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A study of chronic neurotic illness in Nigeria

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Summary

This is a report on a study of patients suffering from chronic neurotic illness, seen at the Psychiatric clinic of the University College Hospital, Ibadan. The patients' current mental health status was assessed using the General Health Questionnaire (GHQ) and also, the Special Neurotic Scale. Seventy-nine patients were studied, 28 males and 51 females. Seventy-one per cent of patients belong to the low socio-economic class, 49% had no formal education, and 38% had attended hospital for over 5 years. Patients who received diagnosis of anxiety neurosis generally did better than those with diagnosis of depressive neurosis (i.e. by their scores on the GHQ). Symptoms of psychological and sensory disturbance were most resistant to treatment. These and other findings are discussed.

Résumé

C'est un rapport d'une étude des malades neurotiques chroniques, vus dans la clinique psychiatrique du Centre Hospitalier Universitaire, à Ibadan. Les états de santé mentale des malades étaient examinés en utilisant l'Enquête de Santé Générale (ESG), et aussi, l'Echelle Neurotique Spéciale. Soixante dix-neuf malades, 28 hommes et 51 femmes, étaient étudiés. Soixante et onze pour cent des malades viennent de la classe basse de socio-économique, 49% des malades n'ont pas d'éducation formale, 38% des malades fréquentent l'hopital quoique périodiquement, pendant plus de 5 ans. Les malades de Neurose d'Angoisse en générale allaient mieux que ceux de Neurose Dépressive (i.e. par leurs comptes sur l'ESG). Les symptômes des troubles psychologiques et sensoires étaient les plus résistants au traitement. Ces observations et d'autres sont discutées.

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Introduction

All over the world, including Nigeria, psychiatrists are regularly confronted with the problem of how to help chronically neurotic patients who attend clinics year in year out with hardly any appreciable improvement. Perhaps the majority of such patients suffer from anxiety neurosis, depressive neurosis and hysterical neurosis, although personality disorders may coexist with these conditions.

One of the reasons for the accumulation of chronic neurotic patients in clinics is the difficulty in making accurate diagnosis, which of course has treatment implications. There are several aspects to this issue:

(a) *Reliability of diagnosis.* Kreitman [1] found 50% agreement on what constituted a neurosis but only 28% agreement on the type of neurosis. Difficulty in distinguishing between anxiety neurosis and depressive neurosis is probably more prominent than problems encountered in trying to discriminate between other types of neurosis. Greer & Cawley [2] studied the natural history of neurotic illness and concluded that it was difficult to differentiate between anxiety, depression and hysterical neurosis. On the other hand Roth *et al.* [3] showed that anxiety and depression can be distinguished from each other. Data obtained from a structured interview and the Maudsley Personality Inventory were subjected to component analysis. Anxiety and depression were found to occupy separate poles of a bipolar configuration. Roth & Mountjoy [4] were also able to separate anxiety from depression.

(b) *The coexistence of depression and anxiety in the same patient where the patient may be predominantly depressed with some symptoms of anxiety.* Sometimes it is difficult to decide

which is primary or secondary, dominant or otherwise. These issues have been discussed in greater detail elsewhere [5].

(c) *The distinction between neurotic and psychotic depression*. Kendell [6] who has done much work in this area concluded that neurotic depression and psychotic depression, rather than being distinct unrelated entities, occupy two ends of a continuum.

(d) *Masked depression*. Somatized depression, has been recognized in recent years as an important obstacle frequently encountered in diagnosing depressive illness [7,8]. Although somatization of depression is a world-wide phenomenon, it appears to be particularly prominent in Nigeria and other African settings [5].

Ineffective or inadequate treatment appears to contribute to the chronicity of neurotic illness as seen in psychiatric clinics, and it is partly due to inaccurate diagnosis. For example, a depressed patient who is treated for anxiety with only anxiolytic medication is unlikely to show remarkable recovery in a short period of time (unless of course the recovery occurs in spite of the medication). Inadequate dosage of medication is sometimes responsible for delayed improvement in depressives. For example tricyclic anti-depressants may be given in a total dosage of 75–100 mg, even though up to 250–300 mg can be administered daily.

