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Symptoms of Anxiety Disorders, Awareness and Health-Seeking Behavior amongst Medical Students

Dr. Ravi Paul[1], Dr. Webster Musonda[2], Dr. Thankian Kusanthan[3]

[1]Head, Department of Psychiatry, School of Medicine, University of Zambia
[2]Senior Resident Medical Officer, Levy Mwanawasa General Hospital, Lusaka, Zambia
[3]Department of Gender Studies, School Humanities and Social Sciences, University of Zambia

Abstract

The most common mental health problems on college campuses are anxiety disorders. Specialized schools such as medical school is recognized as one of the most stressful environments that often exerts a negative effect on the academic performance, physical health and psychological well-being of a student. Challenges such as maintaining relationships with friends and resisting alcohol abuse are among the many factors of anxiety disorder; and have a direct impact on a students' academic performance. Recent work has suggested that having an anxiety disorder without history of mood disorder does convey increased risk for suicidal ideation. Hence, unless awareness is raised that will provoke students to seek help; this silent otherwise manageable condition will continue taking its toll on future professionals. This study therefore was to identify symptoms of awareness and symptoms of anxiety disorders amongst University students.

Keywords: Anxiety disorder, depression, psychological stress, medical students

*Corresponding Author: Dr. Ravi Paul, Head, Department of Psychiatry, School of Medicine, University of Zambia, Lusaka, Zambia. Email: ravipaul35@gmail.com.

Introduction

Anxiety is considered a normal reaction to stress and helps an individual deal with demanding situations. However, facilitated by several factors, most of which exist within the school environment, anxiety may graduate into a chronic, frequently overwhelming experience in which it becomes a disorder (Smith, 2008). The experience of anxiety can be affected by the individual's personality, their support system, their ability to cope with stress and their family history. On the other hand, anxiety can also be a psychological and physiological state in which an individual has a displeasing feeling of fear, worry, uneasiness and concern. It is in this case characterized by somatic, emotional, cognitive and behavioral components. Note however that fear is concrete, for example to a particular danger; whereas anxiety is paranoia of something not in physical existence. The experience of anxiety within a students' body is high and can present many challenges some of which include the inability to maintain relationships with friends and regulate alcohol abuse thus having an overall effect on the academic performance.

Moreover, as a psychological and physiological state, anxiety becomes a disorder when someone develops chronic or severe problems with anxiety (Bouras and Holt, 2007). Psychologically, anxiety disorders are a spectrum of mental illnesses characterized by excessive and ongoing fear, worry, and unrealistic view of problems, concern, rumination, apprehension and fear about future uncertainties both based on real or imagined events; and may affect both physical and psychological health (adda.org, 2007). It is also associated with feelings of restlessness, fatigue, concentration problems, and muscle tension.

Furthermore, some of the notable internal physiological effects of anxiety may include heart palpitations, tachycardia, muscle weakness and tension, fatigue, nausea, chest pain, shortness of breath, headache, stomach aches, or tension headaches. As the body prepares to deal with a threat, such as blood pressure, heart rate and/or perspiration; the blood flow to the major muscle groups are increased, while the immune and digestive functions are inhibited- fight or flight response (Anxiety and its Disorders). It further includes neurotic disorders which are diseases of the central nervous system without a known organic cause (Sujata, 2008). Some of the specific types include agoraphobia, social phobia, and panic disorder with or without agoraphobia, generalized anxiety disorder, obsessive-compulsive disorder, acute stress disorder and post-traumatic stress disorder with each having its own characteristics and symptoms thus each requiring different treatment.

External signs on the other hand may include pallor, sweating, trembling, and pupillary dilation. In some individuals, anxiety may even culminate into panic attacks. Nevertheless, external signs are present when the emotional and cognitive zone is affected by anxiety. As regards the emotional aspect, these among others may include feelings of apprehension, trouble concentrating, feeling tense, irritability, restlessness, nightmares and obsessions about sensations. The cognitive effects of anxiety on the other hand may include thoughts about suspected dangers, such as fear of dying or associating any normal body sensations to danger while behavioral effects of anxiety may include withdrawal from situations which have provoked anxiety in the past, changes in sleeping patterns, nervous habits, increased motor tension like foot tapping and biting finger nails (Barker, 2003).

It is then due to the above phenomenon that this study aims highlighting the symptoms of anxiety disorders, awareness and health-seeking behavior amongst medical students at the University of Zambia's (UNZA) School of Medicine. It further aims at raising the awareness of symptoms of anxiety disorders amongst university students in an effort to promote mental health. Aside from that, this study aims at establishing health seeking behaviors of students with anxiety disorders and which sex is more affected by symptoms of anxiety disorders; estimating the proportions of medical students with different levels of symptoms of anxiety disorders and

determining the link that occurs between alcohol abuse and anxiety.

