

Student's Corner

Study On Pattern Of Obsessive Behaviors And Thoughts In A State Of Anxiety In Teenagers

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Abstract:

Objective: To determine pattern of obsessive behaviors and thoughts in a state of anxiety in teenagers (14-18 years) of age.

Study Design: Cross sectional

Methods: We conducted research on teenagers of different cities of Pakistan. We selected about 100 students of age 14-18 years, out of which 55 were girls and 45 were boys of schools, colleges and academies. DASS (depression anxiety stress scale) was used as instrument.

Results:

Our study showed that 30 students (30%) felt that everything was alright and nothing bad will happen at any time. Similarly same number of teenagers was never afraid for any reason in their day to day lives. We found that about 24(24%) never had any frightened feeling whereas about same number had flushing of face in embarrassing situation sometimes. About 18(18%) teenagers complained of worrying thoughts sometimes at night whereas about same number had a good night sleep all of the time. About 38 teenagers (38%) neither faced difficulty in swallowing in a tense situation nor did they avoid eating in public places in a similar situation. Many students felt afraid of participating in extracurricular activities i.e. about 24 students (24%). However they willingly participated in group discussions. About 55 students (55%) were neither afraid of participating in group discussion nor in extracurricular activities.

Conclusion:

Obsessive behaviors and thoughts were uneasy feelings (like butterflies) in stomach, hot and flushed face, feeling frightened or scared, worrying thoughts at night and difficulty falling asleep.

Key words: Anxiety, depression, obsessive thoughts.

Introduction

Anxiety is a future oriented psychological and physiological mood state characterized by cognitive, somatic, emotional and behavioral components, which create unpleasant feelings. These problems can become chronic or recurrent, substantially impairing an individual's ability to cope with feelings of daily life¹.

Scientific studies have shown that feelings of anxiety are accompanied by physiological activity, also known as arousal, in a person's sympathetic system. This activity or arousal, when moderate may cause an individual to feel physical tenseness, nervousness or restlessness.

Research has shown that certain parts of brain such as Amygdala in temporal lobe become activated when an individual experiences anxiety². The hippocampus and amygdala are major nuclei of Limbic system, a pathway known to underlie emotions³. These centers in turn activate hypothalamic pituitary axis (HPA)³. There are many neurotransmitter alterations in Anxiety disorders³. In keeping with the broader view of anxiety at least five neurotransmitters are disturbed in Anxiety: serotonin, norepinephrine, gamma aminobutyric acid(GABA) and corticotropin releasing hormone(CRH) and cholecystokinin³. There is such careful orchestration between these neurotransmitters that change in one neurotransmitter invariably elicit changes in another including extensive feedback mechanisms³. Serotonin

and GABA are inhibitory neurotransmitters that quiet the stress response⁴.

Low level of GABA, a neurotransmitter that reduces activity in CNS, contributes to anxiety. A number of anxiolytics achieve their effect by modulating GABA receptor^{5,6,7}.

Obsessive compulsive pathology is characterized by intrusive thoughts about potential danger and a compulsion to engage in stereotyped activities. In neurophysiological terms OCD stems from a dysfunction of a specific brain circuit, the cortical-striato-pallidal thalamic circuit and particularly a dysfunction of basal ganglia⁸. There seems to be reduced inhibition of strongly motivated routines (washing, cleaning, checking one's environment, monitoring other agents' behavior) initiated in the striatum, because striatal networks to cortical input and/or because their inhibitory effect on thalamic networks is diminished⁸.

There are several types of anxiety disorders, including panic disorder, obsessive-compulsive disorder, and post traumatic stress disorder (PTSD), social anxiety disorder, specific phobias and generalized anxiety disorder (GAD)⁹.

Individuals with Obsessive-Compulsive disorders have thoughts that will not go away or feel they must perform behaviors over and over again. People with obsessive personalities may refuse to leave their homes because of persistent thoughts that they will kill someone and compulsive personalities may wash their hands a hundred times a day in order to get rid of germs. Unlike the other anxiety disorders, post-traumatic stress disorder is caused by exposure to a traumatic event such as a natural disaster, repeated child abuse¹⁰.

Other anxiety disorders are characterized by different symptoms. For example, individuals with panic disorder experience a sudden onset of intense terror, and may suffer from an impending feeling of sadness. Individuals

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who suffer from this disorder may experience severe chest pains, dizziness, shortness of breath, trembling and sweating. Some experts say that biological factors may play a role in panic disorders.

