

A Survey of Psychiatric Morbidity Among Bank Workers In Ilorin, Nigeria.

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Abstract

This Study surveyed bank workers in Ilorin township with the aim of identifying possible Psychiatric disorders and the inherent associated factors in the banking sector using a 30-item general Health Questionnaire (GHQ-30), a socio-demographic questionnaire, the Present State Examination (PSE) Schedule, and the International Classification of Diseases, the 10th edition (ICD-10). Data were analysed using Epi info version 6.0. Frequency distribution, cross tabulation, and chi square figures were obtained. The level of statistical significance was set at 5%.

Four hundred and thirty out of 563 subjects responded to the questionnaires satisfactorily (76% response rate). The “GHQ-positive” respondents (i.e. score of ≥ 4 and classified as having psychiatric morbidity) were interviewed and assigned into clinical psychiatric syndromes. 57 (13%) of the respondents had psychiatric diagnoses comprising anxiety (19 or 4.4%), depression (16 or 3.7%), neurasthenia (16 or 3.7%), insomnia (5 or 1.2%), and mixed anxiety and depression (1 or 0.2%). There was significant association between psychiatric syndromes and number of children, social club, Bank ownership, work experience, extra hours, and clinical syndrome of anxiety disorder was most significantly diagnosed. These presuppose the needs for introduction of preventive measures, and identification and management of occupationally-related mental ill-health in service organization like the banking sector.

Keywords: Psychiatric Morbidity, Survey, Workplace.

Introduction

A sound mental health should permit the optimal development (physical, intellectual and emotional) of the individual, so far as this is compatible with that of other individuals. The objectives of mental health practice as set out by the Nigeria Mental Health Programme¹ include: (i) enhancement of the use of mental health principles to promote social health and related functions like socio-economic development, national productivity and overall quality of life of all Nigerians; and (ii) re-

duction of mental health harmful effects and consequences resulting from broken homes, delinquency, drug / alcohol abuse or dependence, socio-cultural and economic changes taking place in Nigeria on individuals, families and communities.

Social and psychological factors like socio-political turmoil, insecure employment or non-conducive work environment, have been identified as possible causes of mental ill-health²⁻⁶ and some mental health indicators had consistently given a prevalence of 10-18% of milder but distressing forms of mental disorders (neuroses, depression, and psychosomatic disorders)⁷. Some research reports have implicated occupational and life stresses or changes as capable of precipitating a wide variety of physical and psychological disorders (neuroses, schizophrenia, depression, suicide attempt) as well as untreated symptoms in the community^{2, 8-10}. These may be possible with the rapid technological changes which could lower the quantity and intensity of the physical energy spent on work but raise the mental burdens, which may influence workers' attitudes and behaviour^{11, 12}. Such life changes or events include exit / entrances (e.g. marriages), desirability or undesirability of commonly shared values (e.g. engagement), and the individual's area of activity e.g. change in work conditions.

Studies in the developing countries have reported measurable health problems in the industrial sectors such as anxiety, sleep disturbances, somatic complaints, psychoses, reduced mental capacity, alcohol and drug abuse^{3, 13, 14}. Durosaro¹³ in his study of relationship between stressors and mental health of School administrators in 7 states of Nigeria (including Ilorin town) found that family problems, work pressure, job insecurity among others, were associated with mental ill-health. Similarly, Shankar et al² in a study in Lagos among employees of an aluminium manufacturing Company using GHQ-30, found significantly high association between mental health problems (e.g. anxiety, insomnia, depression, somatization disorders) and job tension, job insecurity or interpersonal rewards. Haruna et al¹⁵ in a study among 180 employees of a paint factory also in Lagos, reported highest psychiatric morbidity (80%) among factory workers and least morbidity (36.7%) among administrators. He went further to identify psychiatric syndromes of agoraphobia, dysthymia,

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generalized anxiety, and neurasthenia. Several other studies have reported varying association between mental disorders and job factors such as job tenure, remunerations, promotion, poor conditions of service, age, or marital status^{14, 15}. None of these studies had however focused on the Banking sector which by virtue of its possible inherent delicate nature might be hazardous to the mental health of these workers. Similarly, the changes in socio-political and economic environment of Nigerians consequent upon different policies of different Governments that possibly demanded adjustment and adaptation might be stressful and thus resulting in psychological breakdown.

