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Identifying and Coping with Adolescent Anxiety



**COLCHESTER FAMILY PRACTICE
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Problem Identification and Description of Need



- Anxiety disorders, which include panic disorder, generalized anxiety disorder, post-traumatic stress disorder, phobias, and separation anxiety disorder, are the most common class of mental disorders present in the general population.
 - Anxiety disorders have a negative impact on the quality of life in a number of areas of functioning, including academic performance, social interactions, self confidence, and ability to enjoy daily life experiences and may impact future emotional health.
- Approximately 20% of youth ages 13 to 18 experience severe mental disorders in a given year.
- Almost one-half of youth ages 8 to 15 with a mental illness received no mental health services in the previous year.
- Of Vermont's approximately 600,000 residents, close to 23,000 adults live with serious mental illness and about 6,000 children live with serious mental health conditions.
- At Colchester family practice, all practicing physicians have a multitude of adolescent patients with a wide spectrum of anxiety disorders
- Teachers at Colchester High School openly acknowledge increased rates of anxiety amongst students throughout in all four grade levels
- Anxiety disorders in youths have long-term implications:
 - Aside from negative emotionality associated with anxiety itself, childhood anxiety disorders have been associated with depression, suicidal ideation, and suicide attempts
 - Childhood anxiety have also been identified as potential risk factors affecting the development and course of substance abuse disorders

Public Health Cost



- **Overall Mental Health Cost:**
 - The WHO has reported that mental illnesses are the leading causes of disability adjusted life years (DALYs) worldwide
 - Serious mental illness costs America \$193.2 billion in lost earnings per year.¹⁷
 - One study estimated the annual cost of anxiety disorders in the United States to be approximately \$42.3 billion in the 1990s
 - Another report estimates the global cost of mental illness at nearly \$2.5 trillion in 2010, with a projected increase to over \$6 trillion by 2030.
- **Individuals living with serious mental illness face an increased risk of having chronic medical conditions. In 2007 study reported that chronic diseases have a total impact on the economy of \$1.3 trillion annually. By the year 2023, this number is projected to increase to \$4.2 trillion in treatment costs and lost economic output.**
- **Vermont Health Costs**
 - Vermont spent \$198 per capita on mental health agency services in 2006, or \$122.5 million.

Community Perspective



- **Health Teacher**

- Has seen an increase in anxiety levels over the last three years
- Anxiety is considered a major stumbling block towards educational success
- Anxiety affects the student's writing in class, forces them to "shut down and do nothing", avoid teachers and friends, increases the frequency of angry outbursts and distractions in class
- At risk students have resources for help, however, there are no current measures for identifying or providing resources to the general population of students
- Ideal future scenario would include professional training for staff and faculty at the school so that they are able to identify students with anxiety, raise awareness of the issue, and provide proper help to those who are dealing with anxiety

- **School Nurse**

- Students are connected to their phones at all times throughout the day- they have lost their ability to communicate, students are "constantly being critiqued, 24/7" due to the power of being technologically connected
- Somatic complaints are the usual presentation for anxiety among the high school students- they come in complaining of headaches, stomach aches, "I just don't feel good".
- Anxiety has a great impact not only on educational performance at school but also affects the student's eating and sleeping patterns
- Students with anxiety often misinterpret social cues which leads to major disruptions in their social interactions and relationships
- There are certain students who frequently come in to the office and these individuals are more likely to come from dysfunctional family units

Intervention and Methodology



- **Intervention:**

- Educational outreach to 78 freshmen and sophomore students in a student health class at Colchester High School
- The hope with this lesson was to expose students to signs and symptoms of anxiety, increase their understanding of each type of anxiety disorder, highlight treatment options, and provide students tangible and easy to implement coping mechanisms

- **Methodology:**

- 4 interactive 1.5 hour classroom sessions that included the following:
 - ✦ Pre and post test examining knowledge on definitions of anxiety, epidemiology of anxiety, causes of anxiety, and treatment options
 - ✦ Case presentations highlighting examples of each anxiety disorder
 - ✦ Video clips featuring symptoms of generalized anxiety, panic, phobia, PTSD OCD disorders
 - ✦ Interactive PowerPoint presentation describing signs and symptoms of anxiety, breaking down each anxiety disorder, providing treatment and resource options for students
 - ✦ TED discussing Mindful Meditation
 - ✦ 5 minute mindfulness breathing meditation session
 - ✦ Administration of GAD-2 screening tool questionnaire
 - ✦ Handout for students that included general information about anxiety, coping mechanisms, and healthy living advice