Individuals with a phobic disorder have an unexplainable, irrational awful and persistent fear of a particular object or situation. Individuals with phobia disorders will go to almost any lengths to avoid the thing that scares them.

GAD involves uncontrollable and unrealistic worry about every day situations such as most schoolwork, relationship or health. This worrying has to occur on most days for at least six months for a diagnosis of GAD¹¹.

It is commonly seen that when teenagers suffer from anxiety disorder their thinking, decision making ability, perception of environment, learning and concentration towards their studies and their other activities get affected. They not only experience fear, nervousness, and shyness but also start avoiding people and activities. If they are left untreated, they face different risks such as poor results at school and avoidance of important social activities.

Teenagers who suffer from an anxiety disorder could suffer from other disorders such as depression, eating disorder, attention deficit disorder both hyperactive and inattentive.

However, researchers also agree that a moderate degree of anxiety may well motivate the student and encourage him/her towards better academic achievement¹². Hence, some degree of anxiety is considered a necessity for learning and high academic achievement. The contrary is unfortunately also true, as a high anxiety score may be a severe obstacle to academic achievement³.

In recent years, anxiety disorders have been found to be increasingly prevalent, and the burden of illness associated with these disorders is often considerable.

Pakistan has a total population of about 160 million. The total number of psychiatrists for such a large population is only 250¹³.

Available research suggests that social problems are major cause for anxiety and depressive disorders in Pakistan, and it has an overall prevalence of 34%¹⁴. Socio demographic factors associated with increased prevalence of anxiety and depressive disorders were female sex, middle age and low level of education. Loss of husband (being widowed, separated or divorced), increasing duration of marriage and being a housewife were also positively associated⁴.

Rationale

Teenagers are backbone of our country. Progress and prosperity of a country depends on them. Unfortunately due to many reasons anxiety is rising among them, so we wanted to have a look at the pattern of negative thoughts. There were about 13 respondents (13%) who were confident enough to look into eyes of strangers and their heart beat always kept at normal pace when seeing strangers.

in a state of anxiety among youngsters. To the best of our knowledge this work has not been done in our background.

Objective

To determine pattern of obsessive behaviors and thoughts in a state of anxiety in teenagers 14-18 years of age.

Subjects and methods

We used DASS (Depression Anxiety Stress Scale) to assess anxiety level. The instrument comprises of 42 self reported items.

We selected students according to our own convenience. Interviews were conducted during students' recess time and were self reported.

Data entry and analysis was done on SPSS version 15.0

Inclusion criteria

Healthy teenagers aged 14-18 years (both girls and boys)

Exclusion criteria

Those suffering from any acute or chronic disease

Sample size

Considering a prevalence (p) of 34%¹⁴, and a bound on error (e) of 5%, we calculated our sample size as follows

$$S = z^2 pq / e^2 = (1.962 \times 0.3 \times 0.7) / (0.05)^2 = 323$$

Our sample size came out to be 323 but practically we collected data on 100 students so as to complete within time.

Study design

Cross sectional

Results

In our study we found that there were about 45(45%) male and about 55(55%) female students. About 23(23%) were 18 years of age (table 1).

From our study we came to know that about 30 students (30%) were those who felt that everything was alright and nothing bad will happen all of the time (table 2). Similarly same numbers of teenagers were never afraid for any reason in their day to day lives (table 2).

We found that about 24(24%) never had any frightened feeling whereas about same number had flushing of face in embarrassing situation sometimes (table 2).

About 18(18%) teenagers complained of worrying thoughts sometimes at night whereas about same number had a good night sleep all of the time (table 2).

About 38 teenagers (38%) neither faced difficulty in swallowing when they were caught in a tense situation nor did they avoid eating in public places in a similar situation.

Many students felt afraid of participating in extracurricular activities i.e. about 24 students (24%). However they willingly participated in group discussions. About 55 students (55%) were neither afraid of participating in group discussion nor in extracurricular activities

About 17 teenagers (17%) messed up their things when they were in a tense situation, similar number got upset easily and felt panicky sometimes.