The impact of these changes on an average bank worker in Ilorin community was the focus of this study. It was against this backdrop that research in the area of occupational mental health especially as it affected bank workers in the community is considered worthwhile because of its possible consequences on the health of the individual worker, the community, and the nation in general (by way of the national productivity). The methodological differences in these studies however precluded any direct comparison as none of them involved clinical interview using PSE and ICD-10 criteria or involving similar occupational sector.

This study is an improvement over (and an addition to) the previous ones by using the banking sector and also combining screening and interview methods with the aim of identifying and categorizing possible psychiatric disorders among this group of workers and to determine possible associated factors.

Method:

The study was conducted among bank workers in Ilorin metropolis. Ilorin town was upgraded from provincial headquarter to a State Capital following the creation of Kwara State in 1967¹⁶. The town covers a land-mass of about 690km² in area and is made up of three Local Government Areas (West, East, and South). It is peopled almost exclusively by Yorubas¹⁷ (1991 Census).

Banking industry is one of the major industries in the town and there were thirteen commercial banks and the apex bank, the Central Bank of Nigeria (CBN). The strength of the banking staff of these banks ranged from 20-200, the highest being found in the CBN. A breakdown of the staff strength of the banks are as follows: Central Bank of Nigeria (180 workers), Societe Generale Bank (Nig.) Ltd. (28 workers), Wema Bank (20 workers), Trade Bank (50 workers), First Bank (30 workers), Habib Bank (15 workers), Savannah Bank (30 workers), Afribank (30 workers), Bank of the North (80 workers), and Union Bank (100 workers). Each 4 day, an average bank worker worked long hours, in addition to some occasional weekend banking. The inclusion criterion for participation in the study was

that the subject must be a bank worker. These are staff involved with the day to day banking activities and comprise senior, middle, and junior cadres. In the senior cadre are senior managers, managers, deputy managers, assistant managers and accountants; in the middle cadres are the officers, which include banking officers, and assistant banking officers. The junior cadres are the supervisors, cashiers, and clerks. Other bank workers are the non-banking (or auxiliary) staff comprising stenographers, secretaries, drivers, messengers, cleaners, and the securities. The criterion for exclusion was previous history of psychiatric illness.

Subjects were initially approached for their consent and invited to participate in the study in which their state of health and social well-being vis-à-vis their working conditions would be assessed for probable health intervention, if need be. Everybody was enthusiastic to participate, because for them, it provided an easy avenue for getting medical advice on work-related health problems, personal problems, and possibly an avenue to express opinions about non-conducive work conditions. However, some could not go beyond the first stage of the study as they refused to return their questionnaires. It was revealed that some of these latter group suspected that the data were being collected in collaboration with their employers to identify disgruntled workers for possible reprisal. They held onto this despite the verbal and written assurance of absolute confidentiality given by the researcher. This was demonstrated by attaching envelopes bearing the address of the researcher to every questionnaire booklet. Five hundred and sixty-three banking staff comprising all the three cadres were served with these questionnaires.

The study was conducted in 2 stages. The first stage involved screening of participants for psychiatric morbidity using the 30-item version of the General Health Questionnaire (GHQ-30) and the socio-demographic questionnaire while the second stage involved clinical interviews of a proportion of participants (GHQ-positive) using the Present State Examination (PSE) schedule and using criteria based on International Classification of Diseases, the 10th edition (ICD-10), with the aim of making clinical diagnosis, if any.

Questionnaires: Each participant was given a questionnaire booklet which assessed:

Socio-demographic characteristics: this was constructed by the researcher and field-tested for content relevance, and questionnaire applicability, in a neighbouring town of Offa where appreciable number of banks existed. Some adjustments were made to the questionnaire based on the responses from the subjects and field experiences. Variables assessed by this questionnaire included age, marital status, pre- and post-employment educational qualifications, household number, family types, job characteristics like cadre, financial and professional re-

munerations, spouse perception of job; social recreational activities, religious activities, and interpersonal relationship at work.

