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Medical students' beliefs about treatment and rehabilitation of persons with mental illness

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Advances in treatment and rehabilitation of persons with mental illness (PWMI) have generally improved their well-being. However, some people most especially the lay public and no-psychiatric health workers still hold a lot of reservation about the effectiveness of such management interventions. Thus, this study set out to explore medical students' beliefs about treatment and rehabilitation of PWMI. A descriptive and cross-sectional study carried out among medical students of the College of Medicine of the University of Lagos (CMUL), Lagos, Nigeria. Subjects were selected through multistage and systematic random sampling techniques, with age and sex-matched controls selected among dental students. They were evaluated with a Questionnaire adapted from an instrument earlier used by Sechrest et al. (1973) on cross-cultural study of attitude to mental illness among university students. A total of 130 medical students (subjects) and 57 controls (dental students) were studied. The mean age of subjects was 23.2 ± 3.0 years. Varying beliefs about mental illness (MI) were expressed by both subjects and controls. One hundred and seventeen (90%) of subjects and 46 (80.7%) of controls believed PWMI can be effectively treated and most of them believed orthodox treatment to be the important one. On rehabilitation, 8 (6.2%) of subjects and 3 (5.3%) of controls believed treated PWMI should not be allowed to marry ($X^2 = 9.28$, $DF=4$, $p=0.05^*$). Ninety eight (75.4%) of subjects and 40 (70.2%) of controls believed treated PWMI should have chance of securing jobs. When stratified to pre-clinical and clinical levels of study, 68 (65.4%) of preclinical and 24 (10.9%) clinical students believed PWMI should be kept away from the community ($X^2 = 24.90$, $DF=4$, $p<0.01^*$). The study has found varying beliefs of the subjects about treatment and rehabilitation of PWMI, most of which are favorable. However, there is still need to emphasize on anti-stigma education on the subjects over their perceived negative beliefs about psychiatry.

Key words: Beliefs, treatment and rehabilitation, mental illness, medical students, Nigeria.

INTRODUCTION

Treatment and rehabilitation in psychiatric practice have witnessed a lot of advances in the past few decades. The discovery of antipsychotic drugs including the more recent second generation types, electro-convulsive therapy (ECT) and effective rehabilitation techniques among other things have led to movement away from institutional care towards greater involvement in the community (Amering et al., 2005; Macpherson et al., 2005; Ahanotu and Onyeizugbo, 2007). This heightened interest in deinstitutionalized system of care for persons

with mental illness (PWMI) necessitated increased need for their social and occupational rehabilitation (National Advisory Mental Health Council, 1993; Lyons and McLoughlin, 2002; Glozier et al., 2006). As an important aspect of mental health care, rehabilitation is to enable treated patients recover their previous social and occupational skills and to help the disabled and handicapped to achieve maximum good health, occupational and social integration and quality of life (Hafner, 1996).

In Nigeria, orthodox mental health practice is characterized by paucity of facilities and mental health professionals, with concentration of care in the relatively few available psychiatric hospitals and psychiatric units of

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some general and teaching hospitals (Odejide and Ohaeri, 1997; Aina et al., 2007). However, increasing awareness among the general public leading to increased patronization of the few psychiatric facilities has led to overstretching the available services most especially in patient facilities (Osibogun, 2004; Boroffka, 1995 -1996). This has led to recent calls in the country for de-emphasis on institutionalization in favor of de-institutionalization as practiced in the Western countries (Gureje et al., 1995; Ladapo et al., 2008). However, an identified potential problem of deinstitutionalized care in Nigeria is the general negative attitudes of the public towards PWMI (Kabir et al., 2004; Gureje et al., 2005). Across various cultures of the world, PWMI have been found to suffer from varying degrees of insidious discrimination which leads to strained social interactions, compromised quality of life, low self esteem, unemployment and loss of income (Link BG and Phelan, 2006). For example, from Canada, studies have shown that elderly people aged 60 years and above tend to keep social distance from patients with schizophrenia when compared with their younger counterparts (Stuart and Arboleda-Florez, 2001). Also in the United Kingdom, varying levels of stigmatizing attitudes were found to be expressed to different types of mental illness; high stigma to persons with substance dependent problem but relatively more positive attitudes to those with depression (Link BG and Phelan, 2006)

