Psychiatric Morbidity Among Job Applicants Into A Tertiary Health Institution In A North-eastern State Of Nigeria

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Abstract

Unemployment and underemployment have been associated with increased psychiatric morbidity in different population. The aim of this study was to determine the prevalence of psychiatric morbidity among job applicants in Nigeria and factors associated with this.

The study was carried out among job applicants that came for job interview at Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, a federal health institution in the North-Eastern part of Nigeria. Study population consisted of 234 consented adults who were invited for job interview into various positions in the hospital. Information about their socio-demographic variables and risk factors were obtained. General Health Questionnaire-12 was used to determine the presence of psychiatric morbidity among the respondents. It was found that 19.2% of the respondents had psychiatric morbidity. Significant associations were found between the development of psychiatric disorders among job applicants and respondents who were older, those with lower income and those with inadequate financial support. It was observed that among the applicants that came for the interview, 175 (74.8%) were already in employment while 59 (25.2%) were unemployed. The unemployed group were younger, more likely to be female and had fewer dependants. The two groups were similar in factors that were associated with the presence of psychiatric morbidity except lack of financial support which was a factor among the employed job seekers but not an associated factor among the purely unemployed group. The vicious cycle of unemployment/ underemployment and psychiatric morbidity could be reduced by provision of job for unemployed people particularly older applicants and also by improvement in the social status of the population to reduce the effect of underemployment.

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Introduction:

Unemployment has been found to be associated with increased psychiatric morbidity in different populations.[1, 2] Studies have tried to find relationship between unemployment and different types of psychiatric disorders. Unemployment may act as a non-specific factor that increases the vulnerability of individuals to the development of psychological problems, thus increasing the predisposition to development of psychiatric disorders.[3] It may also act as mediating factors for as increased level of poverty, reduced self-esteem and psychic effect of unmet social responsibilities and expectations of an individual.[3] Other ways by which unemployment could result into psychological distress are through causing financial strain and increased vulnerability to stressful live events.

Disorders such as major depressive disorder, anxiety disorders, somatoform disorders, substance use disorders and suicidality have been found to be commoner among the unemployed.[1, 4, 5] This category of individuals also report more physical ill health than the employed group.[6]

Different socio-demographic factors have been observed to determine whether an unemployed individual will develop psychiatric disorders or not. Unemployed males are usually observed to show more depressive symptoms than females under the same situation.[7] Similarly, older unemployed people are more likely to have psychiatric morbidity than younger people, so also are people using alcoholic drink when compared with people who do not drink.[8, 9] Principal potential family earners who are unemployed showed more psychological distress and hence more psychiatric morbidity than those who were dependants. Duration of unemployment is also important, as the longer the duration of unemployment the higher the risk of developing psychiatric disorders especially major depression.[10, 11, 12]

However, there are factors that reduce the effects of unemployment in the development of psychiatric disorders. These modifying effects include good social

support, high self-concept and good pre-morbid coping strategies.[1]

Underemployment is seen as economic as well as psychological problem. Individual who is underemployed may be working but may not be satisfied with his job. Types of job that fall under the underemployment classification includes those workers that are highly skilled but working in low paying jobs, workers that are highly skilled but work in low skill jobs and part-time workers that would prefer to be full-time. This is different from unemployment in that the individual is working but is not working at their full capability. Dooley et al (2000) reported that both unemployment and underemployment lead to similar and significant increase in mental health problems especially depression.[13] This is similar to finding by Winefield et al, 2002 that reported that underemployment is associated with increase psychological stress and psychiatric morbidity.[14] The association between the two might be due to economic insecurity and increased income gap.[15, 16] It was predicted that by the year 2020, there would be significant psychiatric morbidity among the underemployed as it would be difficult to get a secured permanent job as a result of casualization of job and use of computers and robots.[17]

As the gap between the rich and poor continues to widen and it is becoming much more difficulty for willing and qualified candidates to secure satisfactory jobs in Nigeria, the prevalence rate of psychiatric morbidity is expected to increase among the unemployed and majorly underemployed population. However, there is dearth of published studies about the mental health of these groups of willing, able and qualified job seekers who are finding it difficult to secure one.