Psychiatric morbidity assessment with the 30-item version of the General Health Questionnaire (GHQ-30): this is a self-administered screening instrument designed to detect current diagnosable psychiatric morbidity in a community sample, clinical setting and occupational setting^{3, 18-20}. It is designed to cover 4 identifiable elements of distress (depression, anxiety, social impairment and hypochondriasis). Thirty symptoms are rated according to whether they have been experienced “not at all”, “the same as usual”, “rather more than usual”, or “much more than usual” in the past few months (6 months for this study). ‘GHQ Scoring method (0-0-1-1) was adopted and each item was scored 0 (not at all or the same as usual) or 1 (rather or much more than usual), giving a maximum score of 30. Subjects that scored ≥ 4 were considered to have psychiatric morbidity in accordance with the previous studies validating this instrument in this environment^{3, 19}. Each questionnaire booklet was numbered serially (001-1000), and the name of every subject and the bank was written against the corresponding number on the questionnaire booklet in a “tracer sheet”. This was to facilitate contact tracing of subjects during the second stage.

Clinical Interview: Subjects that were identified as possible ‘cases’ from the screening stage (i.e. subjects with score of ≥ 4) participated in this stage. Among the 430 subjects that completed the first (screening) stage, 77 scored ≥ 4 , and were enlisted for the second stage of the study. Using the ‘tracer sheet’, the subjects with scores of ≥ 4 were traced to their various banks and recruited into the second stage of the study. The conduct of the second stage was smooth and was guided by the use of the following standardized diagnostic instruments:

Present State Examination (PSE): This instrument consists of 140 items which systematically cover all the phenomena likely to be relevant when conducting a mental state examination²¹ and had been used previously in both local and

International studies^{2, 19, 23-29}. Despite the fact that the subjects were interviewed at work, the researcher enjoyed their cooperation perhaps because the subjects were of reasonably high educational background which enhanced a good rapport. It was thus possible to apply the full PSE. The interview was conducted during the hours of lunch breaks and every subject was interviewed one after the other. The interview process began with exchange of pleasantries, expression of gratitude for co-operating with the researcher thus far as well as seeking further cooperation, re-introducing the purpose of the interview stage, and further reassuring them of absolute confidentiality. On the average, each interview took

about 30 minutes and about 3 subjects were interviewed each day.

International Classification of Diseases, 10th edition (ICD-10): The subjects were assigned into different psychiatric diagnostic entities if any, based on the criteria of ICD-10² as previously used in both local and international studies^{19, 24, 26-28, 30}. The GHQ-30 was scored using GHQ scoring method. Subjects who scored ≥ 4 were regarded as possible cases of psychiatric morbidity and therefore regarded as ‘GHQ-positive’. The data of the total number of respondents and the variables were entered into the computer. All the data were analyzed using a statistical computer software, Epi info version 6³¹. Frequency distribution, cross tabulation, and chi square figure (with Yates correction where applicable) were obtained from the analysis. The level of statistical significance was set at 5%, and where an expected cell value was < 5 , Fisher’s exact 2-tailed p-value was used. Missing data were not considered in cross tabulating for the purpose of deriving the χ^2 or Fisher’s p value.

Results

Four hundred and thirty subjects out of 563 that were recruited returned their questionnaires, giving a response rate of 76%. The non-response of the remaining 103 (24%) subjects could have been due to: (i) loss to retrenchment of some of the subjects after recruitment into the study, and (ii) fear of reprisal from their employers. Seventy-seven (18%) of the 430 respondents scored ≥ 4 on GHQ with range of scores between 4 and 20, and were thus considered as ‘GHQ-positive’ while 353 (82%) scored < 4 with range of score between 0 and 3, and were considered as ‘GHQ-negative’.

As shown in table 1, 57 of these 77 respondents that were GHQ-positive were diagnosed as having psychiatric syndromes and these comprised anxiety (19 or 4.4%), depression (16 or 3.7%), neurasthenia (16 or 3.7%), insomnia (5 or 1.2%), and mixed anxiety and depression (1 or 0.2%).

Table 1: Psychiatric syndromes (ICD-10 Diagnosis)

Diagnoses	Frequency	%
Anxiety	19	4.4
Depression	16	3.7
Neurasthenia	16	3.7
Insomnia	5	1.2
Mixed Anxiety-depression	1	0.2
Total	57	13.2

Table 2 shows the socio-demographic factors among the respondents and it indicates that, though statistically insignificant, more respondents in the age group 30-39 years were observed to have clinical psychiatric syndromes with anxiety disorder accounting for 12

Table 2: Variable distribution (Socio-demographic factors) among respondents diagnosed as neurasthenia, anxiety and depression.

