

## Symptomatology of Generalized Anxiety Disorder among Iraqi Patients

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### Abstract

Generalized anxiety disorder is a common psychiatric disorder. One hundred twenty patients with this disorder attending the outpatient clinic in a university hospital in Baghdad were studied thoroughly by the use of a semi-structured psychiatric interview based on the International Classification of Diseases, 10<sup>th</sup> Revision, in an attempt to identify the symptomatology of the disorder in Iraq. The results showed that the most frequent symptom was headache, followed by tiredness, palpitation, chest pain or discomfort, irritability, restlessness, dry mouth, difficulty of sleep, trembling, abdominal distress, and difficult concentration. There was no significant association between the reported symptoms and sex, age or marital status. Comparison between similar western studies findings and ours shows that the basic symptoms are the same but the difference is in their frequency.

### Introduction

Anxiety Disorder (Generalized anxiety and panic disorders) is the commonest psychiatric disorders. They affect 5-10% of the general population (Blazer et al. 1987 and Byrne et al., 1993), 20-33% of the general practice patients (Zung 1986 and Al Sammari and Al Dawoody, 1994) and 16-39% of patients attending psychiatric outpatient's clinic Keseel and Hassal, 1965; Pmoeroy and Ricketts, 1985; Al Sammarrai, 1998 and Okasha and Ashour, 1981).

Generalized anxiety disorder (GAD) alone affects 6.4% to 16.6% of the community (Uhenhuth et al., 1984 and Baruffol and Thilmay 1993). It affects all people, but most of the studies have shown that the younger age groups are more vulnerable to have this disorders. There are contradictory results regarding the association of this disorder with other sociodemographic variables.

There is a general agreement that anxiety disorders are presented with physical rather

than psychological symptoms. Woodruff et al (1972) suggested that patient seen in psychiatric clinic are likely to present themselves for reasons other than the presence of anxiety symptoms alone. Goldberg and Bridges (1985) found that small minority of patients with GAD are consulting their doctor for psychological symptoms such as tension, panic or nervousness.

Transcultural and cross-cultural psychiatric studies emphasize the differences in psychopathology between cultures (Klienman, 1987). However, many authors like King (1978), have found that psychopathology is universal *phenomena* but some signs and symptoms differ from culture to another. Some studies e.g. WHO (1983) and Cheng (1989), concluded that Somatization is a major characteristic of minor psychiatric disorders in the developing countries. Kirmayer (1984) revealed that Somatization has been found around the world whether westernized or not. This fact suggests that presentation of

anxiety disorder is similar in all patients in all countries if international criteria for diagnosing psychiatric disorders are used, Nevertheless some differences in the form, intensity and frequency of symptoms are expected.

The aim of this study is to describe the symptomatology of GAD among Iraqi patients and to identify some sociodemographic characteristics and their associations with the symptoms.

### Method

One hundred twenty patients suffering from GAD attending the psychiatric outpatient clinic of University Hospital of Saddam College of Medicine in Baghdad during a four month period (1<sup>st</sup>. March 30<sup>th</sup>. June 1996) were studied thoroughly.

The sample included all the patients diagnosed by senior psychiatrists as having GAD. They were interviewed by the use of a semi-structured psychiatric interview schedule based on the International Classification of Diseases, the 10th. Revision (ICD-10) (WHO, 1991) to confirm the diagnosis. The patients received full physical examination to exclude any evidence of physical diseases. Suspected cases with physical and other psychiatric disorders were excluded from the study information regarding the course of the disorder, the sociodemographic characteristics of the patients and the source of referral were obtained.

Definition of GAD according to ICD 10 diagnostic criteria for research (WHO 1993) states that there must have been a period of at least six months with permanent tension, worry and feeling of apprehension about every day events and problems and at least four symptoms from a group of six categories labeled as,

autonomic arousal symptoms, symptoms involving chest and abdomen and mental state, general and symptoms of tension and other none-specific symptoms. Symptoms must be present at least one from the items of the first category.

