Running Head: GENERALLY ON EDGE: AN OVERVIEW OF GAD

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Generally on Edge: An Overview of Generalized Anxiety Disorder

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Definition of the Problem

Prevalent in today's society is the idea that individuals suffer from varying forms of anxiety and anxiety disorders. Most recently, the popularity of generalized anxiety disorder (GAD) has been of particular interest to researchers. Regardless of the recent abounding celebrity of GAD and other anxiety disorders, an actual definition of what constitutes GAD is difficult to derive from popular sources and the media. Therefore, an accurate definition should be developed in order to achieve a basal understanding of the disorder before further exploration should be undertaken.

Generalized anxiety disorder resides under the umbrella category of anxiety disorders. Commonly defined, anxiety disorders are those conditions that promote excessive or irrational worry, elevate attempts to protect one's self from potentially threatening or worrisome situations, and increase attempts to reduce troublesome feelings associated with anxiety-triggering situations or environments (Craighead, 2004). While many individuals may grapple with anxiety throughout their life course, the experiences of those with anxiety disorders differentiate themselves from regular anxiety in the respect that anxiety caused by these disorders typically are chronic in nature and develop as a maladaptive response to unfounded concerns or fears in one's life (Gall, 1996). In sum, individuals who possess anxiety disorders experience strong, sometimes illogical, fear and anxiety due to circumstances that may or may not be in their control or are imagined, whereas those with normal anxiety do not experience these same extremes.

It is important to recognize GAD within the scope of other anxiety disorders because the symptoms between the two frequently parallel, and GAD has previously been recognized as a core component of anxiety disorders (Allgulander, 2006). Generalized anxiety disorder, then, can

be further defined as when an individual experiences heightened levels of worry and tension in regard to everyday activities over a sustained period of time, usually six months. Other manifestations of worry may present themselves in the forms of restlessness, fatigue, muscle tension, irritability, trembling and other somatic responses typically associated with high levels of anxiety and stress (Gale & Oakley-Browne, 2004). While these symptoms may be quite severe, panic attacks are not usually associated with the disorder itself (American Psychological Association, 1994). The *Diagnostic and Statistical Manual of Mental Disorders* further describes the type of worry and anxiety experienced by patients to be disproportionate in intensity, duration, or frequency to the likelihood of the feared event actually occurring (1994). These heightened levels of unwarranted situational awareness also lead patients to perceive everyday innocuous situations as threatening and dangerous (Aikins and Craske, 2001).

Beyond mental and other bodily responses to GAD, individuals afflicted by the disorder generally report lowered levels of life satisfaction as a result of the symptoms they experience (Gale & Oakley-Browne, 2004). Throughout the duration of an individual's day, preoccupation with anxiety from the disorder can cause individuals to experience exorbitant amounts of stress and worry due to daily routine activities and have worrisome thoughts about the safety of their loved ones, work and domestic obligations, and other insignificant matters (American Psychological Association, 1994).

Nutt, Argyropoulos, Hood, and Potokar (2006) point out that generalized anxiety disorder also maintains a high comorbidity rate with other diseases and disorders, especially other conditions that flank GAD in the classification of anxiety disorders. Comorbidity in patients is an important factor to consider in defining the problem of GAD since individuals who experience more than one disorder may present new symptoms or have the effects of GAD compounded

over time. Conditions that may be associated with GAD include major depressive disorder, social phobia, panic disorder, alcoholism, and other anxiety disorders to name a few (American Psychiatric Association, 2004).

Importance of the Problem to Society

In addition to being inescapable in contemporary medicine, the prevalence of generalized anxiety disorder among people in society is readily noticeable. According to the National Institute of Mental Health (2004), approximately 6.8 million adults in the United States will be afflicted with GAD in a given year, which equals about 3.1% of the total population of individuals over the age of 18. While this statistic speaks of any random year in question, Gale and Oakley-Browne (2004) cite that lifetime presentation of generalized anxiety disorder may affect as much as 7% of the total adult population. Of all patients who seek medical assistance for dealing with anxiety disorders, nearly one quarter of all patients' diagnoses recognize generalized anxiety disorder as the origin of their anxiety (Wittchen et al., 2002). It has also been found that 49% of people who are diagnosed with GAD maintain symptoms two years after their initial diagnosis, and the prevalence for the disorder is twice that in men as it is in women (Gale & Oakley-Browne, 2004). Research conducted by Nutt and associates (2006) also demonstrates that individuals who suffer from GAD often experience distress from other associated mental disorders as well. In fact, of current patients who suffer from generalized anxiety disorder, 66.3% also possess other mental disorders such as major depression, panic disorder, agoraphobia, and drug or alcohol abuse (Nutt et al., 2006).