Lack of persistence in the use of medication is another reason why cases of depressive illness may improve too slowly. Not only should adequate dosage of antidepressant drugs be given but this should be carried out for at least a few months before giving up on this particular treatment approach.

The present study was motivated by the concern of the authors for effective treatment of the numerous neurotic patients, especially the chronic ones, attending our clinic. Many chronic patients have been observed to come to the clinic year after year with mostly somatic symptoms. Typically they report little or no improvement. In a proportion of cases the patients' manner on these visits suggest depression or anxiety.

The principal aim of the study, on which this report is based, was to determine the social and psychological characteristics of chronic neurotic patients attending the psychiatric clinic at the University College Hospital, Ibadan. Our ultimate goal is to explore how to improve the management of these patients.

Subjects and methods

Before the study began the three interviewers (the second author and two experienced research nurses) discussed the purpose of the study and completed a pilot phase in which the two questionnaires were administered to several patients. The interviewers completed the questionnaires on behalf of the patients item by item. This was necessary to ensure uniformity of procedure as some patients were illiterate. For the latter group of subjects the questionnaires were translated into Yoruba, the local language. A coefficient of inter-rater reliability of 0.75 was obtained.

Subjects included in the study were selected on the following criteria: (a) the diagnosis must be that of a neurotic illness, (b) cases which had psychotic symptoms were excluded; as were patients with depression associated with physical illness except for two cases with mild hypertension and diabetes mellitus respectively, (c) subjects must have been attending the clinic for at least two years.

Neurotic patients seen at the out-patient department of University College Hospital, Ibadan were interviewed between February and May, 1981. Demographic data were collected as well as information about previous contacts with chemists, traditional healers, spiritual healers, other doctors outside the hospital and other helping agencies because of their emotional illnesses. The case records which contained detailed clinical notes were examined, and diagnosis made from them based on definitions as in the *International Classification of Diseases* (ninth edition) [9].

Subjects were asked to rate their health by comparing it to their first visit using one of the following categories: worse, no change, a little better, better and much better. They were also asked to indicate whatever complaints they had at the time of the interview, and these were recorded separately. Two questionnaires, General Health Questionnaire (GHQ) (60-item version) and the Special Neurotic Scale, which was especially designed by the first author, were used. The General Health Questionnaire has been found to be useful in screening

psychiatric morbidity, the primary function being to identify current psychiatric disturbances rather than classifying them [10]. Validation studies have been done in Nigerian patients by Morakinyo [11].

The Special Neurotic Scale is a 43-item inventory of symptoms. The items are derived from Zung's Self-Rating Anxiety Scale, Zung's Self-Rating Depression Scale and from the symptoms patients with neurotic illness commonly complain of in Nigeria. Among the latter group of symptoms are the following: item 3, my head feels hot or there is a peppery feeling in my head; item 23, I feel something is moving or crawling in my head or other parts of my body. Each item is scored 1, 2, 3, or 4 in increasing order of severity depending on how often the symptom is experienced. The complete inventory is shown in Appendix 1.

Data analysis was done at the Computing Centre of the University of Ibadan.

Results

There were 79 persons, consisting of 28 males (35.4%) and 51 females (64.6%). Table 1 shows the age distribution. As shown in the Table most subjects (76%) were aged 30–54 years.

Thirty-seven subjects (46.8%) had no formal education at all while 22 subjects (27.9%) had primary education, 13 subjects (18.4%) had partial or full secondary education, seven (8.8%) had post-secondary education of some kind but only two were University graduates.

Forty subjects (50.8%) were small-scale traders, another 16 (20.3%) also had low income occupations (i.e. working as drivers, cooks, painters, etc.), one person was a lecturer in a post-secondary institution. On the whole most of the subjects earned relatively little income and were at the lower (the majority) or middle rungs of the socio-economic ladder.

Fifty-one subjects (64.6%) were married, 13 (16.5%) separated and four (5.1%) divorced, seven (8.9%) were widowed and four (5.1%) never married.

Thirty-five (44%) of the subjects had been attending the clinic for 2–5 years at the time of the study, 18 (22.7%) had attended for 6–10 years and 12 (15.4%) for more than 10 years.