Compared to these UK findings, Fernando et al (2009), in a recent study found Sri Lankan doctors and medical students to express higher levels of stigma towards subjects with depression and those with substance dependence problems; but less stigmatized attitude towards schizophrenia (Fernando et al., 2009). Furthermore, the Sri Lankan medical students showed more negative attitudes than the doctors (Fernando et al., 2009). On treatment for PWMI, many studies have also shown that lay respondents as well as health workers believe in the effectiveness of orthodox treatment (Jorm et al., 199; Lauber et al., 2005), even in developing countries (Kirmayer, 1989; Makanjuola, 2006). However, despite the belief in the effectiveness of orthodox treatment for mental illness, it is generally found that health workers / professionals maintain negative attitudes towards PWMI (Fleming and Szmukler 1992; Glozier et al., 2006). Thus, it has been suggested for interventions aimed at modifying negative attitudes towards PWMI to be put in place; and one of the suggestions was for medical students to have contact with recovering patients in community psychiatric settings (Fernando et al., 2009).

Again, the dearth of available practicing psychiatrists in the country which necessitates the involvement of non-psychiatric clinicians in the care of their patients with comorbid psychiatric disorders (Mbakwem and Aina, 2008) and the suggestion that medical education is a major component of attitude change against mental health care (Singh et al., 1998) prompted this study.

METHODS

A descriptive and cross sectional study carried out in the College of Medicine, University of Lagos (CMUL). (The college shares the same compound with Lagos University Teaching Hospital (LUTH) in Idi-Araba, Surulere, Lagos. It is the second medical college to be established in Nigeria and took off as a medical school in 1962 but transformed into CMUL via a decree in 1967. The college provides training for medical, dental, physiotherapy and radiography students among others (Ogunnowo et al., 2004; Historical Background in Prospectus 2006-2008).

The study was carried out on medical students that gave verbal consent using a multi-stage sampling method to select the subjects for study. The first stage was to stratify them to pre-clinical (100 - 300 levels) and clinical students (400 -600 levels) groups. The clinical students were those who have had four weeks clinical rotation through psychiatry (usually in year one or two clinical). In each level of study, systematic random sampling was used to select the subjects for inclusion. Age and sex-matched students of dentistry acted as controls. Unlike their medical students' counterparts (subjects), the dental students (controls) do not undergo rotation through psychiatric posting in the course of their training.

A questionnaire made up of two parts was administered: section one to elicit necessary socio-demographic data of the subjects and the second section to elicit their attitudes to PWMI with emphasis on their beliefs as regards treatment and rehabilitation of PWMI. This main section (2) of the instrument is a 25 item questionnaire adapted from that of cross-cultural study of attitude to mental disorders among university students in USA, Pakistan and Philippines by Sechrest et al (1973). Confidentiality and anonymity were guaranteed on the information obtained from the subjects. Data obtained was entered and analyzed using version 16 of Statistical Package for Social Sciences (SPSS-16). Where necessary, percentages and mean were obtained and cross tabulations done. For the categorical variables, differences were obtained using chi-squared statistics with significant level set at $p \leq 0.05$.

RESULTS

Socio-demography

A total of one hundred and eighty seven (187) persons made up of 130 medical students (subjects) and 57 controls (dental students) were studied. The mean age was 23.2 ± 3.0 years and made up of 137 (73.3%) males and 50 (26.7%) females and this is a reflection of the usual gender distribution of medical students in Nigeria. There were 104 (55.6%) pre-clinical (100 - 300 level) and 83 clinical (400 - 600 level) students.

General knowledge about Mental Illness

Nearly equal proportion of subjects (73.6%, $n = 130$) and controls (73.7%, $n = 57$) believed mental illnesses are common in the country and consequently 96.6% of subjects would want psychiatry to be strongly entrenched in the curriculum of medical undergraduate training. Ninety seven (74.6%) of the subjects and 35 (61.4%) of controls claimed psychiatric illness seen in the country are

mainly psychotic disorders. However, in term of levels of study, 66.3% (n=104) of the pre-clinical students agreed with the concept of psychiatric illness as mainly psychoses as against nearly 75% (n=83) of clinical students but the differences were not statistically significant.

