# Factors associated with stigmatization of mental illness among health care providers of a tertiary healthcare centre

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## Abstract

**Background**: Stigma has been identified as a complex and problematic issue. It acts as a major barrier to accessing care and can exacerbate the experience of a health condition, particularly for clients with mental illness. Research on the attitudes of health care providers towards people with mental illness has repeatedly shown that they may be stigmatizing. The aim of the study is to identify factors associated with stigmatization of mental illness among Healthcare providers and to determine the nature of stigma present in different professional group.

**Method:** The investigation was a descriptive and cross-sectional study on a stratified and randomly selected sample population of 308 Health workers at the Jos University Teaching Hospital. Questionnaires were used to elicit responses from the respondents, using the Community Attitudes towards the Mentally Ill (CAMI) scale,

**Results:** The present study revealed that male gender, age group (55-64years), professional group (especially laboratory Scientists) and years of clinical experience (especially year 10 and above) were significantly associated with stigmatizing attitude towards mental illness among health care providers at the Jos University Teaching Hospital.

**Conclusion:** Demographic variables such as gender, age, professional group and years of clinical experience can contribute to variations in attitudes towards people with mental illness among health care providers.

**Keywords:** mental illness, stigma, healthcare providers, factors

## Introduction

The stigma of mental illness presents an important challenge to health care providers. Research has shown that those who experience stigma as a result of a mental illness or substance use problems are less likely to access health care for these conditions and are less likely to engage fully with treatment programs [1, 2]. Stigma impedes care at different levels. Stigma held by a health care professional towards patients with a mental illness may negatively affect the service that the health care professional provides.

Corrigan *et al* [1]. reminds us that stigma can have significant negative repercussions on not only those people with the mental health problem, but also their family members and friends, and mental health provider groups. Because of these concerns, the World Health Organisation (WHO) in 1996 launched a major worldwide campaign to attack the stigma attached to mental illness. They highlighted how stigma, if not combated, can create "a vicious cycle of alienation and discrimination which can lead to social isolation, inability to work, alcohol or drug abuse, homelessness, or excessive institutionalisation, all of which decrease the chance of recovery"*.

Some health practitioners may blame the patient for their disease, and therefore treat them with less respect or less compassion than their other patients. Patients suffering from paranoia or other forms of psychosis that stem from prolonged addiction to drugs may be difficult to sympathize with because of a perception that they are the cause of their own disease. However, there are other self-inflicted illnesses that do not receive the same type of negative treatment as mental illness. For instance, many health care providers are

frustrated by their obese patients who often come to the hospital for their co morbidities. Many of these patients are responsible for their illnesses because of their weight, but the practitioner's treatment toward them is still professional. But there appears to be a different attitude toward these patients and those suffering psychologically. This attitude creates distance between the patient and the provider, which can hinder the patient's healing

Another potential cause of negative perceptions toward psychiatric patients may come from frustration. Health care providers see many types of patients, and those diagnosed with a wide range of mental illnesses tend to require more attention, time and care. In addition to psychological pain, a good number of psychiatric patients suffer from somatic pain that is difficult to treat, but they will continue to complain because they hurt. They can also require more time, for example requesting numerous explanations of different topics, or needing to talk about certain issues beyond the specialty of the treating health care provider, and so on. This is understandably frustrating for physicians who often struggle with time demands in their daily practice. The provider's successful retaining a relationship between him-self and the patient takes extra time to listen to the patient's complaints. The provider that does not have this time and simply treats the patient for their illness is less successful in keeping patient trust, compliance, and satisfaction

Authors have hypothesized about factors that contribute to stigmatizing attitudes among health professionals. Negative attitudes on the part of health professionals have been found to be associated with feelings of helplessness and futility among these professionals [3]. In addition, stigmatizing

attitudes are associated with feelings of resistance from professionals towards providing services and treatment to clients and lack of specialized training [3, 4].

Research on psychological correlates of stigmatization of mental illness has shown that an important and surprising predictor of stigma is greater belief in biological or genetic bases of mental illness[5]. Phelan[6] theorized that genetic causes of mental illness are perceived as permanent, which raises discomfort because of the implication that complete recovery is impossible. Conversely, then, optimism about the effectiveness of treatment might be expected to reduce stigma

In the literature, it has been shown that attitudes towards people with mental illness can be measured using stereotypes such as: 'people with mental illness are dangerous,' and 'people with mental illness do not recover' [7, 8] as well as a desire for social distance because of the aforementioned stereotypes[9]. Stigmatizing attitudes can also be measured in the form of emotional reactions towards people with mental illness. Finally, disclosing that one has a mental illness, because of the dimensions described above, can lead to self- stigma and may also be an indicator of mental illness related stigma [8, 10].