Results



- **Pre and Post Test Comparisons:**
 - Overall Averages:
 - ✦ Pre- Test Average: 66%
 - ✦ Post- Test Average: 83%
 - Question 3- Percent of students who are able to identify signs and symptoms of anxiety:
 - ✦ Pre- Test: 80%
 - ✦ Post- Test: 98%
 - Question 5- Percent of students who are able to identify treatment options for anxiety
 - ✦ Pre-Test: 57%
 - ✦ Post- Test: 85%
- **GAD-2 Results**
 - A positive screen is indicated as >3 points
 - Out of 78 students screened for GAD, 36 screened positive- **46%** of students

COPING WITH ADOLESCENT ANXIETY PRE/POST TESET EXAMPLE

1. What does the word "anxiety" mean?
 - a. A type of disorder that involves periods of time where an individual has an immense amount of energy followed by feelings of depression
 - b. An abnormal response to stressful situations in daily life
 - c. A normal response to stressful situations in daily life that can lead to excessive unfocused fear or worry
 - d. A problem that occurs because your mood is low and you have little interest in doing activities
2. What age group has been diagnosed with anxiety disorder?
 - a. 5-10 years of age
 - b. 10-20 years of age
 - c. 20-40 years of age
 - d. 40-60+ years of age
 - e. Both C and D
 - f. All of the above
3. What are the signs and symptoms of anxiety disorder?
 - a. Restlessness or feeling on edge
 - b. Difficulty relaxing
 - c. Continual nervousness
 - d. Muscle tension and cramps
 - e. All of the above
4. What causes anxiety?
 - a. Genetics
 - b. Stressful Life events
 - c. Home environment
 - d. All of the above
5. What is the treatment for anxiety?
 - a. Medications
 - b. Therapy
 - c. Biofeedback to control muscle tension
 - d. A combination of all or some of the choices listed above
 - e. There is no treatment for anxiety

GAD-2

Over the last 2 weeks, how often have you been bothered by the following problems?	Not at all	Several days	Nearly half the days	Nearly every day
1. Feeling nervous, anxious or on edge?	0	1	2	3
2. Not being able to stop or control worrying?	0	1	2	3
(For office scoring, total score T__ = _____ + _____ + _____)				

A positive screening test is a score >3 points.

Evaluation of Effectiveness and Limitations



- **Effectiveness:**

- Given the significant improvement from the pre to post test, it can be said that the lesson provided students with sufficient knowledge on anxiety and its definition, epidemiology, signs, symptoms and treatment options
- One of the major goals for this lesson was for students to leave with the understanding of what the signs of anxiety are and the possible forms of treatment available for them. Effectiveness of this was seen by drastic improvement in pre and post test results surrounding these two questions
- Overall the students showed great participation during the lecture portion, engaged well during throughout each activity, and placed great effort into the end-of-class mindfulness meditation
- The smaller size of each class allowed for active discussion and problem-solving
- Various comments from students included “great presentation”, “increased knowledge on anxiety disorders”, “interactive presentation”, “positive experience”
- Since students were given a tangible to take home which can be used a resource during times of increased anxiety, the effectiveness of this presentation can extend beyond the classroom

- **Limitations:**

- The lessons were only able to target only 10% of the student population at the high school
 - ✦ Additionally, the lesson was only generated towards freshmen and sophomores, who may have a completely different understand and prevalence of anxiety compared to junior and senior classes
- Much of the anxiety students are grappling with is a byproduct of their home environments. Presenting to only one aspect of their lives may not have as full of a benefit as interacting with and bring together their family unit for an intervention
- In addition to including parents, expanding the lesson to include staff, faculty and teachers could have an immense impact on the prevalence and severity of anxiety at the school
- Although students showed increased understanding about anxiety, it takes much longer to develop the correct coping mechanisms. Therefore, exposing students to one session of mindfulness may not be truly effective for them to incorporate this coping skill during an anxiety attack

Recommendations for Future Interventions and Projects



- Due to the fact that anxiety can affect individuals at young ages, targeting younger populations can provide individuals with early coping skills and decrease the severity of later age anxiety
- Family dynamics play an extremely important role in anxiety for a teenager, therefore, creating a family unit intervention could be extremely beneficial
- As stated by the health teacher, it is imperative for all faculty and staff to be educated about anxiety. Creating a tool for staff and faculty to use so that they are able to not only identify students with anxiety but also provide proper help to those individuals will have an immense impact on anxiety at the high school level
- Although the lesson was effective in raising awareness of anxiety and the types of anxiety disorders, implementing a longitudinal yearly course or elective on mindfulness techniques and coping mechanisms will without a doubt have a profound effect on how students deal with anxiety.

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