Depression of Secondary School Students

Depression frequently occurs through an individual's life and is especially higher in adolescents. Choochart Deeromram (a lecturer) and Yardpiroon Chummalee (a nursing student at the Faculty of Nursing, Mahasarakham University, Thailand) conducted a study aimed at determining the prevalence and factors related to depression of secondary school students in the north-east region of Thailand.

Background of the study

With globalisation, the world is changing rapidly, especially in terms of environmental, social and cultural aspects. These changes could impact and affect the stress level of people and their ability to adapt. Stress is an adaptive phenomenon of human beings which, to a higher degree, contributes to their survival, an adequate output in their activities and the effective performance in many phases of life (Pades Jiménez & Homar Amengual, 2006).

According to the failure of coping with difficult situations, persons will be prone to several causes of illness either physically or psychologically. Mental health and psychiatric disorders are associated with significant functional impairment, morbidity and mortality of people. It frequently occurs with chronic and recurrent progression through the life period of individuals (Lotrakul & Sukanich, 1999).

Depression is one of the most commonly occurring of the major psychiatric disorders, and it has become increasingly recognized that depression often begins in adolescence. It is a prototypical multifactorial disorder that profoundly affects individuals' emotions, thoughts, sense of self, behaviour, interpersonal relations, physical functioning, biological processes, work productivity and overall life satisfaction (Hankin, 2006).

According to a World Health Organization (WHO) report, the number of suicidal victims is about one million each year or 2,739 persons a day (on average 114 persons per hour or 2 persons a minute). Moreover, the expected number of victims in the year 2020 will be 1.5 million persons. In Thailand, the Department of Mental Health Report, Ministry of Public Health states that the country ranks 71 in the world statistics of suicidal victims (http://www.thaihealth.or.th/node/4634).

Why adolescents?

Situations in high school, especially academic, are one of several areas that lead to stress. Other factors, such as genetic, personality/temperament, biological, cognitive and interpersonal, increase the risk of adolescents experiencing depression, especially when facing stressful events (Hankin, 2006).

According to Hankin (2006), the syndrome and predominant symptoms of depression may differ given the age and development of an individual since cognitive, social, emotional and biological changes transpire over time throughout the childhood and adolescence. It appears that very young children, especially preschoolers, tend not to report depressed moods or hopelessness and that younger child are more likely to describe somatic symptoms of depression (Weiss & Garber, 2003).

Depression symptoms, such as anhedonia (loss of pleasure) and psychomotor retardation, tend to increase and become more prevalent with the transition from childhood to adolescence, whereas the symptoms of somatic complaints and the physical appearance of looking depressed tend to decrease with age. The rate of prevalence of depression has been examined in many studies with different age groups, methods and samples. However, community samples are emphasized for estimating prevalence rate of depression because samples drawn from psychiatric clinics may be biased in various ways, such as actively seeking treatment, exhibiting greater severity and revealing higher co-morbidity. These biases can artificially inflate the rate of prevalence of depression (Hankin, 2006).

Gender makes a difference

Differences in genders also affect adolescent depression: twice as many adult women are depressed as men. Longitudinal studies investigating the emergence of the gender difference at the level of depressive disorder find the same pattern: more girls than boys begin to become clinically depressed after the age of 12 or 13 (Costello, et. al., 2003). Pubertal development and timing have been studied relative to the gender difference in adolescent depression. Additionally, girls who start puberty earlier than their peers are more likely to become depressed (Ge, et al., 2001). Girls reported more depressive symptoms and stress in certain contexts (e.g., interpersonal) than boys.

Gender differences in depression were partially explained by girls reporting more stress, especially peer events. Depressed mood at younger ages carries the risk for development of depressive disorder later in life. Moreover, it is a chronic and recurrent disorder. For individuals with multiple recurrences, the time to the next recurrence decreases with each recurrence. In addition, depression commonly occurs with other disorders, especially anxiety and disruptive behavioural disorders. Children and early adolescents are more likely to have a co-occurring diagnosis of separation anxiety disorder and depression, whereas older adolescents are more likely to exhibit co-morbid eating disorders and substance use problems (Hankin, 2006).