These statistics illuminate the vast number of people who are afflicted by this disorder; however, numbers only mildly add up to the full extent of the adverse affects individuals incur as a result of this ailment. As noted by Roemer and Orsillo (2007), one of the characteristics of an

individual most impacted by the presence of generalized anxiety disorder is quality of life. Mendlowicz and Stein (2000) have conducted extensive research in relation to the role of anxiety disorders, particularly GAD, in an individual's quality of life. For the purposes of their research, they define quality of life as being the individual's perceived interpretation of the quality of his or her own life in regard to their everyday living state, health, and health care (Mendlowicz & Stein, 2000). Individuals who possess generalized anxiety disorder are more likely to have impaired social functioning, difficulty fulfilling roles, and experience an overall decrease in quality of life and lifetime satisfaction. Furthermore, the group determined that people who possess GAD experience a decrease in overall emotional health (Mendlowicz and Stein, 2000).

While individuals bear the brunt of decreased quality of life, both the individual and society at large are adversely affected by the economic impact that generalized anxiety disorder creates. More and more patients are filling waiting rooms across the country to see doctors regarding their GAD conditions, which inevitably costs the individual and society money. With increased numbers of individuals acquiring the disorder, more and more people frequent hospitals to seek help with their problems, and these same individuals increasingly overuse services provided by medical professionals (Koerner et al., 2004). Since individuals are seeking medical attention at such a rapid rate, direct costs (e.g., money and other resources) are being incurred much more frequently for the individual and the society that must pay for health insurance. For instance, in 1990 in the United States, Koerner and associates (2004) report that approximately $47 billion was spent in the way of expenditures for generalized anxiety disorder. Furthermore, workplace impairment, in which businesses lose revenue, resources, or money due to worker illness and compensation, accounted for nearly 13% of that total (Koerner et al., 2004). Kennedy, Lin and Schwab (2002) further report that 23% of individuals who are diagnosed with

forms of mental disorders, including generalized anxiety disorder, lose their jobs within five years of initial diagnosis. Overall, individuals and society increasingly have to shoulder the costs associated with treating GAD.

Not only is society at large and individuals impacted by the harsh effects of generalized anxiety disorder, families, too, must contend with the repercussions of this condition. Individuals who suffer from GAD are reported to have the highest degree of functional impairment when attempting to relate to and operate within their families in an intimate setting (Kennedy, Lin & Schwab, 2002). Kennedy and colleagues (2002) point out that GAD patients also experience the highest amount of marital dissatisfaction when compared to normatively functioning control groups and individuals who possess other forms of mental disorders. In particular, women who suffer from generalized anxiety disorder report significantly higher levels of poor marital satisfaction when compared to wives who do not possess the disease. Married individuals who suffer from GAD also experience the same type of marital conflicts associated with people who suffer from depression or who abuse alcohol. Since generalized anxiety disorder maintains a high comorbidity rate with these other disorders, including depression and alcoholism, individuals who experience GAD in concert with one of these other conditions are at an even higher risk for marital dissatisfaction (McLeod, 2004; Nutt et al, 2004).

Also within the family context, generalized anxiety disorder negatively impacts parent-child relationships as well. In families where the mother experiences high levels of anxiety associated with GAD, children run a greater risk of behaving poorly compared to families containing parents not suffering from generalized anxiety disorder (Meadows, McLanahan & Brooks-Gunn, 2007). Meadows et al. (2007) further explore the relationship between families with one or both parents suffering from generalized anxiety disorder and childhood compliance

and find that families in which both parents suffer from GAD demonstrate greater childhood behavioral problems than families with only one parent suffering from the disease.