The data were collected and analyzed statistically. Chi-Squared was applied whenever applicable.

### Results

#### 1. Characteristics of the sample:

**Sex** There is excess of females among the sample, which included 51 males (42.5%) and 69 females (57.5%).

**Age:** The age of the patients ranged from 18-59 years. The mean age was

28.1 years for the total sample 27.5 years for males and 28.5 years for females the age group 20-29 years accounted for over half of the patients. About three-quarters (73.3%) of the sample were in the age group 20-39 years as table one shows.

**Material status:** Single patients were more represented than the married. Among males the single patients were more than the married ones. The disorder is more common among the married females than the married males (Table 1).

**Religion and ethnicity:** The sample included 110 Moslems (91.6%) and 10 Christian. There were 106 Arabs (88.4%), 12 Kurds and Turks.

#### 2. Source of referral:

Seventy percent of the sample (N=84) were referred from other medical professionals mainly general practitioners. Only 30% (N=36) of the patients were self-referrals of which 80.6% were referred by relatives or friends who were treated previously for the same problem.

### 3. Symptomatology:

The total symptoms reported by the patient were 27. Some symptoms with special cultural expressions were included under the most approximate symptoms listed in table 2. The table shows the numbers and the percentages of individual symptoms elicited in both sexes. The symptoms are listed according to their frequencies. The most frequent symptom was headache followed by tiredness (fatigue), palpitation, chest pain or discomfort, irritability, restlessness, dry mouth, difficulty of sleep, trembling and abdominal distress.

Although all the patients expressed worry about their symptoms, only 15% of them reported fear of dying and a few of them expressed fear of loss of control, fear of going crazy and being startled or exaggerated response.

Differences between both sexes were noticed in relation to the number and frequency of symptoms. Females reported greater number of symptoms than did males (Mean-- 10.72 and 8.45 respectively). ( $\chi^2=2.58$ ,  $df=2$   $p<0.05$ ). Among female patients, headache was the most frequent symptom (80%) followed by fatigue, restlessness, difficulty of sleep and palpitation. While in males irritability was the most common symptom followed by headache palpitation, and chest pain.

However statistical analysis revealed a highly significant relationship between females and difficulty of sleep ( $\chi=4.40$ ,  $p<0.05$ ) abdominal distress ( $\chi=15.50$ ,  $p<0.05$ ), difficult concentration ( $\chi=9.40$ ,  $p<0.05$ ). (Table 2). Statistical analysis showed no significant relationship between the reported symptoms and age or marital status.

**Table 1: Age and Marital Status of the Patients with GAD**

|                 |                     | Male | Female | Total |      |
|-----------------|---------------------|------|--------|-------|------|
|                 |                     |      |        | N     | %    |
| Age Groups      | 18 -19              | 5    | 9      | 14    | 11.6 |
|                 | 20 - 29             | 31   | 35     | 66    | 55   |
|                 | 30 - 39             | 9    | 13     | 22    | 18.3 |
|                 | 40 - 49             | 4    | 11     | 15    | 12.5 |
|                 | 50 - 59             | 2    | 1      | 3     | 2.5  |
| Material Status | Single              | 33   | 27     | 60    | 50   |
|                 | Married             | 15   | 32     | 47    | 39.2 |
|                 | Divorced or Widowed | 3    | 10     | 13    | 10.8 |
| Total           |                     | 51   | 69     | 120   | 100  |