Stress factors play a part

Regarding several factors related to depression in adolescents, a vulnerability-stress framework, recent stressful events trigger an underlying predisposition and this may be one of the most promising approaches for understanding what may cause depression in youth (Hankin & Abela, 2005). Stresses are defined as environmental events or chronic conditions that objectively threaten the physical and/or psychological health as well as the well-being of individuals of a particular age in a particular society (Grant, et al., 2003). Almost all individuals diagnosed with depressive disorder will have experienced at least one significant stress in terms of a negative life event prior to the onset of depression (Goodyer, 2001).

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Furthermore, not only stressful negative life events but also a variety of vulnerabilities leads to depression in adolescents. These vulnerability factors include genetic, personality/temperament, biological, cognitive and interpersonal (Hankin, 2006). The genetic vulnerability, which means having a parent with a history of major depressive disorder, is the strongest predictor of depression. Genetic studies with children and adolescents as samples have found depression to be hereditary (Rice, et al., 2002; Sullivan, et al., 2000).

For personality/temperament vulnerability, depression has consistently been associated with personality traits that are moderately heritable (Plomin & Caspi, 1999). The strongest predictors of depression in adults are negative life events, genetic factors, previous depressive episodes and neuroticism (Kendler, et al., 1993).

Several aspects of biological vulnerability to depression have been investigated in children, adolescents and adults (Kaufman, et al., 2001; Thease, et al., 2002). Humans biologically respond to stress factors through the activation of the hypothalamic-pituitary-adrenal (HPA) axis, which may be a biological vulnerability to depression (Meyer, et al., 2001). Neural circuits in the brain (the amygdale mediates fear, anxiety and emotional memory; the mesolimbic dopamine system involves reward and pleasure and the prefrontal cortex controls behavioural and affective flexibility that is involved with approach/withdrawal systems) have been implicated in vulnerability to depression. These regions have been found to be abnormal in studies comparing depressed adults with normal persons (Davidson, et al., 2002).

Cognitive vulnerability and cognitive theories of depression are concerned primarily with the relationship between human mental activity and the experience

of depression. Four cognitive vulnerability factors have received the most attention: negative inferential styles about causes, consequences and the self; dysfunctional attitudes; the tendency to ruminate in response to depressed moods and self-criticism (Hankin, 2006). The remaining, interpersonal vulnerabilities to depression can be characterised as manifesting themselves within the individual, including excessive reassurance seeking, dependency, social support and insecure attachment.

In a study looking at the school performance of students, depression was associated with difficulties in concentration, social relationships, self-reliant school performance and reading and writing as well as perceiving schoolwork as highly loaded (Fröjd, 2008).

In summary, these selected vulnerabilities to depression and the role of stressors as contributory causes of the development of depression in adolescents, demonstrate that environmental stressors precede and contribute to prospective increases in adolescent depression. Furthermore, vulnerabilities can enhance the association, such that vulnerable adolescents are more likely to become depressed in the face of stress compared with non-vulnerable youth (Hankin, 2006).

Depression in adolescents is a prevalent mental illness with significant burden and costs in terms of social, educational, interpersonal, economic and impaired future developmental outcomes. It can be identified and evaluated in various ways, and this is important for diagnosis and eventual treatment or prevention (Hankin, 2006). Therefore, this study is essentially conducted to determine the prevalence of depression and factors influencing depression among secondary school students (grades 4 to 6). This is especially with students in the north-east region of Thailand since they face a variety of vulnerability factors.

How the study was conducted

The descriptive research design was used to determine the prevalence of depression.

i) Population and Sampling

The target population was secondary school students (grades 4 to 6). The research setting was one of the secondary schools randomly selected from the north-east region of Thailand. The population was 752 students in academic year 2008. The samples of this study, 261 students, were proportionately drawn by stratified random sampling.

ii) Research Instruments

The demographic data was assessed using the Demographic Data Questionnaire that contains checklists of demographic characteristics.