This present study aimed to find the prevalence of psychiatric morbidity among willing and qualified job applicants into a federal health institution in Nigeria. It also examined factors that are associated with the presence of poor mental health in the unemployed and underemployed populations.

Method:

This was a cross sectional survey of job applicants that attended a job recruitment interview at a tertiary health institution in the North Eastern state of Bauchi, Nigeria. Abubakar Tafawa Balewa University Teaching Hospital, Bauchi is a tertiary health facility that serves the people of Bauchi State and the neighboring states like Plateau, Borno, Kano, Gombe and Taraba States. The advertisement into various positions in the hospital was published in two national dailies. So, applicants were from all the geo-political regions of the country.

The ethical approval for the study was obtained from the Ethical & Research Committee (ERC) of Abubakar Tafawa Balewa University Teaching Hospital, Bauchi (ATBUTH). Permission to study the applicants was also obtained from the management of the hospital. Similarly, the informed consent of each respondent was sought and only those who gave consent were obtained were recruited into the study.

All the 286 applicants who came for the interview were approached to participate in this study and 234 accepted to participate. All the respondents had education up to tertiary level. These included registered nursing/midwifery, higher national diploma, bachelor of sciences, bachelor of medicine; bachelor of surgery, master of sciences and fellowship of colleges of physicians and surgeons. The respondents were addressed while waiting for oral segment of the interview. Those that gave their consent were given questionnaires designed by the authors to obtain the socio-demographic and risk factors for psychiatric morbidity from the respondents. They were also requested to complete the twelve-item General Health Questionnaire (GHQ-12).[18]

Results:

Out of two hundred and eighty six (286) applicants that came for the interview, two hundred and thirty four (234) completed and returned the questionnaire. This constituted 81.1% response rate.

Socio-demographic characteristics of respondents

One hundred and sixty (68.4%) of the respondents were in the 21 to 30 year age group, 64 (27.4%) were above 30 year. One hundred and twenty seven (54.3%) of the respondents were females. Slightly more than half (120, 51.3%) of the respondents were single. More than half (53.8%) were Muslims. (Table 1)

One hundred and seventy five of the respondents (74.8%) were previously working, while 59 (25.2%) were unemployed. Among those respondents who were employed, 117 (66.9%) were on monthly income of less than ?100,000 while the remaining 58 (33.1%) were on monthly income of ?100,000 or more. (?160.00 ≈$1.00 USD at the time of study)

Furthermore, 145 (62%) of the respondents applied for the position of nurse/midwife, 58 (24.8%) who were doctors applied for registrars' position (i.e. residency programme), 7 (3%) applied for the position of health information management officer, 5 (2.1%) each applied for position of consultant physician/surgeon, and laundry technician, while the remaining 14 (5.9%) were for various positions like accountant, medical physicists, radiology technicians and medical social

Table 1: Socio-demographic characteristics of the respondents

Variables	Frequency
Age	
20-30	160 (68.4)
≥31	74 (31.6)
Sex	
Female	127 (54.3)
Male	107 (45.7)
Marital Status	
Single	120 (51.3)
Married	114 (48.7)
Religion	
Christianity	108 (46.2)
Islam	126 (53.8)
Employment status	
Employed	175 (74.8)
Unemployed	59 (25.2)
Position applied for	
Nurse/midwife	145 (62.0)
Residency	58 (24.8)
Others	31 (13.2)
Monthly income for the employed (n=175)	
<? 100,000	117 (66.9)
≥? 100,000	58 (33.1)
Financial support	
Adequate	121 (51.7)
Not Adequate	113 (48.3)
Number of dependant	
None	114 (48.7)
1-4	101 (43.2)
>4	19 (8.1)
GHQ score	
<3	189 (80.8)
≥3	45 (19.2)

workers.

Among the respondents who were working previously, different reasons were given for decision to seek another job. Forty six (24.5%) wanted to advance in their academic pursuit, 47 (25%) wanted to leave their former work because of lack of job satisfaction and 25 (13.3%) were leaving due to poor financial remuneration compared to duty been performed. Also 13 (6.9%) respondents each were leaving their previous job because they had either completed their program (for instance, compulsory one year National Youth Corps Service) or they wanted a more challenging and appropriate job. Thirty three (17.6%) respondents said they were leaving their previous job for personal reasons and 11 (5.9%) were leaving because of general insecurity to life and properties in their previous places of work.