Table 1: Age of subjects

Age (years)	Frequency(n)	Percentage
18	23	23
17	14	14
16	28	28
15	20	20
14	15	15

Table2: Frequency of obsessive behaviors and thoughts

Variable	1	2	3	4	Total
Feeling everything is all right	Sometimes	Rarely	All of the time	Never	
	4	1	1	26	32
	2	1	0	8	11
	2	2	3	30	37
	4	3	1	12	20
Feeling afraid for no reason	4	2	2	4	12
	1	1	2	3	7
	1	0	3	1	5
	26	8	30	12	76
Feeling butterflies in stomach	5	1	5	5	16
	4	2	5	1	12
	1	1	10	1	13
	24	1	18	16	59
Hot and flushed face	5	4	1	24	34
	1	2	1	1	5
	5	5	10	18	38
	5	1	1	16	23
Worrying thoughts at night	18	4	11	6	39
	9	0	6	1	16
	3	4	16	3	26
	4	1	14	0	19
Easily fall asleep at night and a good night sleep	18	9	3	4	34
	4	0	4	1	9
	11	6	16	14	47
	6	1	3	0	10

Discussion

For our study we chose to select an equal number of students in terms of gender. However other studies say that females are more anxious as compared to males¹². Other risk factors besides female gender were found to be middle age, low level of education, financial difficulty, being a housewife and relationship problems¹². Also it was found that those people having close confiding relationships were less likely to have anxiety and depressive disorders⁴.

Most of these students enjoyed their sleep at night and did not have any worries in their mind during their sleep thus representing a healthy group of teenagers. Sleep and mood are closely connected; poor or inadequate sleep can cause irritability and stress, while healthy sleep can enhance well being¹⁵. Studies have shown that even partial sleep deprivation has a significant effect on mood. University of Pennsylvania researchers found that subjects who were limited to only 4.5 hours of sleep a night for one week reported feeling more stressed, angry, sad and mentally exhausted. When the subjects resumed normal sleep, they reported a dramatic improvement in mood¹⁶.

Not only does sleep affect mood, but mood and mental states can also affect sleep. Anxiety increases agitation and arousal, which makes it hard to sleep. Stress also affects sleep by making the body aroused, awake and alert. People who are constantly under stress tend to have sleep problems. Difficulty sleeping is sometimes the first symptom of depression. Studies have found that 15-20% of people diagnosed with insomnia will develop major depression.

Sleep problems may in turn contribute to psychological problems. For example chronic insomnia may increase an individual's risk of developing a mood disorder, such as depression or anxiety. In one major study of 10,000 adults, people with insomnia were 5 times more likely to develop depression¹⁷. Lack of sleep can be an even greater risk factor for anxiety. In the same study, people with insomnia were 20 times more likely to develop panic disorder (a type of anxiety disorder)¹⁷. Another study showed that insomnia is a reliable predictor of depression and many other psychological disorders including all types of anxiety disorders¹⁸.

Most of them did not face any difficulty in swallowing when they were tense neither did they avoid eating in public places. Difficulty in swallowing is thought to be a common physical symptom of anxiety. Globus hystericus is the correct term for this symptom. It is caused by the muscles in the throat contracting due to anxiety or stress. This is another example of a symptom which will improve if it is given no credibility. It is totally harmless and will not cause cessation of breathing, eating or drinking¹⁹.

It is well known that participation in sports or other activities besides academics plays a positive role in teenagers. Hence school assimilation is essential for students with anxiety. In our study most of them liked to

participate in sports and group discussions. Participation in athletic activities can be a buffer to stress and anxiety. Allowing students to share common experiences and to work in groups can help them adjust during years in college.

Our teenagers did not face any trouble when seeing strangers. This again shows a positive and healthy sign of our teenagers. Stranger anxiety is an innate anxiety, mistrust or wariness of foreigners, newcomers, outsiders or other unacquainted and unknown individuals. Social anxiety is more common in children and infants.

Our research strengthens the idea that negative thoughts can drive people or teenagers into anxiety and low mood¹¹.

On the other hand it is seen that positive behavior or positive thought plays a positive role in relieving anxiety and stress. Cognitive behavior therapy²⁰ is thus found to be most effective in alleviating anxiety. Cognitive therapy is a treatment process that helps patient's correct false self beliefs that lead to certain moods and behaviors. The fundamental principle behind this therapy is that thought precedes a mood, and that both are interrelated and a person's environment, physical reaction and subsequent behavior. Therefore changing a thought that arises in a given situation will change mood, behavior and physical reaction.

Conclusion

We looked at various obsessive behaviors and thoughts during anxious state in teenagers. Some common obsessive behaviors and thoughts were uneasy feelings (like butterflies) in stomach, hot and flushed face, feeling frightened or scared, worrying thoughts at night and difficulty falling asleep.

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