separated anxiety disorder. In addition, questions regarding dislike or feeling neglected by the family, was correctly answered by more than half (57%) of the respondents. This occurs because elementary students which are initially always close to parents now have to be apart thereby, resulting in anxiety. Children affected by symptoms of separation anxiety and emotional insecurity always feel deeply concerned. Meanwhile, separation anxiety disorders are to be differentiated from age-appropriate fear by caregiver.[8] It is a common childhood anxiety disorder characterized by children's excessive fears of being separated from major attachment figures.[18] Separation anxiety disorders refers to fear of parting with parents or other significant individual attached to such child for a long time.

Social anxiety

Based on the results, more than half of the respondents (89; 65.9%) suffered from social anxiety disorder. This is supported by the reports of uneasiness feeling when around people which 61.5%

Figure 1. Frequency distribution of respondents by type of anxiety (n=135).

of the respondents answered correctly. Models of social anxiety suggested that negative social experiences contribute to the development of social anxiety. Individuals with social anxiety often recall events that are closely linked to the negative self-image portrayed by the mind.[19] Social anxiety, also known as social phobia, is a sense of extreme fear in social situations or involving certain performance, especially unfamiliar situation. It often makes potential students less optimal.

School avoidance

The results show that less than half of the respondents (38; 30%) experienced a school avoidance. This was supported by response to questions regarding feeling anxious when going to school where 49% of the respondents answered occasionally, and 27% answered correctly. The respondents typically identified school and classroom work as the top sources of stress.[20] School avoidance is an emotional issue, manifested by the refusal of children to attend school by showing physical symptoms such as malingering, due to anxiety of being separated from the nearest person, as well as negative experiences in school. The tendency to avoid school is characterized by excessive worrying, crying, feeling sick or scared when going to school. School avoidance behaviour also occur because children are uncomfortable due to the fear of losing the ability to master developmental tasks at various stages of development.

The results showed that the respondents experienced several types of anxiety namely generalized, panic, and separated anxiety disorder as well as school avoidance. Meanwhile, more than half of the respondents suffered from a social anxiety disorder. The featured private primary school students have elevated stressor levels due to higher school demands such as numerous varied schoolwork, lessons and extracurricular activities. Furthermore, due to the higher school fees spent by the parents, students are required to always get good grades. This condition is a problem that elementary student attempt to avoid. When the brain responds to this situation, children feel anxious. This brain response is a basic emotion, already present in infancy and childhood. Anxiety becomes maladaptive when it interferes with functioning, for example avoidance behaviour is most likely to occur when anxiety becomes overly frequent, severe, and persistent.

The results were in line with previous study which stated that the specific risk periods for the first onset of anxiety disorders is childhood and adolescence. Besides, the differences in age of onset provides one important indicator for separating different types of anxiety disorders. The earliest age of onset has been consistently found for separating anxiety disorder and other types of specific phobias, with most cases emerging in childhood before the age of 12, followed by the onset of social phobia which are more prevalent in late childhood. In contrast, the core periods for the first onset of panic disorder are late adolescence with further incidences occurring in early adulthood, although some cases, especially with panic attacks, might occur at or before 12 years.[21]

Therefore, teachers, parents and health workers are to work together to help elementary school students overcome anxiety disorders by supporting adaptive measure to sustain and assist students when anxious. Nurses as health workers at community primary health are to work together with counselling and guidance teachers to provide preventive and promotive interventions through the school's mental health services. This study is limited given that it only describes anxiety based on the scoring results. Therefore, further tests are needed to diagnose anxiety in elementary school children.
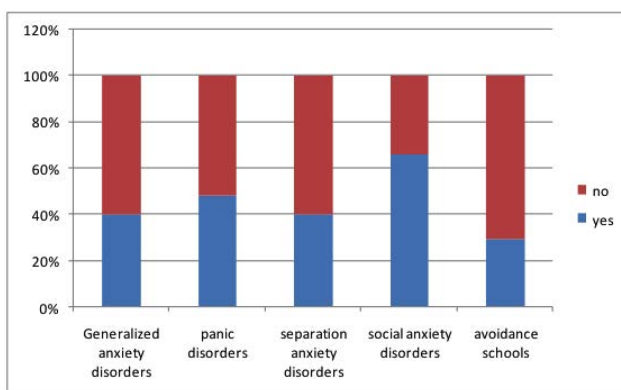
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