Slightly more than half of the respondents (51.7%) felt they had good financial support while 113 (48.3%) were of the opinion that they did not have enough financial support. Less than half (48.7%) of the respondents did not have any dependant. Furthermore, 101 (43.2%) of the respondents had between 1 and 4 dependants while the rest 19 (8.1%) had more than 4 dependants (Table 1).

Using the score of 3 and above on the GHQ-12 as the cut off point for psychiatric morbidity, 45 (19.2%) respondents had score of 3 or more on the GHQ-12 while the remaining 189 (80.8%) had score of less than 3 on GHQ-12.[19, 20]

Considering the two sub-populations of the job applicants, that is job seekers who are in employment and job seekers who are unemployed, the following were observed.

Among the unemployed job seekers, the majority (88.1%) were between ages of 20 and 30 years, 35 (59.3%) were female, 37 (62.7%) were single. Thirty five (55.9%) of this population did not have adequate financial support and 40 (67.8%) reported having no dependants. Thirteen (22.0%) had GHQ score of 3 or more. Of the job seekers in employment, 108 (61.7%) were between the ages of 20 and 30 years, 92 (52.6%) were female while the same proportion were married. Seventy eight (44.6%) respondents in this group reported having no adequate financial support and only 74 (42.3%) did not have any dependants. Thirty two (18.3%) of this group of job seekers who were in employment had GHQ score of 3 and above. Analysis of the two sub-populations revealed that the unemployed job seekers were more likely to be younger; of female gender and less likely to have many dependants. (Age; X^2=14.25, p-value=0.000: marital status; X^2=4.13, p-value=0.042: number of dependants; X^2=12.83, p-value=0.001) (Table 2)

Factors associated with the development of psychiatric morbidity among the respondents

The analysis of age range of applicants without psychiatric morbidity revealed that those within the 21-30 age group were 135 (71.4%), while those above age of 30 year were 54 (28.6%). For the applicants with psychiatric morbidity, those who were below 30 year were 25 (55.6%) and those above 30 year were 20 (46.4%). This showed a significant association, as the morbidity was more among the older applicants (X^2=4.24; p- 0.040).

Thirteen (28.9%) of respondents who had psychiatric morbidity were unemployed during the time of interview while the remaining 32 (71.1%) were in employment at the time of the study. In addition, 46

Table 2: Socio-demographic variables and GHQ categorization of respondents

Variables	GHQ≥3	GHQ<3	X^2	p-value
Age				
21-30	25 (53.2)	135 (72.2)		
≥30	20 (44.4)	54 (28.6)	4.24	0.040
Gender				
Male	18 (40.0)	89 (47.1)		
Female	27 (60.0)	100 (52.9)	0.478	0.409
Marital status				
Single	21(46.7)	99 (52.4)		
Married	24 (53.3)	90 (47.6)	0.48	0.491
Religion				
Islam	24 (53.3)	102 (54.0)		
Christianity	21 (46.7)	87 (46.0)	0.008	0.928
Position sought				
Nurses/Midwives	32 (71.1)	113 (59.8)		
Residency	8 (24.2)	50 (26.4)		
Others	5 (15.0)	26 (13.8)	2.05	0.359
Employment status				
Unemployed	13 (28.9)	46 (24.3)		
Employed	32 (71.1)	143 (75.7)	0.194	0.659
Income Status (monthly) for the employed				
<? 100,000	8 (24.2)	51 (35.7)		
≥? 100,000	25 (75.6)	92 (64.3)	10.16	0.017
Financial Support				
Adequate	14 (31.1)	107 (56.6)		
Inadequate	31 (68.9)	82 (43.4)	8.472	0.003
Presence of Dependants				
None	19 (42.2)	95 (50.3)		
1-4	24 (53.3)	77 (40.7)		
>4	2 (4.4)	17 (9.0)	2.74	0.258