Causes of the Problem

Like numerous other mental disorders, it is commonly thought among researchers that generalized anxiety disorder is in part a result of genetic predisposition and has a high propensity to be inherited (Gall, 1996). When the genetic composition of individuals who possess generalized anxiety disorder is compared to normally functioning individuals and patients with other mental disorders, it was discovered that genes account for 37.2% of the risk for eventually contracting GAD in middle-aged males (Scherrer et al., 2000). These results compare favorably with the 30% risk factor due to genetic makeup from a group of women of similar background (Hettema et al., 2001). It should be noted, however, that the studies by Scherrer and his colleagues utilized conservative definitions of generalized anxiety disorder, which may preclude a number of individuals who possess the disorder from being included in the study's final analysis. When the genetic makeup of twins was analyzed in relation to presentation or absence of generalized anxiety disorder, it was discovered that the role of genetics further proved to be a strong force in the eventual presentation of GAD (Hettema et al., 2001). Also, genetic predisposition to other personality traits that promote worry and anxiety that are associated GAD were also prevalent in a cohort group that was followed until age 32 (Moffitt et al., 2007).

While genetics may point in one direction for the causal background of GAD, most genetics studies found during the review of literature cite that environmental factors should be taken into consideration as well. Individuals who came from homes of low socioeconomic status, received maltreatment from parents, and possessed poor coping skills and affect regulation eventually displayed signs of generalized anxiety disorder later in life (Moffitt et al., 2007).

Furthermore, 25% of identified GAD patients from one study had a family history of other mental disorders, primarily depression, and 19% had family histories of generalized anxiety disorder or other types of anxiety disorders (Moffitt et al., 2007). Not only does exposure to parents who possess mental disorders present the likelihood for greater genetic passage of the disorder, this type of familial environment presents a fragile family context in which the daily family processes that take place disrupt and hinder proper development of the child (Brooks et al., 2007). Victor, Bernat, Bernstein, and Layne (2006) further conclude that family cohesion is imperative in predicting the eventual outcome of children who exhibit generalized anxiety disorder or other anxious disorder symptoms. Due to parents' inadequacies due to their own mental conditions, children who are exposed to environments with those types of parents often do not receive the type of familial reinforcement or external intervention that is crucial to the solvency of their own generalized anxiety or other anxiety disorders, and the children's symptoms may be exacerbated or left untreated (Victor et al., 2006).

The environmental context of the individual external to the family is also noted as contributing to the incidence of generalized anxiety disorder. It was determined that working environments that require an immense amount of psychological demand from the individual increased the likelihood of acquiring anxiety disorders, including GAD, by two times, and the presentation of multiple "work stressors" would further increase the risk of acquiring these disorders (Melchior et al., 2007). The study attempts to maintain validity by testing for whether or not individuals presented symptoms of GAD prior to their entry into their current work positions. Previous research on the effects of work environment proved that similar working conditions produced an increased amount of psychological distress; however, Melchior and colleagues (2007) found that, beyond simply being associated with distress, demanding work

environments increased the prevalence of generalized anxiety disorder within examined employees (Melchior et al., 2007). One reason that accounts for the increased likelihood of developing GAD as a result of prolonged mentally and physically taxing work is that an elevation in stress hormone levels may have adverse effects on brain functioning, particularly in the areas of affect regulation (Melchior et al., 2007).

While the general condition of a patient's environment may contribute to the acquisition of GAD, mounting evidence suggests that traumatic events that occurred in the individual's past, particularly the individual's childhood, may play an important role in causing generalized anxiety disorder (Craighead, 2004). Mancini, Ameringen and MacMillan (1995) found that, though childhood abuse has been demonstrated to have impacts on many domains of children's development, it has also been linked to the development of anxiety disorders. In one study, 25% of individuals who were victims of childhood abuse presented symptoms of generalized anxiety disorder later in life (Safren et al., 2002). Individuals who experience GAD and have a history of physical or sexual abuse as a child score higher on anxiety trait tests; furthermore, the abusive history may influence the severity of the anxiety that the patient experiences as well (Mancini et al., 1995). Preliminary findings also suggest that individuals who experienced traumatic events such as sexual and physical abuse at an early age presented different symptoms of anxiety compared to other GAD patients (Brawman-Mintzer et al., 2005).

Effective Strategies

Upon reviewing published findings of effective strategies for dealing with generalized anxiety disorder, two treatment modalities are quite prevalent: drug treatment and psychotherapy. Although pharmacological treatment of generalized anxiety disorder is the most frequently

assigned plan for patients seeking help, psychotherapeutic methods of treatment have also grown in popularity in recent history (Lader & Bond, 1998). Dinan (2006) further expounds on current research regarding treatment modalities and states that a single treatment has yet to be discovered that is superior to other treatment options. The remainder of this section will concern itself with the discussion of both types of popular treatment strategies and their limitations.