Variables	Neuras- thenia N ₁ =16 n ₁ (%)	Anxiety N ₂ =19 n ₂ (%)	Depres- sion N ₃ =16 n ₃ (%)
i. Ages			
< 30 years (N=46)	1(2.2)	3(6.5)	3(6.5)
30-39(N=234)	10(4.3)	12(5.2)	9(3.8)
40-49(N=80)	1(1.3)	4(5)	4(5)
≥50 years (N=42)	4(9.5)	-	-
X ²	5.38	2.51	2.75
P-value	0.14	0.47	0.43
Ii. Gender			
Male (N=294)	15(5.1)	12(4.1)	13(4.4)
Female (N=123)	1(0.8)	6(4.9)	3(2.4)
X ²	3.24(yates)	0.13	0.46(yates)
P-value	0.07	0.72	0.5
Iii. Number of Children:			
0 children (N=48)	1(2)	3(6)	5(10)
1-5 children (N=328)	14(4.3)	13(4)	11(3.4)
>5 children (N=36)	1(2.8)	1(2.8)	-
X ²	0.66	0.73	7.19
P-value	0.72	0.69	0.03
IV. Social club:			

N = Total number of respondents expected for each variable item

N₁ = Total number of respondents expected for neurasthenia

N₂ = Total number of respondents expected for anxiety

N₃ = Total number of respondents expected for depression

n₁ = Number of respondents observed for neurasthenia

n₂ = Number of respondents observed for anxiety

n₃ = Number of respondents observed for depression

(5.1%), depression 9 (3.8%), and neurasthenia 10 (4.3%). Most respondents, also not statistically significant though, were males with majority being diagnosed to have neurasthenia (15 or 5.1%). Respondents that had between 1-5 children were however significantly diagnosed to have clinical psychiatric syndromes of neurasthenia (14 or 4.3%), anxiety (13 or 4.0%), and depression (11 or 3.4%); $\chi^2 = 7.19$, $p < 0.03$. Similarly, significantly most of the respondents did not belong to social club and were diagnosed to have anxiety disorder (13 or 7.7%, $\chi^2 = 6.64$, $p < 0.01$).

Table 3 shows the work factors among the respondents and concerning their work experience in bank, significantly most respondents had worked in the industry for ≤ 10 years and were significantly diagnosed to be having anxiety disorder (13 or 7.1% , $\chi^2 = 5.96$, $p < 0.01$). Similarly, respondents in the employment of privately-owned banks were significantly most diagnosed to be having clinical syndrome of anxiety (15 or 6.8%,

Table 3: Variable distribution (Work factors) among respondents diagnosed as neurasthenia, anxiety and depression.

Variables	Neuras- thenia N ₁ =16 n ₁ (%)	Anxiety N ₂ =19 n ₂ (%)	Depres- sion N ₃ =16 n ₃ (%)
i. Work experience:			
≤ 10 years (N=182)	6(3.3)	13(7.1)	9(4.9)
> 10 years (N=229)	10(4.4)	5(2.2)	7(3.1)
X ²	0.31	5.96	0.97
P-value	0.58	0.01	0.32
Ownership:			
Federal (N=170)	6(3.5)	3(1.8)	6(3.5)
State (N=38)	-	1(2.6)	-
Private (N=220)	10(4.5)	15(6.8)	10(4.5)
X ²	1.89	6.09	1.89
P-value	0.39	0.05	0.39
Workload			
Heave (N=315)	15(4.8)	16(5.1)	13(4.1)
Light (N=6)	-	2(33.3)	1(16.7)
Appropriate (N=86)	1(1.2)	-	2(2.3)
X ²	-	-	-
P-value	-	-	-
Overtime			
Working Extra hours (N=384)	15(3.9)	14(3.6)	13(3.4)
No Extra hours (N=22)	1(4.5)	5(22.7)	2(9.1)
X ²	-	12.98 Yates	-
P-value	-	0.0003	-
Desirability of overtime:			
Desirable (N=93)	2(2.2)	2(2.2)	-
Not Desirable (N=289)	14(4.8)	11(3.8)	14(4.8)
X ²	0.69(Yates)	0.19 Yates	3.41yates
P-value	0.41	0.66	0.06

$\chi^2 = 6.09$, $p < 0.05$) compared with those who were in the employment of Federal government-owned, or State-owned banks.