Subjects' global assessment of their condition at the time of the study is illustrated in Table 2.

Table 1. Age distribution

Age (range years)	No.	%
20–24	1	1.3
25–29	7	8.9
30–34	11	13.9
35–39	9	11.4
40–44	17	21.5
45–49	13	16.5
50–54	10	12.7
55–59	6	7.8
60–64	2	2.5
65–69	3	3.8
Total	79	100

Table 2. Subjects' self-assessment of severity of illness

Assessment	Frequency	%
No change	2	2.5
Worse	4	5.1
A little better	22	27.8
Moderately better	30	38.0
Much better	15	19.0
Not specified	6	7.6
Total	79	100.0

Table 3 shows distribution of diagnoses made by the authors based on definitions of the *International Classification of Diseases* (ninth edition). It is clear that most subjects (71%) suffered from either depressive neurosis or anxiety neurosis.

Table 4 shows the total symptom count of all 79 subjects at the time of the study in 1981 (column 2) compared with the initial symptom count when the subjects first attended the clinic (column 1), the case notes being the source of the initial symptom count. The third column shows percentage reduction in symptoms.

In Table 5 diagnoses are related to symptom count. The distribution of GHQ scores was as follows: 52 subjects scored below 12, and 27 patients above 11. Of the 27 subjects with GHQ scores of 12 and above, 13 had scores in the range 12–20 and 9 had scores of 21–30. Three subjects scored 31–40 and two 40–50.

Table 3. Diagnoses based on the *International Classification of Diseases* (ninth edition)

Diagnosis*	Male	Female	Total	%
Anxiety states	10	16	26	32.9
Hysteria (300.1)	—	1	1	1.3
Obsessive-compulsive neurosis (300.3)	1	—	1	1.3
Neurotic depression (300.4)	8	30	38	48.1
Hypochondriasis (300.7)	7	3	10	12.7
Hysterical personality disorder (301.5)	1	1	2	2.5
Prolonged depressive reaction (309.1)	1	—	1	1.3
Total	28	51	79	100

*Code is shown in parentheses.

Table 4. Symptom count in all subjects*

Symptom	Initial symptom count	1981 symptom count	Percentage reduction of symptoms
Intellectual difficulties	16	3	81.25
Disturbed affect	59	12	79.7
Sleep disturbance	69	15	78.2
Physiological disturbance	114	51	55.3
Sensory disturbance (somaesthetic) localized in head and neck	83	48	42.2
Generalized sensory disturbance in the body	97	81	16.5
Sensory disturbance of special senses	37	27	27.0
Others	9	2	77.8

*The numbers in columns 1 and 2 represent the number of each category of symptoms present in *all* 79 patients at initial presentation (column 1) and at the time of the study (column 2).

Table 5. Symptom count in all subjects and corresponding diagnoses *based on the *International Classification of Diseases* (ninth edition)

ICD categories†	Initial symptom count	1981 symptom count	Percentage reduction in symptoms
Anxiety state (300.0)	149	73	51.00
Hysteria (300.0)	4	3	Sample size small
Obsessive-compulsive neurosis (300.3)	9	5	Sample size small
Neurotic depression (300.4)	244	111	54.5
Hypochondriasis (300.7)	62	40	35.5
Hysterical personality (301.5)	10	5	50.0
Prolonged depressive reaction (309.1)	8	1	Sample size small

*Footnote as for Table 4.
†Code is shown in parentheses.

Table 6 shows ICD-9 diagnoses of the 27 subjects with GHQ scores of 12 and above. The symptom count of these subjects is illustrated in Table 7.

The mean scores on the GHQ and the Special Neurotic Scale were 10.20 (s.d. 10.92) and 68.15 (s.d. 18.57) respectively. The Pearson correlation coefficient between the two instruments was 0.71 ($P < 0.001$).