Table 2: Symptoms of Generalized Anxiety Disorder

| Symptoms                       | Male<br>(N=51) |      | Female<br>(N=69) |      | Total<br>(N=120) |      |
|--------------------------------|----------------|------|------------------|------|------------------|------|
|                                | N              | %    | N                | %    | N                | %    |
| Headache                       | 35             | 68.6 | 55               | 79.7 | 90               | 75   |
| Fatigue/Tiredness              | 31             | 60.7 | 53               | 76.8 | 84               | 70   |
| Palpitation                    | 35             | 68.6 | 46               | 66.6 | 81               | 67.5 |
| Chest Pain or discomfort       | 34             | 66.6 | 46               | 66.6 | 80               | 66.6 |
| Irritability                   | 37             | 72.5 | 40               | 57.9 | 77               | 64.1 |
| Restlessness                   | 29             | 56.8 | 47               | 68.1 | 76               | 63.3 |
| Dry Mouth                      | 27             | 52.9 | 45               | 65.2 | 72               | 60   |
| Difficulty of sleep            | 25             | 49   | 47               | 68.1 | 72               | 60   |
| Trembling/Shaking              | 28             | 54.9 | 41               | 59.4 | 69               | 57.5 |
| Abdominal distress**           | 22             | 43.1 | 45               | 65.2 | 67               | 55.8 |
| Difficult Concentration***     | 12             | 23.5 | 42               | 60.8 | 54               | 45   |
| Sweating                       | 23             | 45   | 30               | 43.4 | 53               | 44.1 |
| Difficult breathing****        | 17             | 33.3 | 33               | 47.8 | 50               | 41.6 |
| Numbness or tingling sensation | 10             | 19.6 | 32               | 46.3 | 42               | 35   |
| Muscle tension                 | 17             | 33.3 | 23               | 33.3 | 40               | 33.3 |
| Weakness                       | 12             | 23.5 | 17               | 24.6 | 29               | 24.1 |
| Hot Flushes                    | 7              | 13.7 | 19               | 27.5 | 26               | 21.6 |
| Nausea                         | 8              | 15.6 | 16               | 23.1 | 24               | 20   |
| Dizziness                      | 7              | 13.7 | 15               | 21.7 | 22               | 18.3 |
| Fear of dying                  | 8              | 15.6 | 10               | 14.4 | 18               | 15   |
| Light headless                 | 4              | 7.8  | 9                | 13   | 13               | 10.8 |
| Faintness                      | 1              | 1.9  | 12               | 17.3 | 13               | 10.8 |
| Feeling of choking             | 1              | 1.9  | 7                | 10.1 | 8                | 6.6  |
| Fear of loss of control        | 1              | 1.9  | 3                | 4.3  | 4                | 3.3  |
| Fear of going crazy            | 0              | -    | 3                | 4.3  | 3                | 2.5  |
| Being startled or exaggerated  |                |      |                  |      |                  |      |
| Response                       | 0              |      | 2                | 2.8  | 2                | 1.6  |
| Dysphagia                      | 0              |      | 2                | 2.8  | 2                | 1.6  |

\* $\chi^2 = 4.40$   $df=2$   $p < 0.05$ ; \*\* $\chi^2 = 15.50$ ,  $p < 0.05$ ; \*\*\* $\chi^2 = 15.80$   $p < 0.05$ ; \*\*\*\* $\chi^2 = 9.40$   $p < 0.05$

**Table 3: Comparison of Reported Symptoms Percentages between Four Surveys**

| Symptoms                          | This Study | Noyes<br>et.al. (1980) | Anderson<br>et.al. (1984) | Awaritefe<br>(1988) |
|-----------------------------------|------------|------------------------|---------------------------|---------------------|
| Headache                          | 75         | 69                     | 55.6                      | 59                  |
| Fatigue/Tiredness                 | 70         | 75                     | 77.8                      | 26                  |
| Palpitation                       | 67.5       | 73                     | 61.1                      | 30                  |
| Chest Pain                        | 66.6       | 62                     | 11.1                      | 30                  |
| Irritability                      | 64.1       | 69                     | 50                        | 16                  |
| Restlessness                      | 63.3       | 71                     | 66.7                      | -                   |
| Dry Mouth                         | 60         | 44                     | 38.9                      | -                   |
| Difficulty of sleep               | 60         | 64                     | 55.6                      | 45                  |
| Trembling/Shaking                 | 57.5       | 57                     | 61                        | -                   |
| Abdominal distress                | 55.8       | 63                     | 33.3                      | -                   |
| Difficult Concentration           | 45         | 54                     | 50                        | 31                  |
| Sweating                          | 44.1       | 68                     | 22.2                      | 44                  |
| Difficult breathing               | 41.6       | 64                     | 52.1                      | -                   |
| Numbness or tingling<br>sensation | 21.5       | 62                     | 22.2                      |                     |
| Muscle tension                    | 33.3       | 68                     | 72                        |                     |