One hundred and six (81.5%) of the subjects believed a normal person can suddenly become mentally ill and no one is immune from developing the illness as against 38 (66.7%) of controls. In the same vein, 76 (73.1%) of pre-clinical and 68 (81.9%) of clinical students held this view. The differences were not significant. Sixty four (49.2%) of the subjects as against 26 (45.6%) of controls believed only very few of PWMI would do anything to harm others. Similarly, 46 (44.2%) of pre-clinical and 44 (53.0%) of clinical students respectively held this belief. The differences were not significant. Only fourteen (10.8%) of subjects and four (7.0%) of controls believed psychiatric illness was due to punishment for sins committed in the past. While 8 (7.7%) pre-clinical and 10 (12.0%) of clinical students respectively held this belief; and the differences were non-significant.

Thirty nine (30%) of subjects and 10 (17.5%) of controls believed "evil spirits" have nothing to do with mental illness, while 25 (24.0%) of preclinical and 24 (28.9%) of clinical students held this belief. The differences were not significant.

Beliefs about treatment and rehabilitation of PWMI

One hundred and seventeen (90%) of the subjects and 46 (80.7%) of controls believed PWMI can be effectively treated to become normal again. Ninety two (88.5%) of pre-clinical and 71 (85.5%) of clinical students believed this. The differences were not significant. One hundred and twelve (86.2%) of subjects and 47 (82.5%) of controls believed orthodox care is the best form of treatment for mental illness. Similarly, 87 (83.7%) of pre-clinical and 72 (86.7%) of clinical students agreed with this. The differences were not significant. Furthermore, more of controls compared with very few subjects (medical students) believed PWMI taken to psychiatric hospitals would end up been institutionalized; the difference was significant ($X^2=11.73$, $DF=4$, $p=0.04^*$). In the same vein, 42 (32.3%) of subjects and 6 (10.5%) of controls believed PWMI are best treated in their home environment than been institutionalized with significant difference ($X^2=11.6$, $DF=4$, $p=0.03^*$).

Similarly, 14 (11.5%) pre-clinical and 34 (41.0%) of clinical students believed in home care respectively also with significant difference ($X^2=22.74$, $DF=4$, $p<0.01^*$). Forty eight (36.9%) of the subjects and 24 (42.1%) of control believed PWMI would require being tied and locked up in special rooms sometimes in their lives to respond to treatment, the difference was not significant. However, 47 (45.2%) of pre clinical and 25 (30.1%)

clinical students respectively believed in this with significant difference ($X^2=11.64$, $DF=4$ and $p=0.02^*$).

In terms of rehabilitation, 8 (6.2%) of subjects and 3 (5.3%) of controls believed recovered PWMI should not be allowed to marry and the difference was significant ($X^2=9.28$, $DF=4$ and $p=0.05^*$). Ten (9.6%) pre-clinical and 1(1.2%) clinical students respectively held this believe but the difference was not significant. Ninety eight (75.4%) of subjects and 40 (70.2%) of controls believed recovered PWMI should have equal chances of securing jobs as those who have never been mentally ill. Seventy nine (76.0%) of pre-clinical and 59 (71.1%) of clinical students believed this. The differences were however not significant.

Sixty one (46.9%) of subjects and 31 (54.4%) of controls believed PWMI should be kept away from the community so as not to harm others but the differences was not significant. Sixty eighth (65.4%) of pre-clinical and 24 (10.9%) clinical students held this belief and the difference was statically significant ($X^2=24.90$, $DF=4$, $p=0.00^*$).