When a patient presents signs of generalized anxiety disorder, doctors can immediately assign a drug treatment regimen that includes goals and general timetables for symptom improvement during administration of the treatment (Dinan, 2006). One drug treatment option is to prescribe Buspirone, which has demonstrated to improve symptoms over a 4 – 9 week period (Gale & Oakley-Browne, 2004). Benzodiazepines (BZNs) are also typically noted as the first line of acute treatment for management of generalized anxiety disorder and are associated with GABA regulation in neurons (Dinan, 2006). Other pharmacological options include antidepressants such as imipramine, opipramol, paroxetine, and other serotonin reuptake inhibitors (SSRIs) (Gale & Oakley Brown, 2004; Nutt et al., 2006). These drugs work by regulating the reuptake of serotonin and norepinephrine by presynaptic neurons and have shown great efficacy in their treatment of GAD and prevention of relapse of symptoms (Dinan, 2006).

These types of drugs promise to promote improved functioning and symptom reduction within patients; however, there are limitations to the effectiveness of this method of treatment. Nutt and colleagues (2006) note that pharmacological treatment of generalized anxiety may lead to undesirable side-effects such as nausea, sexual dysfunction, and suicide risk. They further point out that the efficacy of SSRIs is questionable by virtue that little research has been done on patients who possess only GAD in absence of other comorbid mental disorders and that onset of treatment effectiveness tends to take a while, sometimes necessitating prescriptions of other

medications during the interim (Nutt et al., 2006). Other forms of pharmacologic treatment, such as BZNs, also present adverse affects as well, such as an actual increase in anxiety and withdrawal symptoms as the drug wears off (Dinan, 2006).

The second popular form of treatment, psychotherapy, has been proven to work at effectively combating generalized anxiety disorder and typically includes therapy domains such as cognitive behavioral therapy and behavioral-based treatments such as anxiety management training (Tyrer & Baldwin, 2006). Acceptance-based behavior therapy, for example, includes teaching self-monitoring, coping skills, and relaxation strategies to utilize when anxiety interferes or hinders an individual from functioning normally (Roemer & Orsillo, 2007). Supportive expressive therapy also seeks to alleviate associated anxiety caused by GAD through jointly exploring with a professional therapist the interpersonal conflicts and contextual conflicts that patients experience (Present et al., 2007). Present and colleagues (2007) note that patients who were treated with supportive expressive therapy techniques also showed a substantial improvement over anxious symptoms in the span of just a few sessions. Patients who receive cognitive based therapy also are thought to show dramatic improvements because they are more readily accepting of the treatment path that they are proscribed and are more able to cope with the cognitive elements of their anxiety by regaining a normative way of thinking and rationalizing their environments and everyday situations (Dinan, 2006).

As in pharmacologically-based strategies of dealing with generalized anxiety disorder, limitations also exist in using psychotherapy methods as well. Therapy-based treatment options seem to work when treatment is sustained; however, effectiveness seems to wane over time, and patients with the most severe states of generalized anxiety disorder do not show any substantial improvement at all (Tyrer & Baldwin, 2006). After participating in forms of psychotherapeutic

therapy, patients showed only slight improvements in dealing with interpersonal problems stemming from issues with GAD (Crits-Christoph et al., 2005). The most limiting factor of this type of strategy agreed upon by many experts for the treatment of GAD is the limited amount of research that has been dedicated to determining the efficacy of psychotherapeutic options (Present et al., 2007; Tyrer & Baldwin, 2006; Roemer & Orsillo, 2007).

Conclusion

Generalized anxiety disorder is broadly defined as excessive amounts of worry and tension that result from anxiety regarding the completion of everyday tasks (Gale & Oakley-Browne, 2004). The vast extent of this medical and social problem affects millions of individuals each year and has tremendous negative implications for individuals, societies, and families (Mendlowicz & Stein, 2000; Koerner et al., 2004). Though the effects of generalized anxiety disorder are growing, research has yet to directly point a finger at the cause of this disorder. While there is no definitive answer as to what causes generalized anxiety disorder, genetics, family history, environment, and other factors such as brain chemistry are areas that currently make up the foundational knowledge regarding the causes of GAD and need more research to be fully determined (Hettema et al., 2001; Victor et al., 2006; Mancini, et al., 1995; Tyrer & Baldwin, 2006). Finally, while there are two prevalent forms of treatment for generalized anxiety disorder, pharmacological and psychotherapeutic, both forms of treatment have their advantages and limitations and more research should be undertaken to examine the potential benefits of a treatment regimen composed of both (Dinan, 2006).

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