Majority of the respondents that reported heavy workloads were observed to have clinical psychiatric syndromes but this was not statistically significant. However, respondents who reported working extra hours were observed to have clinical psychiatric syndromes and most were significantly diagnosed to have anxiety disorder ($\chi^2 = 12.98$, $p < 0.0003$). Majority of the respondents who felt overtime was not desirable were observed to have clinical psychiatric syndromes though not statistically significant.

Discussion:

In the previous studies among industrial populations, several psychiatric syndromes have been identified. For instance, Shankar *et al* ³ in their study of em-

ployees of a group of companies in Lagos, Nigeria, identified syndromes of anxiety, fatigue, depression, and insomnia. In a similar study by Haruna *et al*¹⁵ among workers of a paint factory also in Lagos, Nigeria, syndromes of agoraphobia, dysthymia, anxiety, and neurasthenia were identified. Several authors have also identified other psychiatric syndromes such as drinking-related problems, violence, social dysfunctions, substance abuse, and psychosomatic disorders among various occupational settings^{32,33}. In a study of senior health service staff in Lincoln by Caplan³⁴, higher levels of anxiety and depression were reported among doctors and managers.

The current finding of less severe forms of psychiatric disorders in the banking industry further gave credence to the view that milder forms of psychiatric disorders exist in the community⁵ and especially in the occupational settings but usually escape discovery as majority of the affected individuals might have failed to present to the mental health specialists. This perhaps might be because such individuals did not regard themselves as being ill. It could also be due to non-recognition by private doctors or the fear of the social stigma associated with any disorder that might suggest mental illness. The observed significant association of clinical psychiatric syndrome with extra work hours was in agreement with the findings of Ezoe *et al*³⁵ and Maruyama *et al*³⁶ who reported significant association between long working hours and the development of psychiatric disorders among Japanese factory workers.

Psychiatric syndromes and the associated factors (Tables 2 & 3):

Anxiety: The association of work factors and anxiety disorder in this group of workers may not be too surprising because workers with few years of work experience might have been too anxious about promotion, achievement and recognition. Coupled with the continual restructuring especially in the privately-owned banks, such workers might even be more anxious as a result of impending job loss. This finding again may explain why some of the respondents did not belong to social clubs as it might have been difficult to engage themselves in any social activities to minimize tension emanating from their work.

Depression: In a study of risk factors for depression by Salokangas *et al*³⁷, negative life events, poor marital or other inter-personal relationships, poor socioeconomic and work situations were implicated. The significant association between clinical psychiatric syndromes and having 1-5 children appeared to be in consonance with previous studies. Expectedly, respondents who had more children were very likely to have more clinical syndromes as this could amount to more role demands. The increased morbidity of psychiatric illness consequent upon the rearing of children had been ob-

served in previous studies. According to Brown *et al*³⁸, presence of 3 or more children in working class mothers make them more vulnerable to developing depression especially in the presence of an event or difficulty.

Neurasthenia: Haruna *et al*¹⁵ had observed this syndrome among workers of a paint factory in Nigeria and reported significant association between this syndrome and psychological complaints. The finding of high incidence in the middle age was partially in consonance with literature documentation. Significantly more male than female respondents were observed to have the diagnosis but this may be particularly difficult to explain because no mention had been made about the gender distribution pattern of this disorder in the few available studies.

The author recognized the difficulty of making any definitive inference from this study. Nevertheless, the findings of the study may bear significant implications for banking staff and their employers as there had been no study that primarily focused on this sector. Thus, there are needs to initiate primary preventive measures that would be geared towards mitigating those psychosocial work-related factors that were identified as being hazardous to workers mental health. These could be attained through: (i) organization of seminars/workshops for these group of workers, (ii) training of the private medical retainers of the organization for early identification and prompt management of cases in order to improve the psychological health of the workers, and (iii) incorporation of occupational mental health practitioners into organizational health promotion programmes.

Acknowledgement

The author wish to acknowledge the contributions of Prof. M. L. Adelekan, retired Prof. of Psychiatry, College of Medicine, University of Ilorin, and Dr. Adeyemi, J. D., Associate Professor of Psychiatry, College of Medicine, University of Lagos.

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