## Discussion

The designs of this study by the use of a semi-structured psychiatric interview based on an international criteria for diagnosis allow as to compare our results with those of similar studies in different countries. The comparison shows that the same symptoms of GAD of the western and the non-western patients are found among Iraqi patients. The variation is in the frequency of such symptoms.

Our findings support the notion of that Somatization has been found around the world (Kirmayer, 1988). This is simply can be explained by the fact that GAD cannot be diagnosed in the absence of somatic

symptoms which are related to autonomic arousal and muscle tension.

Although all the patients in this study expressed apprehension about their problems, they reported high rates of physical symptoms. This can be explained by the tendency of the patients of seeking help for somatic symptoms and/or somatic concern which may reflect fear of having serious disease. Similar findings were found by western and non-western authors. Golfing and Bridges (1985) in Manchester found that many patients (50%) with dysphoric disorders such as GAD are displaying the phenomenon of

Somatization. They do not consider that they have psychological problems. They often resist the idea that they are psychologically ill and persist in asking for help with their various somatic symptoms. Similarly Cheng (1989) in Taiwan noticed that patients with out knowledge of mental disorders often interpret their illness as physical in origin and report only somatic discomfort to their doctors. While Awaritefe (1988) in Nigeria agreed with those findings and concluded that Somatization of symptoms by Africans is not peculiar.

On comparing the frequencies of the symptoms of GAD in the present study with similar previous published studies there are differences and similarities. The most frequent ten symptoms in this study are headache, tiredness, palpitations, chest pain, irritability, restlessness, dry mouth, difficulty or sleep, trembling and abdominal distress, while Noyes et al (1980) in the USA found that the commonest symptoms of anxiety neurosis among his 112 patients were, nervousness, fatigue (tiredness), palpitation, restlessness, irritability, headache, muscle aching or tension, sweating, dyspnoea, and insomnia. On the other hand Anderson et al (1983) in the same country noticed that the commonest symptoms of GAD according to DSM-III were, fatigue (tiredness), persisting nervousness, muscle tension, restlessness, palpitation, trembling and shaking, headache, trouble sleeping, irritability and poor concentration. Marten et. al. (1993) according to DSM-III-R (APA, 1987) criteria of GAD identified seven satisfactory symptoms, irritability, restlessness, muscle tension, difficulty in concentration, sleep difficulty, feeling keys up, and easy fatigability.

The variation of symptoms frequency seen in the western studies becomes more obvious in two studies from developing countries. Okasha and Ashour (1981) in Egypt, using a structured interview, found that the commonest symptoms in 120 patients with anxiety state were, worrying, irritability, anxiety, depressive mood tiredness, restlessness, anergia and delayed sleep. Awaritefe (1988) in Nigeria reported that the commonest ten symptoms of anxiety in 200 patients were, headache difficulty in sleep, flushing, difficulty in concentration, rapid and irregular heart beating, weakness, hot flushes, dizziness, feeling something crawling in the head, heaviness of the head, nervousness, poor appetite poor sight, night mares and chest pain.

This comparison leads us to the conclusion that the same symptoms in different frequencies are present in all studies of patients with GAD. The differences may be explained the differences in the diagnostic criteria used, methodology and the type and the size the sample studied.