(24.3%) of those who had no psychiatric morbidity were unemployed and the remaining 143 (75.7%) were employed (X^2 = 0.194; p = 0.659). When the average monthly incomes of those who had and those who did not have psychiatric morbidity were compared, the following were revealed. Only 8 (24.2%) of those applicants who earned more than 100,000 naira per month had GHQ-12 score of 3 or more but 25 (75.6%) of those employed who score 3 or more were earning less than ?100,000 per month. It was of note that the only two respondents with monthly income of less than ?10,000 had GHQ score of ≥ 3. Among those employed with score of less than 3, 51 (35.7%) were earning more than ?100,000 per month and 92 (64.3%) were earning less than ?100,000 per month. (X^2 = 10.16; p = 0.017). This showed that significant proportion of those employed with average monthly income of less than ?100,000 per month had psychiatric morbidity.

When reasons given by respondents for changing their previous job were considered among those with GHQ-12 score of less than 3, 40 (26.1%) wanted to go for further academic training like residency, 10 (6.5%) had

Table3: Comparison of socio-demographic characteristics of employed and unemployed job seekers

Variables	Unemployed job seekers	Employed job seekers	X^2	p-value
Age				
21-30	52 (88.1)	108 (61.7)		
≥31	7 (11.9)	67 (38.3)	14.25	0.000
Sex				
Female	35 (59.3)	92 (52.6)		
Male	24 (40.7)	83 (47.4)	0.81	0.368
Marital Status				
Single	37 (62.7)	92 (52.6)		
Married	22 (37.3)	83 (47.4)	1.83	0.176
Religion				
Christianity	26 (44.1)	82 (46.9)		
Islam	33 (55.9)	93 (53.1)	0.14	0.710
Position applied for				
Nurse/midwife	38 (64.4)	107 (61.1)		
Residency	5 (8.5)	53 (30.3)		
Others	16 (27.1)	15 (8.6)	20.0	0.000
Financial support				
Adequate	24 (40.7)	74 (42.3)		
Not Adequate	35 (59.3)	78 (44.6)	3.84	0.049
Dependant				
None	40 (67.8)	74 (42.3)		
1-4	18 (30.5)	83 (47.4)		
>4	1 (1.7)	18 (10.3)	12.83	0.002
GHQ12 score				
<3	46 (78.0)	143 (81.7)		
≥3	13 (22.0)	32 (18.3)	0.19	0.659

completed their programs, 13 (8.5%) were in search of better experiences, 20 (13.1%) said they were leaving because of poor salary, 9 (5.2%) were leaving because of insecurity in their present place of work and 36 (23%) were leaving because of lack of job satisfaction. Among the applicants who scored 3 or more on the GHQ12, 6 (17.1%) wanted to go for further academic training, 3 (8.6%) had completed their various programs, 5 (14.3%) claimed the remuneration were poor, 2 (5.7%) were leaving because of insecurity in their place of work and 11 (31.4%) were leaving due to lack of job satisfaction with their current job. (X^2 = 5.52; p = 0.478).

When asked if the applicants had adequate financial support, 31 (68.9%) of those without adequate support had morbidity while only 14 (31.1%) with adequate financial support had GHQ12 score of 3 or more. However, among those with GHQ12 score of less than 3, 82 (43.4%) had no adequate financial support while 107 (56.6%) had adequate financial support. That means, significant proportion of those with psychiatric morbidity had less than adequate financial support (X^2 = 8.472; p = 0.003). (Table 2)

Contrary to the expectation that majority of job applicants would be unemployed, this study revealed that greater proportion (175 i.e. 74.8%) of job seekers who were invited for the job interview in this study were already in one employment or the other. Only 59

Table 4: Comparison of socio-demographic characteristics of Unemployed job seekers with and without psychiatric morbidity