DISCUSSION

The non-psychiatric clinicians are becoming more involved in the care of PWMI due to large numbers of patients in general hospitals setting who have serious co-morbid psychiatric disorders (Reiser et al., 1982-1986; Keane, 1990). Yet studies have shown that doctors have negative opinions about PWMI and find it difficult to talk to them (Mukherjee et al., 2002). One of the major areas of concern is their doubt about the response to treatment and rehabilitation of PWMI (Reiser et al., 1982-1986). In Nigeria where there is a dearth of mental health clinicians, a study of this nature for the future medical doctors that would be involved in care of PWMI at one time or the other in the course of their professional career is imperative. In our study, large percentages of our subjects and even the controls have good general knowledge of mental illness. Perhaps their exposure to medical education could have largely contributed to this finding. As seen from the Table 1, the subjects' belief that the major types of MI seen in Nigeria are psychotic cases was probably borne out of the fact that psychotic disorders are the commonest MI presenting for treatment in tertiary health institutions of their medical training (Aina et al., 2007; Gureje et al., 1995).

In Africa, studies have shown that majority of Africans irrespective of their educational attainment still hold to spiritual causation of mental illness and even some physical illnesses that defy simple methods of treatment (Gureje et al., 2005; Odejide et al., 1989). However, contrary to this belief, the majority of medical students and even the controls in our study seemed not to share the view of spiritual causes of MI such as punishments for sins committed and evil spirits. This could probably be

Table 1. Beliefs about mi and treatment/rehabilitation of PWMI.

| | | Subjects n = 130 (%) | Controls n = 51 (%) | Significance | | | Pre-clinical students n = 104 (%) | Clinical students n = 83 (%) | Significance | | |
|---|-----|-------------------------|------------------------|----------------|----|------|--------------------------------------|---------------------------------|----------------|----|-------|
| | | | | X ² | df | p | | | X ² | df | p |
| General knowledge of MI | | | | | | | | | | | |
| *MI is common in Nigeria | Yes | 97 (74.6) | 42(73.7) | 1.36 | 4 | 0.71 | 72(69.2) | 67(80.7) | 6 | 4 | 0.20 |
| | No | 33(25.4) | 15(26.3) | | | | 32(30.8) | 16(19.3) | | | |
| *Main MI seen in Nigeria are psychotic disorders | Yes | 97(74.6) | 35(61.4) | 3.83 | 4 | 0.43 | 69(66.3) | 62(74.7) | 7.72 | 4 | 0.10 |
| | No | 33(25.4) | 22(38.6) | | | | 35(33.7) | 21(25.3) | | | |
| *No one is immuned from having MI | Yes | 106(81.5) | 38(66.7) | 2.06 | 4 | 0.72 | 76(73.1) | 68(81.9) | 8.81 | 4 | 0.01* |
| | No | 24(18.5) | 19(33.3) | | | | 28(26.9) | 15(18.1) | | | |
| *Only few of PWMI would harm others | Yes | 64(49.2) | 26(45.6) | 3.85 | 4 | 0.43 | 46(44.2) | 44(53.0) | 2.57 | 4 | 0.63 |
| | No | 66(50.8) | 31(54.4) | | | | 58(55.8) | 39(47.0) | | | |
| *MI is due to punishment for sins committed | Yes | 14(10.8) | 4(7.0) | 1.93 | 4 | 0.74 | 8(7.7) | 10(12) | 2.10 | 4 | 0.72 |
| | No | 116(89.2) | 53(93.0) | | | | 96(92.3) | 73(88.0) | | | |
| *Evil spirits have nothing to do with MI | Yes | 39(30.0) | 10(17.5) | 3.46 | 4 | 0.48 | 25(24.0) | 24(28.9) | 0.94 | 4 | 0.92 |
| | No | 91(70.0) | 47(82.5) | | | | 79(76.0) | 59(71.1) | | | |
| Treatment of PWMI | | | | | | | | | | | |
| *PWMI can be treated to become normal again | Yes | 117(90.0) | 46(80.7) | 4.98 | 4 | 0.29 | 92(88.5) | 71(85.5) | 2.64 | 4 | 0.62 |
| | No | 13(10.0) | 11(19.3) | | | | 12(11.5) | 12(14.5) | | | |
| *Orthodox care is the best treatment of MI | Yes | 112(86.2) | 47(82.5) | 1.78 | 4 | 0.78 | 87(83.7) | 72(85.5) | 1.34 | 4 | 0.86 |
| | No | 18(13.8) | 10(17.5) | | | | 17(16.3) | 11(14.5) | | | |
| *PWMI taken to Psychiatric Hospitals eventually get institutionalized | Yes | 10(7.7) | 4(7.0) | 11.73 | 4 | .04* | 8(7.7) | 6(7.2) | 11.80 | 4 | 0.38 |
| | No | 120(92.3) | 53(93.0) | | | | 96(92.3) | 77(92.8) | | | |
| *PWMI is best treated at home | Yes | 42(32.3) | 6(10.5) | 11.16 | 4 | .03* | 14(13.5) | 34(41.0) | 22.74 | 4 | .00* |
| | No | 88(67.7) | 51(89.5) | | | | 90(86.5) | 49(59.0) | | | |
| *PWMI requires to be tied and locked up | Yes | 48(36.9) | 24(42.1) | 6.65 | 4 | 0.16 | 47(45.2) | 25(30.1) | 11.6 | 4 | 0.02* |
| | No | 82(63.1) | 33(57.9) | | | | 57(54.8) | 58(69.9) | | | |
| Rehabilitation of PWMI | | | | | | | | | | | |
| *Recovered PWMI can not marry | Yes | 8(6.2) | 3(5.3) | 9.28 | 4 | .05* | 10(9.6) | 1(1.2) | 8.31 | 4 | 0.08 |
| | No | 122(93.8) | 54(94.7) | | | | 94(90.4) | 82(98.8) | | | |
| *Recovered PWMI should be employable as those without MI | Yes | 98(75.4) | 40(70.2) | 2.80 | 4 | 0.67 | 79(76.0) | 59(71.1) | 0.79 | 4 | 0.94 |
| | No | 32(24.6) | 17(29.8) | | | | 25(24.0) | 24(28.9) | | | |
| *PWMI should be kept away so as not to harm others | Yes | 61(46.9) | 31(54.4) | 3.55 | 4 | 0.47 | 68(65.4) | 24(28.9) | 24.9 | 4 | 0.00* |
| | No | 69(53.1) | 26(45.6) | | | | 36(34.6) | 59(71.1) | | | |