**Materials and Method**
This is a cross sectional study on a stratified and randomly selected sample population of health workers conducted at the Jos University Teaching Hospital. The study population comprise of all health care providers at the Jos University Teaching Hospital. We excluded administrators, health record officers, security personnel, dieticians, ward attendants because they are often not involve or minimally involved in patients management, and health staff who do not give consent.

Having a population of 1175 with a 95% confidence level and±5% precision, it was determined that a sample of 328 participants will be adequate, calculated using appropriate formular for proportions. Following approval from the ethical committee of JUTH and permission to carry out the study, health care providers were approached and the details and objectives of the study was explained to them. The confidentiality of information given as well as the purpose of the study, which is strictly for research purposes, was stressed. Informed consent was obtained from the staff. The researchers administered the questionnaire to the consented staff within a period of one month i.e in April 2014.

We obtained two sets of data. The first set comprised demographic variables, and the second set was, responses derived from the CAMI scale [11], a self-report inventory for measuring public attitudes towards the mentally ill. The CAMI includes four subscales (authoritarianism (AUTH), benevolence (BNVL), social restrictiveness (SRST) and community mental health ideology (CMHI)). The subjects were asked to rate each statement on a 5-point scale (strongly agree, agree, neither, strongly disagree, disagree).

**Data Analysis**
Data was analysed by the use of Statistical Package of Social Sciences (SPSS) version 19.0 (SPSS 19) for Microsoft Windows Software Package. The result was presented with frequency tables, means, standard deviation and descriptive analysis. SPSS was used to analysed, simple frequency distribution tables. Tests of association between some of the responses and some of the respondents' socio

demographic features such as type of profession, gender, and sex was determined with the χ2 test. Descriptive statistics such as means and standard deviations was used to summarize continuous variables while categorical variables was summarized with percentages. The student t test was used to compare continuous variables. Coefficient alphas were computed to obtain internal consistency estimates of reliability for the CAMI subscales. The level of significance was set at $p<0.05$.

**Results**
Out of the 328 questionnaires administered 308 were properly completed and returned therefore, the statistical analysis was based on 308 respondents. The respondents comprised 111 (36.0%) Doctors, 158 (51.3%) Nurses, 10 (3.2%) pharmacists, 21 (6.8%) laboratory scientists/technicians, 4 (1.3%) medical social workers, 3 (1.0%) physiotherapists and 1(0.3%) clinical psychologist.

Among these, 150(49.0%) were males and 156 (51.0%) were females. One hundred and eighty seven (61.1%) were married and 109 (35.6%) were singles. One (0.3%) of the respondents was separated and 1 (0.3%) was divorced while 8 (2.6%) were widowed. Their mean age was 37.8 (standard deviation (SD) 9.5) years (range 18-64 years). Demographically, the respondents truly represent the study.

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**Table 1:** This was determined by comparing of mean scores of the CAMI subscales as a function of the variables, in which among the professional group, the four CAMI subscales (AU, BE, SR and CAMHI) show statistically significant mean differences among the different professional groups, (P< 0.001) as shown in table 2. The analysis showed that Medical social workers and laboratory scientists had a significantly higher Authoritarianian score, followed by Nurses, Physiotherapists, Pharmacists, and lastly the Doctors who had the least score. Doctors had significantly higher benevolence score, followed by laboratory scientists, Medical social workers, Nurses, Pharmacists and Physiotherapists respectively. Pharmacists and laboratory scientists had significantly higher score on social restrictiveness scale, followed by Nurses and physiotherapists and lastly by Doctors and medical social workers who had the least score. Laboratory scientists had a higher score for community mental health ideology, followed by Doctors, Pharmacists and Medical social workers who had the same mean score, Nurses and Physiotherapists respectively.