The Thai Centre for Epidemiologic Studies-Depression Scale (CES-D) was developed by Umaporn Trungkasombat and his team in 1997. It consists of 20 items with 4-point differential scale for identifying the feelings of participants over one week. The score of the CES-D questionnaire ranges from 0 to 60. Students who indicated a CES-D scale higher than 22 scores were assigned as high risks to depression, whereas the CES-D score of normal students was lower than 23. The alpha cronbach's coefficient of the questionnaire was 0.68.

iii) Protection of Human Subjects

This study was conducted based on the protection of human rights. Eligible subjects who were approached to participate in the study had to sign consent forms. The subjects who agreed to participate were assured that data would be kept confidential and reported only as aggregated information. In addition, participants were informed that they could withdraw from the study at any time.

iv) Data Collection Procedure

The research team contacted the researchers who developed the Thai versions of instruments and ask for their permission to use their questionnaires in this study. Permission to conduct the study was obtained from the head of the secondary school.

v) Data Analysis

Data was analysed using a computer programme. Frequencies and parameters were used for data description and the sums of CES-D scores for identifying students who were at risk to depression. Non-parametric statistics (Chi-square test) were used to determine factors influencing depression among students.

Results of the study

Of the 261 students (academic year 2008) of the secondary school

approached, the response rate was 100%. This sample was proportionate stratified random sampling. The mean age of the subjects was 16.40 years (SD= 0.90, range= 14 to 18).

The findings reveal that the mean score of CES-D scale was 22.51 (SD= 5.77). The percentage of students with risk for depression (CES-D score higher than 22) was 46.4%, whereas normal students (CES-D score lower than 22) was 53.6%. The subjects with different gender, level of education, marital status of parents, attachment level in the family, individual health status and others who had not asked for counselling were not significantly related to depression.

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Discussion

To investigate depression in early adolescents, the CES-D scale was applied to secondary school students in this study. The cut-off point of this instrument was assigned by using CES-D score higher than 22 for the group at risk for depression whereas the normal group had to demonstrate a score lower than 23. The findings reveal that the mean score was 22.51. Interestingly, the assessed score of depression in secondary school students was higher than the cut-off point of the questionnaire. Additionally, the percentage of students who were in the depression and normal groups was a little different. Although there were only few differences in the values of percentage and mean score it may be considered as the critical point for monitoring.

With regards to the result of this study, it makes aware the situation and allows for preventive measures to be undertaken to deal with the new trend of depression in early adolescents.

Several studies on depression in adolescents suggest that the syndrome and predominant symptoms may differ in accordance to the age and development given the cognitive, social, emotional and biological changes that transpire over time throughout childhood and adolescence (Hankin, 2006). With regards to the result of this study, it makes aware the situation and allows for preventive measures to be undertaken to deal with the new trend of depression in early adolescents.

Regarding factors related to depression in adolescents, vulnerability–stress framework was proposed as one of the most promising approaches for understanding what may cause depression in youth (Hankin & Abela, 2005). Not only stressful negative life events, but also a variety of vulnerability factors including genetic, personality/temperament, biological, cognitive, and interpersonal could influence the depression of adolescents (Hankin, 2006).

In this study, in contrast with the results of several previous researches, the subjects with different gender, level of education, marital status of parents, attachment level in the family and individual health status were not significantly related to depression. These results might be considered as a new perspective of depressive disorder in early adolescents based on the Thai culture, especially in the north-east region of Thailand. One possible reason to explain these results might be due to the differences of area and culture of the subjects. Therefore, adolescents in both groups of experienced and inexperienced with stressful negative life events as well as vulnerability factors must be closely monitored for initiating the appropriate preventive measures. Moreover, the results of this study provide a preliminary knowledge base and are essential for developing further studies in the future.

Conclusion

According to the results of this research, despite differences from previous studies, it may demonstrate the changing point of depression trend in early adolescents. The results significantly reflect the recent situation of depressive disorder in adolescents, especially based on specific culture in the north-east region of Thailand. Therefore, these findings can stimulate people to become aware of this situation and search for appropriate preventive measures. ■

About the Author

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