Headache is the most frequent symptom in this study. Similar finding detected by Awaritife. However its rate (75%) is higher than the rates founds by other authors, 69% (Anderson et al., 1984), 59% (Awaritefe, 1988) and 55.6% Noyes et al., 1980). This high rate can be explained by sociocultural reasons. It goes with the common saying: "Holding the world over one's head". It is also supported by the physiological findings of Hazlett et al (1994) who concluded that clinically anxious individuals have elevated muscle tonus and reduced variability in frontalis activity. Interestingly tiredness (fatigue rate, found in our study is close to the findings of other studies; 75% (Anderson et al., 1984), 77.8% (Marten et

al., 1993) and 64%. Table 3 shows the comparison of the commonest reported symptoms in four surveys.

Regarding the characteristics of GAD patients, there is an excess of female among our patients. This finding was found by Noyes et al (1980), Anderson et al (1984) and Chang (1989), but was contradicted by others (Okasha and Ashour, 1981 and Uhenhuth et al., 1984). GAD is commonly found among married females, single males and the young age group (20-29 years). These findings may be explained by the facts that : females are more vulnerable to develop psychiatric disorders than males. The dependency of males on their wives in household activities even if she was employed as a tradition. Women remain at home have high level of psychological symptoms (Brown and Harris, 1978). Single males are over concerned with their expectations about meeting present difficult situations and future plans (Okasha and Ashour, 1981). The period 20-29 years of life demands difficult adjustment and effort for facing the struggle in a stressful life and the uncertainty about the future exaggerated by the present economic suction.

In conclusion, the findings of our study provide the basic knowledge about symptomatology of GAD in Iraq for the first time. Somatic complaints represent the most frequent symptoms of the disorder.

The comparison between the findings of this study and the western studies suggests that the basic symptoms are the same to some extent but their frequencies are different in some aspects. This difference is even noticed between the findings of the western studies.

Since the majority of the patients would seek help from other non-psychiatric

medical professionals, cooperation between them and psychiatrists is necessary in the management of GAD. Further researches on a wider scale are recommended to testify the results of this study and to have a more understanding of this common psychiatric disorder in Iraq.

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### References:

- Al-Sainai Tai A.H.S (1998).* Psychiatric outpatients in a university hospital in Baghdad. *Journal of Faculty Of Kedical*
- Al-Sainarrai A.H.S. and Al-Dawoody A.K. (1994).* Psychiatric disorders in the primary health care clinic in Baghdad. *The Journal of Psychological Sciences ; 2 : 2-16.*
- American Psychiatric Association. (1987).* Diagnostic and statistical manual of Mental Disorders (3rd. edition, Revised) (DSM-111-R). *Diagnostic and statistical Manual of Mental Disorders (3rd. edition, Revised). (DSM-111R). Washington, DC. APA.*
- Anderson D.J., Noyes R.Jr. and Crow PR. (1984).* Comparison of panic disorder and generalized anxiety disorder. *Am. J. psychiatry. 141:572-575,*
- Awaritefe A. (1988)* Clinical anxiety in Nigeria. *Acta. Psychiat. Scand. 77;729-735.*
- Baruffol E and Thihnay M.C. (1993).* Anxiety, depression, somatization and alcohol abuse. Prevalence rates in a general Belgian community sample. *Acta Psychiatr. Belg. 93 (3) :136-53.*