**Table 2:** Three CAMI subscales, AU, BE and SR showed statistically significant mean difference among the age groups as shown in table 3. The analysis showed that age group 55-64 had a significantly higher authoritarian score, followed by age 18-24, 25-34, 35-44 and lastly age 45-54 years. Age 55-64 had a significantly higher Benevolence score followed by age 35-44, 25-34, 18-24 and lastly age 45-54 years. Age 55-64 also had a significantly higher score on Social restrictiveness scale, followed by age 18-24, 25-34, 35-44 and 45-54 years. Therefore age 55-64 stigmatized more, followed by age 18-24, 25-34, 35-44 and lastly age 45-54 years.

**Table 3:** CAMI subscales BE and CMHI shows statistical significant mean difference in years of clinical experience as shown in table 4.The analysis showed that those who had their clinical experience between 4-6 years and 7-9 years had a higher benevolence score, followed by 1-3 years, ≥ 10

years, < 1 year and 4-6 years of clinical experience. Those that had 1-3 years of clinical experience had a higher score on CMHI, followed by 7-9 years, ≥ 10 years, <1 year and 4-6 years of clinical experience.

**Table 4:** Showed Comparison of mean scores of the CAMI subscales as a function of Gender, Marital status and Religion. Three CAMI subscales: AU, BE and CMHI showed statistically significant mean difference among the sex group. The analysis showed that male sex had significantly higher Au and BE score than the female sex, while female sex had higher score in CMHI.BE subscale of CAMI showed statistically significant mean difference in marital status, where the married had significantly higher benevolence score than singles. BE subscale of CAMI also show statistical significant mean difference among religious beliefs, where Islamic religion had significantly higher benevolence score than Christian religion.

**Table 1:** Comparison of mean scores of the CAMI subscales as a function of professionals

| Professionals | AU Mean±SD | BE Mean±SD | SR Mean±SD | CMHI Mean±SD | Overall stigma |
|---|---|---|---|---|---|
| Doctors | 2.5±0.2 | 4.3±0.3 | 2.1±0.3 | 3.6±0.2 | 3.1±0.1 |
| Nurses | 2.9±0.1 | 3.8±0.2 | 2.3±0.2 | 3.3±0.2 | 3.1±0.1 |
| Pharmacists | 2.6±0.2 | 3.7±0.4 | 2.5±0.2 | 3.6±0.2 | 3.1±0.1 |
| Lab. Scientists | 3.0±0.1 | 4.0±0.2 | 2.5±0.2 | 3.7±0.2 | 3.3±0.1 |
| Physiotherapist | 2.7±0.1 | 3.4±0.2 | 2.3±0.4 | 3.2±0.1 | 2.9±0.2 |
| Med. social workers | 3.0±0.3 | 3.9±0.4 | 2.1±0.3 | 3.6±0.2 | 3.1±0.1 |
| F-test | 107.658 | 49.367 | 14.036 | 40.812 | 49.026 |
| P value | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |

**Table 2:** Comparison of mean scores of the CAMI subscales as a function of Age

| Age (Years) | AU Mean±SD | BE Mean±SD | SR Mean±SD | CMHI Mean±SD | Overall Stigma |
|---|---|---|---|---|---|
| 18-24 | 3.07±0.18 | 2.75±0.13 | 2.94±0.14 | 3.05±0.17 | 2.95±0.07 |
| 25-34 | 3.00±0.43 | 2.91±0.30 | 2.93±0.34 | 3.15±0.41 | 3.00±0.18 |
| 35-44 | 2.94±0.44 | 2.96±0.32 | 2.86±0.47 | 3.15±0.30 | 2.98±0.25 |
| 45-54 | 2.84±0.18 | 2.74±0.45 | 2.69±0.43 | 3.22±0.26 | 2.87±0.18 |
| 55-64 | 3.80±0.00 | 3.40±0.00 | 3.60±0.00 | 3.50±0.00 | 3.58±0.000 |
| F | 4.288 | 5.236 | 4.441 | 1.283 | 8.020 |
| P | <0.001 | <0.001 | <0.001 | 0.277 | <0.001 |

**Table 3:** Comparison of mean scores of the CAMI subscales as a function of years of experience

| Years-of experience | AU Mean±SD | BE Mean±SD | SR Mean±SD | CMHI Mean±SD | Overall Stigma |
|---|---|---|---|---|---|
| <1 | 2.98±0.43 | 2.79±0.37 | 2.94±0.40 | 3.13±0.30 | 2.96±0.22 |
| 1-3 | 2.94±0.67 | 2.97±0.21 | 2.81±0.37 | 3.33±0.60 | 3.01±0.16 |
| 4-6 | 3.05±0.25 | 2.98±0.30 | 2.88±0.36 | 3.02±0.35 | 2.98±0.19 |
| 7-9 | 2.88±0.50 | 2.98±0.27 | 2.79±0.52 | 3.20±0.33 | 2.96±0.28 |
| ≥10 | 2.90±0.37 | 2.90±0.37 | 2.95±0.36 | 3.18±0.25 | 3.01±0.20 |
| F | 1.525 | 3.998 | 1.882 | 4.794 | 0.669 |
| P | 0.195 | 0.004 | 0.114 | <0.001 | 0.614 |