Materials and Methods

This research study was carried out at the University of Zambia, School of Medicine Ridgeway campus located at the corner of Government road and Nationalist road. The target population in this study was all medical students on campus in 3rd (136 students), 4th (92 students), 5th (76 students), 6th (67 students) and 7th (60 students) year of study thus giving a total of 431 medical students. To obtain meaningful results in this study, all medical students were selected to participate in this study with no exclusionary criteria. This was to ensure that the results obtained were not by chance. However, purposeful sampling was used as some students could not consent to taking part in the study. Out of the 431 medical students, only 199 consented to taking part in the study and were therefore provided with questionnaires. The entire population of medical students, 124 females and 307 males giving a total of 431 medical students were selected to participate in the study with no exclusionary criteria. Considering that only 199 medical students, male and female, consented to participate in the study, 199 Standardized Self-rating Beck Anxiety Inventory Questionnaires were administered. For those who were found to have a history of alcohol use, the Diagnostic and Statistical Manual of Mental Disorders VI (DSM-IV) criteria for alcohol abuse was used to determine whether they were abusing alcohol or not. The raw data collected was initially analyzed manually and later respective percentages calculated and compared amongst the various data points. The tally system was used to compile data which was then used to construct tables and plot graphs.

Ethical Consideration: Permission was sought from the Head Department of Community Medicine and consent was obtained from all participating students. Confidentiality was kept with every participant.

Results and Discussion

The overall numbers of male participants were 146 (73% of 199 participants, 48% of all males on campus and 34% of all medical students) of which 62% had at least mild to severe symptoms of anxiety disorders. Female participants were 53(27% of 199 participants, 43% of all females on campus and 12% of all medical students) of which 67% had at least mild to severe symptoms of anxiety disorders (Table

1). The percentage contribution to the 199 participating students was as follows: 17% came from the 3rd year class; 34%came from the 4th year class; 19% came from the 5th year class; 22% came from the 6th year class and 10% came from the 7th year class (Table 1).

A general level of anxiety symptoms was as follows: 55% of 199 participants scored between 0-7 (minimal level of anxiety symptoms) which was 62% of males and 34% of females. This clearly shows that there were more males with a minimal level of anxiety symptoms as compared to the females. 27% of 199 participants scored between 8-15 (mild level of anxiety symptoms) which was 23% of males and 40% of females thus showing that more females had mild symptoms of anxiety which is unlike what was observed with the minimal level of anxiety symptoms. 12% of 199 participants scored in the ranges of 16-25 (moderate level of anxiety symptoms) which was11% of males and 12% of females. Despite a smaller difference, this is consistent with the mild level of anxiety symptoms where 6% of 199 participants scored between 26-63 (severe symptoms of anxiety) which is 3% of males and 15% of the females (Figure 1). This is again consistent with the mild and moderate levels of anxiety symptoms showing that females are more affected than males in three significant categories. Overall, 45% of participants had mild to severe symptoms of anxiety disorders while 55% had minimal (normal) level of anxiety symptoms which is consistent with results obtained in Hong Kong but lower than in the United States (Bienvenu et al, 2004).
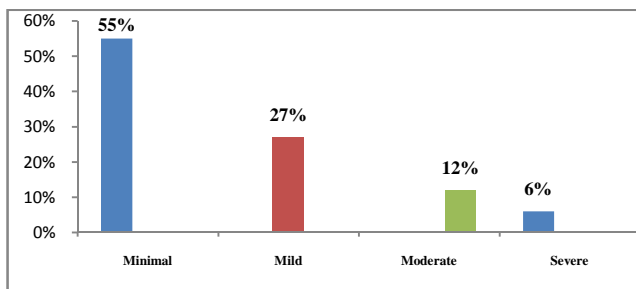

Figure 1: General levels of anxiety symptoms amongst participating students

Anxiety Prevalence: Even more interesting to note is that of the 199 students that participated, only 19% were aware of their symptoms (Figure 2). Insight into the illness or condition that a person has is one of the most important factors that helps improve every patient's health seeking behavior. Like to contradict

this statement, it was found that none of the students both aware and non-aware of their symptoms has ever sought any form of help. Some of the reasons given for this were that some did not feel it necessary to seek attention; others expressed lack of knowledge while others bemoaned the lack of such services to address mental health.