Variables	No morbidity	With morbidity	X^2	p-value
Age				
21-30	42 (91.3)	10 (76.9)		
≥31	4 (8.7)	3 (23.1)	0.87*	0.352
Sex				
Female	27 (58.7)	8 (61.5)		
Male	19 (41.3)	5 (38.5)	0.03	0.854
Marital status				
Single	30 (65.2)	7 (53.8)		
Married	16 (34.8)	6 (46.2)	0.56	0.454
Religion				
Christian	19 (41.3)	7 (53.8)		
Islam	27 (58.7)	6 (46.2)	0.65	0.421
Position applied for				
Nurse/midwife	30 (65.2)	8 (61.5)		
Residency	4 (8.7)	1 (7.7)		
Others	12 (26.1)	4 (30.8)	0.12	0.944
Financial support				
Adequate	27 (58.7)	8(61.5)		
Not Adequate	19 (41.3)	5 (38.5)	0.03	0.854
Number of dependants				
None	31 (67.4)	9 (69.2)		
1-4	14 (30.4)	4 (30.8)		
>4	1 (2.2)	0 (0.0)	0.29	0.866

*= Yate chi-square

Table 5: Comparison of socio- demographic characteristics of Employed job seekers with and without psychiatric morbidity

Variables	No morbidity	With morbidity	X^2	p-value
Age				
20-30	93 (65.0)	15 (46.9)		
≥30	50 (35.0)	17 (53.1)	3.65	0.056
Sex				
Female	73 (51.0)	19 (59.4)		
Male	70 (49.0)	13 (40.6)	0.73	0.394
Marital Status				
Single	69 (48.3)	14 (43.8)		
Married	74 (51.7)	18 (56.3)	0.21	0.645
Religion				
Christianity	68 (47.6)	14 (43.8)		
Islam	75 (52.4)	18 (56.3)	0.15	0.697
Position applied for				
Nurse/Midwife	83 (58.0)	24 (75.0)		
Residency	46 (32.2)	7 (21.9)	0.15	0.174
Financial support				
Adequate	88 (61.5)	9 (28.1)		
Not Adequate	55 (38.5)	23 (71.9)	11.82	0.000
Income/month				
<? 100,000	92 (64.3)	24 (75.0)		
≥? 100,000	51 (35.7)	8 (25.0)	1.33	0.249
Number of dependants				
None	64 (44.8)	10 (31.3)		
1-4	63 (44.1)	20 (62.5)		
>4	16 (11.2)	2 (6.3)	3.62	0.163

(25.2%) of the respondents that came for the job interview were completely unemployed as at the time the study was carried out. Therefore, the group was further divided into sub-groups of unemployed and employed job seekers and further analyses done to assess if there are differences between then vis-à-vis socio-demographical variables and presence of psychiatric morbidity.

Nearly 90% of the unemployed job seekers were in the age group of 20-30 years as against only about 60% of those in employment. Fifty nine percent of the respondents in the unemployed group were female and 52% percent of the employed were female. More than 62% were still single among the unemployed group but barely above half of the employed group were still single. Almost 60% of the unemployed group believed that they did not have adequate support but slightly above 40% of the employed group have similar believe. The unemployed job applicants were also observed to have less number of dependants as above 67% of them have no dependant as against only 42% among the employed group. The types of jobs these two groups applied for also differ. More of the applicants who were neither nurses nor doctors were more likely to be unemployed prior to the study period. The study revealed that other category of job seekers apart from doctors or nurses constituted 27% of the population of unemployed job seekers but only 8.6% of the applicants who were already in one form of employment or the other.

There were statistically significant differences between the two sub groups in terms of age of the applicants, financial support, number of the dependants and type of job seeking. The unemployed applicants were more likely to be younger, have much less financial support, less number of dependants and less likely to apply for medical or nursing position.

Thirteen (22.0%) out of 59 of the unemployed job applicants scored 3 or more on GHQ compared to only 32 (18.3%) of the 175 job seekers in employment. This, however, did not reach a statistical significant level (X^2= 0.40; p-value= 0.528). (Table 3)

When the unemployed applicants with psychiatric morbidity where compared with those without psychiatric morbidity, the following were observed. Majority (91.3%) of those who have no psychiatric morbidity were in the age group of 20-30years as against only 76.9% of those with morbidity in d same age group. Only 34.8% of those with GHQ score of less than 3 were married among the unemployed applicants as against 46.2% among those who have psychiatric morbidity. Also about 41.3% of the unemployed applicants without psychiatric morbidity were Christian but 53.8% of those who have GHQ score of 3 and above were Christians. None these differences noted above reached a statistically significant level. Table 4