- Blazer D., Hughes D, George L.K. (1987).** Stressful Life Events and the Onset of general anxiety syndrome. *Am.J. Psychiatry*, 144; 1 178-1183.
- Brown G.M. and Harris T. (1978).** Social Crigin of depression. London. Tavistock.
- Cheng T.M. (1989).** Symtomatology of minor psychiatric morbidity :A cross-cultural comparison. *Psychol Medicine* ; 19:697-708.
- Goldberg D. and Bridges K. (1985).** The diagnosis of anxiety in primary care setting *Brit. J. Clinical practice*. 39;5:28-3 1.
- Hazlett RL., Mcleod D.D and Hoehn-Saric R. (1994).** Muscle tension in GAD elevated Muscle tonus or agitated movement? . *psychophysiology* 31(2) : 189-95 .
- Keseel N. and Hassal C. (1965).** Psychiatric outpatients in Plymouth. An area services analysis. *Brit.J. Psychiatry*; 11 1: 10-17.
- King L.M. (1978).** Social and cultural influences on psychopathology *Ann. Rev. psychology* ;29:405-433.
- Kinnayer L.J. (1988).** Culture, affect and somatization. *Transcultural Psychiatry Res. Rev.* 21; 237-261.
- Klienman A. (1987).** Anthropology and psychiatry : The role of culture in cross cultural research on illness. *Brit. J. Psychiatry* ; 15 1:447-454.
- Marten P.A., Brown T.A - DH. et. al. (1993).** Evaluation of the rating comparing the associated symptoms criteria of DSM-111-R. generalized anxiety disorder. *J. Nerv. Ment. Dis*, 181 (11) :676-82.
- Noyes R., Clancy J., Hoenk P.R. and Symen D.J. (1980).** The prognosis of anxiety neurosis. *Arch.Gen psychiatry*. 37:173-178.
- Okasha A. and Ashour A. (1981).** Psychodemographic study of anxiety in Egypt. The PSE in its Arabic version. *Brit J.Psychiatry* ;139: 170-173.
- Pomeroy J.C. and Rickefts B. (1985).** Long-Term attendance in the psychiatric outpatients department for Non-psychotic illness.*Brit.J.Psychiatry*; 143:460-466.
- Roy-Byrne P., Wingerson D., Cowley., & Dager S. (1993).** Psychopharmacological Treatment of panics, generalized anxiety disorder and social phobia. *Psychiatric Clinic. North Am.* 16 (4):719--35.
- Uhenhuth E.H, Balter M.B., Mellinger S.D, Cisin I.H. & Clinthome J. (1984).** Anxiety disorders : Prevalence and treatment. *Curr. Med Opin.Suppl.* 4: 47.
- Wooddruff R.A., Guze S.B. and Clayton R.J (1972).** Anxiety neurosis among psychiatric outpatients. *Comprehensive psychiatry*. 13: 165.
- World Health Organization (1991).** The International Classification of Diseases, 10th. Revision. Geneva: WHO.
- World Health Organization (1983).** Depressive disorders in different cultures. W.H.O. Genva.
- Zung W.W.k (1986).** Prevalence of clinically significant anxiety in a family practice setting. *Am. J. Psychiatry*. 143:1471-1472.
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**أعراض اضطراب القلق العام  
لدى المرضى العراقيين**

يعتبر اضطراب القلق العام من الاضطرابات النفسية الشائعة. تمت دراسة مائة وعشرين مريضاً مصاباً بهذا الاضطراب من مراجعي العيادة الاستشارية النفسية في مستشفى جامعة بغداد دراسة تفصيلية باستعمال المقابلة الشبه - منظمة والمستندة على التصنيف الدولي للأمراض المراجعة العاشرة في محاولة للتعرف على أعراض الاضطراب في العراق.

أشارت النتائج إلى أن الصداع كان أكثر الأعراض تكراراً تلتها أعراض "التعب وخفقان القلب وألم الصدر والعصبية وعدم الاستقرار وجفاف الفم وصعوبة النوم والارتجاف وألم البطن وصعوبة التركيز ولم يتبين وجود علاقة دالة ما بين الأعراض المرضية والجنس والعمر أو الحالة الزوجية.

إن مقارنة نتائج الدراسات الغربية المشابهة لدراستنا تظهر بأن الأعراض الأساسية هي نفسها ولكن الفرق يكمن في تكرارها.

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