due to the suggestions that medical education is seen as the major component of attitude change against mental illness (Singh et al., 1998; Olley et al., 2007). In term of treatment, very large percentages of our subjects and controls, cutting across both pre-clinical and clinical levels of training believed PWMI can be treated to become normal again and orthodox psychiatric care being the best form of treatment. Our findings are similar to those from studies on medical students and doctors in Britain (Mukherjee et al., 2002) and Pakistan (Naeem et al., 2006). But contrary to findings in USA (Reitel et al., 1999), Australia (Malhi et al., 2002) and back home (Nigeria) (Olotu and Osahon, 2001) where medical students that were previously studied perceived psychiatric treatment as some less effective and PWMI hardly get better.

In line with de-institutionalization concept, some of our subjects (32.3%) and controls (10.5%) believed PWMI are best treated in their home environment and PWMI taken to psychiatric facilities for treatment would not necessarily be institutionalized. These findings are relevant to psychiatric practice in Nigeria because the high percentages of subjects and controls who do not share this belief of home care for the mentally ill in a way tactfully approved institutional care which obviously could overstretch the few psychiatric facilities and professionals available in the country. Rehabilitation is a major issue in psychiatric practice with the principal aims of social re-integration, gainful employment and improved quality of life (Lehman, 1983; Browne, 1999; Naber et al., 2002).

In our study, majority of subjects and controls cutting across pre-clinical and clinical levels of training favored PWMI to have equal chance of employment with those that have never suffered from mental illness. On the other hand, majority of subjects and controls would want PWMI to remain unmarried and prefer them (PWMI) to be kept away from the community for institutional care so as not to harm others. Thus, taking into cognizance these beliefs, majority of our subjects and controls seem not to support effective psycho-social rehabilitation plan for PWMI. This has implication on psychiatric aspect of medical education in the country. Thus, there is need to lay more emphasis on psychiatric rehabilitation and anti-stigma contents of psychiatric teachings in the medical curriculum.

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