Table 6. Diagnoses based on the *International Classification of Diseases* (ninth edition) in subjects with GHQ scores of 12 and above

Diagnosis	Code	Male	Female	Total
Anxiety states	300.0	1	3	4
Obsessive-compulsive neurosis	300.3	1	—	1
Neurotic depression	300.4	4	13	17
Hypochondriasis	300.7	4	1	5
Total		10	17	27

Table 7. Symptom count in subjects with GHQ scores of 12 and above*

Symptom	Initial symptom count	1981 symptom count	Percentage reduction in symptoms
Intellectual difficulties	11	2	81.8
Disturbed affect	21	9	57.1
Sleep disturbance	24	7	70.8
Physiological disturbance	37	23	37.8
Sensory disturbance localized in head and neck	37	22	40.5
Others	5	1	80.0

*Footnote as for Table 4 except that $n = 27$ instead of 79.

Discussion

Certain aspects of the findings of this study which merit discussion include the following: the social class of the subjects, the association between prognosis and diagnosis, and the correlation between GHQ and Special Neurotic Scale scores.

The finding that almost three-quarters of the subjects are of low socio-economic background may suggest that neurotic illness is predominantly a disease of the poor, or that prognosis of neurotic disorders is worse in subjects from the lower socio-economic strata of society. With respect to the latter notion any generalization we might wish to make should take cognizance of the fact that we have no information on the social class distribution of all new patients with neurotic illness registered in the clinic at the same time as our subjects. Those with diagnoses of anxiety neurosis tend to do better than those with neurotic depression by their score on the GHQ. Also, sensory symptoms like heat and crawling sensation in the body are resistant to treatment.

As for the possibility that neurotic illness may be more common among the poor, it appears reasonable to speculate that to a certain extent,

low social class membership is associated with a wide variety of stressful life situations and events; and neurotic illness, in this group, tends to present with somatic complaints.

The symptoms shown in Table 4 are in general those seen in cases of the 'Brain Fag' syndrome first described [12] in Nigerian students. Anumonye [13] went further to group the common symptoms of 'Brain Fag' syndrome into intellectual difficulties, disturbances of affect and sleep, as well as psychological and sensory disturbances (this grouping is used in this study). Recent work involving large scale surveys and the use of factor analysis suggests the so-called 'Brain Fag' syndrome is not a syndrome as such, existing diagnostic categories, especially depressive and anxiety neuroses being applicable in virtually all cases [14].

Tables 2, 4, 5, 6, and 7 provide information on the pattern of improvement among the subjects. The fact that over 80% of the subjects had improved to some extent (ranging from a little to much) may provide the subject with the motivation to continue attending the clinic. Subjects who became well shortly after their first clinic attendance are likely to have dropped out, and this also applies to subjects who showed no improvement at all. The latter would have patronized traditional or religious healers who are found in large numbers all over Nigeria.

Inspection of Table 4 shows that symptoms of physiological and sensory disturbance are the most resistant to treatment, which is predominantly organic in that psychotropic drugs are relied on, psychotherapy being merely supportive owing to staff shortage and the large number of clinic patients. The results support our clinical observation that chronic neurotic patients tend to have persistence of heat in the head or body and related symptoms, after most other symptoms have subsided. Table 7 shows that the trend for subjects with high GHQ scores is similar to that of the entire group of subjects (Table 4).

The symptom count was much higher among subjects with neurotic depression than is the case with subjects with anxiety state even when we have made adjustments for the absolute number of subjects with each diagnosis (Tables 3 and 5). The outcome was worst in subjects with the diagnosis of hypochondriasis which suggests the need to search more vigorously for effective therapy in affected patients. It is remarkable that four out of the 26 cases of anxiety neurosis as compared with 17 out of 38 cases of neurotic depression had GHQ scores of 12 and above (Table 6). Thus, anxious subjects tend to have low GHQ scores. This may be interpreted to mean that cases of anxiety neurosis had a better outcome which is consistent with the finding of Binitie [15] who observed in an 8–9 year follow-up study of neurotic patients that anxiety was associated with better prognosis than depression. Kerr *et al.* [16] and Schipira *et al.* [17] observed a poorer outcome in cases with anxiety which is contrary to the findings of the present study.