Of interest was that 28% of the participants that were in the mild to severe categories were found to be abusing alcohol (Figure 3). A good proportion of these attributed the alcohol abuse to the stress and challenges experienced in medical school, some of which include lack of accommodation, poor interpersonal relationship, personal problems, poverty, family problems, etc. This was supported by 62% of 199 students who attributed these anxiety symptoms to school-related stressors (Figure 4). Some of the notable examples given include examinations and results; fear of failure and repeating the academic year; meeting deadlines when it comes to assignments and school projects; having too much school material to cover within a limited period of time; inadequate preparation for tests or examinations; being in the presence of intimidating lecturers and consultants on the wards. Other reasons given were financial challenges in medical school, public speaking and uncertainty of things to happen. Only a few in the minimal category reported consuming alcohol on occasional events. It was also found that some students could not associate the anxiety symptoms to any notable risk factor.
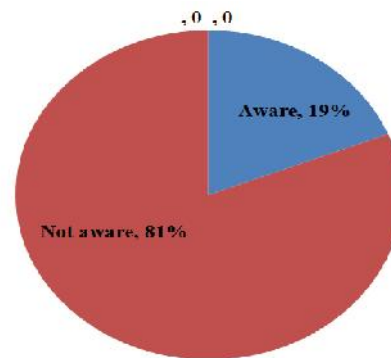

Figure 2: Percentage of students that are aware of anxiety symptoms

The students that were aware of their symptoms of anxiety reported employing self-techniques to counter their experiences in order of highest frequency: relaxing and taking a deep breath (60%); taking alcohol (20%); watching television and

listening to music (10%); pray and talking to friends (5%) and others (5%).
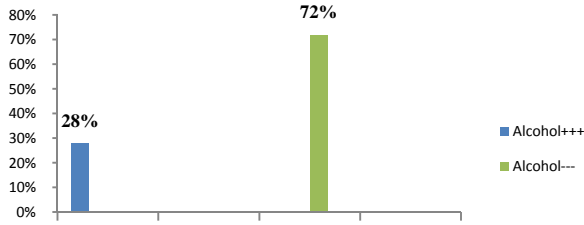
Figure 3: Percentage of students that were abusing alcohol in the mild to severe range
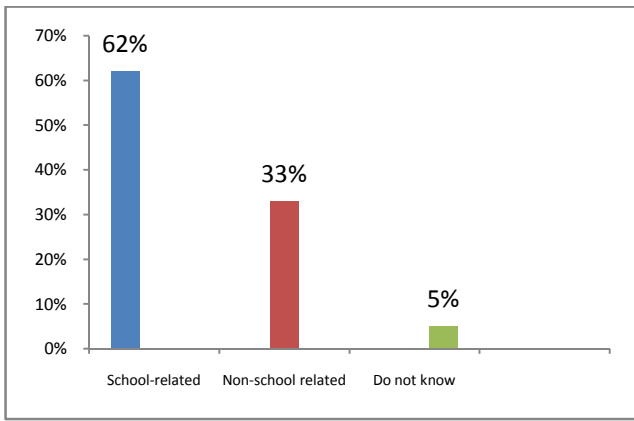
Figure 4: Associated risk factors to their developing anxiety symptoms.

Based on the study, it is recommended that the school introduces deliberate health policies that would allow all students to be screened for health problems including symptoms of anxiety disorders at regular intervals. Aside from that, it should facilitate the formation of Cognitive Behavioral Therapy (CBT) Groups amongst students, employ Cognitive Behavioral Therapists and Pharmacotherapists who would keep all records, monitor and supervise all programs and activities addressing students' mental health; and constantly monitor students' mental health from their 1st year right up to 7th year of study. Lastly, the school should help extend similar screening protocols amongst health practitioners for a continuous improvement in provision of health services.

Conclusion

The objectives of the study were achieved as it was found that 55% of the participants scored minimal (normal) levels of symptoms of anxiety on the Beck Anxiety Inventory; 27% scored mild level; 12% scored moderate level and 6% scored severe level. The overall scores were; 45% scored mild to severe symptoms of anxiety disorder on the scale and 55% scored minimal/ normal level. This represented a near 1:1 ratio.

As shown by the sex-specific characteristics of the different levels of symptoms of anxiety disorders, females were found to be more affected by symptoms of anxiety disorders by the Beck Anxiety Inventory as they scored higher than males in three out of four categories which are mild (40% against 23% of males); moderate (12% against 11% of males) and finally severe (15% against 3% of males). Males were only dominant in the minimal range scoring 62% against 34% of females. In total 66% of females were affected while only 62% of males were affected.

It was also found that 28% of the participating students with mild to severe symptoms of anxiety found with the Beck Anxiety Inventory were abusing alcohol as shown by the DSM Diagnostic criteria of alcohol abuse. None of the students with minimal level of symptoms of anxiety disorder was abusing alcohol. Only a few had occasional consumption of alcohol. Students admitted to using alcohol as a means of relieving their anxiety symptoms.

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