In the sub-group of the applicants who were in employment, those who have psychiatric morbidity were compared with those who did not have psychiatric morbidity. It is observed that only 35% of those without psychiatric morbidity were above the age of 30 year as against 53.1% of the same group who have psychiatric morbidity. Fifty nine percent of those who have psychiatric morbidity in this sub-group were female but only 51% of those without psychiatric morbidity were female. Also, 56.3% of those with psychiatric morbidity were married but only 51.7% of those with no psychiatric morbidity were married.
Considering the type of job these applicants who were in employment applied for, the nurses were more represented among those who have psychiatric morbidity than those who did not have morbidity (75% vs 58%).

Furthermore, majority (71.9%) of the applicants already in employment with psychiatric morbidity believed that they did not have adequate support. This is contrary to only 38.5% of those who have no psychiatric morbidity that shared the same view. Also, the group with no psychiatric morbidity had fewer dependants than their counterparts with psychiatric morbidity. When the monthly income of this sub-group were considered vis-à-vis the presence of psychiatric morbidity, more than 35% of those without psychiatric morbidity receive monthly income of equal or more than a hundred thousand naira per month. However, only about 25% of those with psychiatric morbidity get a monthly income of similar amount.

With the above differences noted, it was only the presence or otherwise of adequate support that reached a statistically significant level (Table 5).

The factors found to be associated with the presence of psychiatric morbidity among the job applicants were older age group, lower average monthly income and lack of adequate financial support. Furthermore, the unemployed applicants were more likely to be younger, have much less financial support, less number of dependants and less likely to apply for medical or nursing position when compared with employed job seekers. There were no statistically significant differences in socio-demographical variables among the unemployed job seekers with psychiatric morbidity and those without psychiatric morbidity. However, among the job seekers who were in employment, the only socio-demographical factor that reached a statistically significant level was the presence or

otherwise of adequate support.

Discussion:

The study was carried out among job applicants invited for job interview at a teaching hospital in Nigeria. It is important to know that out of the 234 respondents that returned completed questionnaire, only 57 (25.2%) respondents were purely unemployed. The remaining 175 (74.8%) respondents were in previous employment who wanted to leave their former job based on various reasons such as lack of job satisfaction, inadequate financial remuneration compared to other workers with similar job and need for more challenging and appropriate job. This category of applicants could be said to be underemployed.

There were obvious differences in socio-demographic variables between the unemployed job seekers and those already in one employment or the other. The unemployed group tends to be younger than the employed group. They were also more likely to be females and they had fewer dependants. This was, perhaps, due to the fact that the unemployed job applicants were more likely to be recent graduates, therefore younger. And because they might have never been in employment, the responsibility imposed on them by the family might be less, which may explain why they had fewer dependants. The two groups were not significantly different on the other socio-demographical variable.

Thirteen (22%) out of the 57 unemployed applicants that were interviewed had psychiatric morbidity. The authors looked at the factors that could be responsible for the presence of psychiatric morbidity among this unemployed sub-population and the following observation were noticed. The unemployed job applicants with psychiatric morbidity were more likely to be older than those without psychiatric morbidity. Female respondents without employment were also more represented among those that have psychiatric morbidity so also were the married respondents. Though none of the observed differences reached a statistically significant level, this might be important for future research. The respondents in this subgroup were similar in the other variables. Literature search has shown that older age is a factor associated with presence of psychiatric disorder among the unemployed, which is in agreement with the findings of this study.[6] However, contrary to the finding of this study where female applicants were more among the unemployed with psychiatric disorders (though did not reach statistically significant level), male population had been identify as one of the factors associated with presence of psychiatric morbidity among the unemployed population.[7]

Similarly, 18.3% of job seekers who were in employment had psychiatric morbidity in the present study. This sub-population of the job applicants who were already in employment were similar to the above group in the sense that those among them who had psychiatric morbidity were more likely to be older, of female gender and married. Also similar to the subgroup of unemployed respondents, all these differences did not reach a statistically significant level. But contrary to those applicants without employment, lack of adequate support is a significant factor associated with the presence of psychiatric morbidity in those job seekers who were in employment in this study. Reasons adduced for this might be additional responsibility imposed on these people as their families consider them as workers. Also, all other sources of income especially from the families and relatives might have been reduced because they would be expected to be getting salary and therefore, should be responsible for themselves.