We shall now discuss the treatment of neurotic illness in the African setting with the focus on improvement of prognosis. The dependence on psychotropic drugs (especially anxiolytic and antidepressant drugs) does not give satisfactory results in many cases, as observed in the practice of most psychiatrists and as confirmed by the findings of this study. The use of psychotherapy as practised in the West is beset by two main problems. First, the large case load makes intensive psychotherapy impossible. Second, even if there was enough time, most patients do not have the interest or motivation for intensive psychotherapy since their aim is symptom relief, not self understanding or personality change. There is a clear need to discover more effective ways of helping neurotic patients. The authors are of the opinion that a combination of brief psychotherapy, psychotropic medication and advising patients on how to deal with stressful situations can produce better results. Giving advice would be frowned upon in a Western setting but in the African context the patient expects and asks for it. Behaviour therapy can also be usefully applied in selected cases.

In order to improve the prognosis in cases of anxiety neurosis and neurotic depression clinicians should pay attention to the need to make accurate diagnosis. Furthermore, psychotropic drugs should be given in adequate dosage. For example, to give up after trying 25–50 mg amitriptyline twice daily is to deny the patient the opportunity of benefiting from a higher dosage of up to 300 mg daily. An attempt should also be made to help the patient cope better with stressful life situations, some of which it may be possible to ameliorate through

the intervention of the social worker. In cases of refractory depression there is now evidence from the work of Kielholz and his colleagues that intravenous infusions of antidepressants can be helpful when other measures have failed. They initially used clomipramine alone but they later found that better results were obtained by infusing two antidepressants, clomipramine and maprotiline with simultaneous intramuscular injection of a major tranquillizer [8]. Both psychogenic and endogenous depressions respond favourably to this method of treatment.

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Appendix 1: The Special Neurotic Scale

The statements below describe how people feel. Please state how *you* have been feeling *during the last 7 days* by using the key *below*:

Key

1 = the statement does *not* describe me at all.
2 = the statement describes the way I feel some of the time (i.e. less than half of the time).
3 = the statement describes the way I feel a good part of the time (i.e. about half of the time).
4 = the statement describes the way I feel most of the time.

Example

11. 2 I feel sad or unhappy.

By writing 2 in the space opposite the statement I have shown that I feel sad or unhappy some of the time.

Scale

1. ___ I have achieved something in life.
2. ___ I have trouble falling asleep.
3. ___ My head feels hot for there is a peppery feeling in my head.
4. ___ My legs and arms shake.
5. ___ I have bad or frightening dreams.
6. ___ I have to push myself to do anything.
7. ___ I breathe in and out easily.
8. ___ I cry more than I used to (more than usual).
9. ___ I get annoyed easily.
10. ___ I find it difficult to make decisions.
11. ___ I feel sad or unhappy.
12. ___ I feel I am a bad or unworthy person.
13. ___ I have no appetite.
14. ___ I have aches and pains.
15. ___ I pass urine more often than usual.
16. ___ Some parts of my body feel as if they were not mine (they feel dead).
17. ___ I have lost my usual interest in members of the opposite sex.
18. ___ I do not feel refreshed on waking up in the morning.
19. ___ I feel hot (or have a peppery feeling) in my chest, stomach, arms or legs.
20. ___ I feel something bad may happen to me.
21. ___ I have lost weight.
22. ___ I wake up repeatedly during the night.
23. ___ I feel something is moving or crawling in my head or other parts of my body.
24. ___ I get tired easily after little or no exertion.
25. ___ I can feel my heart beating fast without working hard or doing exercise.
26. ___ I feel afraid for no reason at all.
27. ___ It is difficult for me to understand what I read or what people say to me.
28. ___ I worry a lot.
29. ___ I have attacks of fainting or feel like fainting.
30. ___ My body feels weak.
31. ___ I am disappointed in myself.
32. ___ I feel everything is all right and nothing bad will happen to me.
33. ___ I get upset easily.
34. ___ I sweat a lot more than I used to.
35. ___ I feel I would be better off dead.
36. ___ I have nothing to look forward to.
37. ___ I do not enjoy things as much as I used to do.
38. ___ I often get lost in thought.
39. ___ I feel dizzy (everything seems to be turning round).
40. ___ I am restless.
41. ___ I have pinching or biting feelings in one or more parts of my body.
42. ___ I find it difficult to concentrate.
43. ___ I feel sick in my stomach or feel like vomiting.

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