Though there was slight difference between the prevalence rates of psychiatric morbidity among the unemployed and employed job seekers, (22% vs 18.3%), this did not reach a statistically significant level, and both values were greater than estimated prevalence rate of psychiatric disorder among the general populace in Nigeria.[21] Some studies have shown that the prevalence rates of psychiatric disorders among the unemployed and underemployed groups were similar.[13, 14] Dooley (2000) reported that both unemployment and underemployment lead to similar and significant increase in the rate of psychiatric disorders more especially major depression.[13] Unsatisfactory employment was also noted to have increase adverse and detrimental psychological effect on the individuals just like those who were unemployed.[14] Factors found in previous studies that may contribute to increase rate of psychiatric disorders among the underemployed were: increase income inequality, economic insecurity and lack of job satisfaction.[15, 16, 17, 22]

When the group was considered together as a whole, out of 234 respondents that returned completed questionnaire, 45 had psychiatric morbidity giving a prevalence of 19.2% among the respondents. This figure was higher than the prevalence of mental ill health in Nigeria estimated at between 10% and 18%.[21] Factors found to be associated with presence of morbidity were: older age of the respondents, lower income and lack of financial support.

This study showed that the prevalence of psychiatric morbidity among the job applicants in Nigeria was higher than that of the general populace. It is similar to other studies that found higher prevalence of

psychiatric disorders among the unemployed and underemployed.[1] Older respondents were also found to have higher rate of psychiatric morbidity than younger respondents. This also was similar to the findings by Warr & Jackson (1985) where older unemployed individuals were found to have higher risk of developing psychiatric disorders.[8] This might be due to the fact that there might be increased expectations and more responsibilities as one gets older. There might also be heightened stress as many organizations are now putting a ceiling to the maximum age at which applicants could be employed by their establishment. However, Goldsmith et al, (1996) and Korpi, (1997) did not find any association between the age of unemployed and the development of psychiatric disorders.[23, 24]

Other factors that were found to be significant were low income and perception of poor financial support by the respondents. Low or no income might increase the presence of psychiatric morbidity because of the fact that the individual are much likely to be disadvantaged in a competitive market because of lack of purchasing power compared with those who have adequate financial support and or high financial income. Other studies had found similar findings.[22, 25]

Though this study did not find significant association between presence of psychiatric morbidity and gender of the respondents, more female respondents were represented among those with psychiatric morbidity in both the unemployed and those in employment. This was contrary to study by Clark & Oswald (1994) who found male unemployed respondents to have increased risk for psychiatric disorders.[26] Other factors such as the number of dependents and religion of the respondents were also not found to be statistically significant in this study.

The relationship between unemployment /underemployment is reciprocal; unemployment and underemployment are risk factors for mental disorders and conversely poor mental health is a barrier to employment. Individuals with mental health problems often earn lower wages and work fewer hours. This is in support of the proposed inverse relationship between socio-economic status and mental health.[27]
In Nigeria there is inequality in the salary structures paid to workers. Workers in the Federal pay system earn better salary than the States and Local Government paid workers. University Teaching Hospitals belong to this federally paid group. It is therefore not surprising that people who are not contented with their current work salary would want to leave to join the federal job, when such opportunity beacons. Income inequality on its own is a risk factor for developing psychiatric morbidity.[28, 29]

Conclusion:

In order to stem the vicious cycle of unemployment and psychiatric morbidity, all job applicants should be given equal opportunity irrespective of their age. Work environment and conditions should also be made more conducive for workers to reduce the detrimental effects of underemployment on the workers. Future studies must examine larger samples of purely unemployed population (e.g. through multicentre studies) in this environment in order to ascertain prevalence of psychiatric morbidity in them and the associated factors. This will allow for cross-cultural comparisons. It will also assist to provide preventive measure to reduce the morbidity rate.

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