**Table 4:** Comparison of mean scores of the CAMI subscales as a function of Gender, Marital status and Religion

| Variables | | AU Mean ± SD | BE Mean±SD | SR Mean ± SD | CMHI Mean ± SD | Overall |
|---|---|---|---|---|---|---|
| Gender | Male | 3.02±0.42 | 2.98±0.31 | 2.88±0.44 | 3.11±0.34 | 3.00±0.23 |
| | Female | 2.87±0.41 | 2.79±0.34 | 2.88±0.35 | 3.26±0.35 | 2.95±0.19 |
| | t | 3.069 | 4.864 | 0.038 | -3.440 | 1.949 |
| | p | <0.001 | <0.001 | 0.970 | <0.001 | 0.052 |
| Marital | Single | 2.99±0.38 | 2.84±0.28 | 2.91±0.32 | 3.15±0.35 | 2.97±0.18 |
| | Married | 2.96±0.46 | 2.99±0.36 | 2.86±0.48 | 3.16±0.34 | 2.99±0.25 |
| Status | t | 0.636 | -3.873 | 1.218 | -0.141 | -6.23 |
| | p | 0.525 | <0.001 | 0.224 | 0.888 | 0.534 |
| Religion | Christian | 2.97±0.43 | 2.90±0.33 | 2.89±0.42 | 3.16±0.35 | 2.98±0.23 |
| | Islam | 3.00±0.28 | 3.26±0.17 | 2.82±0.08 | 3.12±0.09 | 3.05±0.09 |
| | T | 0.249 | 3.926 | 0.538 | 0.441 | 1.133 |
| | P | 0.803 | <0.001 | 0.591 | 0.659 | 0.258 |

## Discussion

Factors associated with stigmatization of mental illness among health care providers in this study were identified to include gender (especially male), age groups(especially age group 55-64), professional group (especially laboratory Scientists) and years of clinical experience (especially 10 years and above).

This finding supports studies done by Esa *et al* [12] where in their study potential predictors of stigmatization of mental illness included demographic variables (age, gender, and education), even though their study was in a general population. Notwithstanding, it contrasts with study done by Adewuya *et al* [13] among doctors where high social distance was found amongst 64.1% and the associated factors were: not having a family member/friend with mental illness, age less than 45 years, less than 10 years of clinical experience and female sex. This could be due to the fact that their study was done among doctors only while this study included other health care providers. This finding also contrasts with the study done by Dominic *et al* [14] where there were no significant differences when the CAMI mean subscale scores were compared with respect to age, gender, marital status or occupational groups in their sample. This may be due to smaller sample size (208) compared to the one used in this study (308), and also the socio cultural environment where the study was conducted

The nature of stigma present in different professional groups was also determined, in which Laboratory Scientists/ technicians were observed to stigmatise more than other professional groups on CAMI scale, followed by nurses, medical social workers, physiotherapists, pharmacists, and lastly Doctors. The reason why Doctors are seen to stigmatise mental illness less than other professions in this

study could be due to the nature of their curriculum, acquisition of greater knowledge, many years of training than other professional groups. Likewise the Pharmacists who spend more years in their training than the other remaining professions also stigmatise less. On the other hand Laboratory Scientists and Nurses were observed to stigmatise mental illness more than other professional groups, this could also be due to the nature of their curriculum, few years of training even though the nurses have more contacts with the mentally ill more than other groups. This study is in agreement with previous studies, including one by Singh et al [15], which showed that good educational methods could decrease stigma. But it contrast with the study conducted by Anthony et al [16] in which their result showed that the public rated positive outcomes as more likely and negative outcomes as less likely than did the general practitioners and the psychiatrists. The clinical psychologists also rated positive outcomes as more likely and negative outcomes as less likely than did the general practitioners, and they rated negative outcomes as less likely than did the psychiatrists.

Why the male gender stigmatised mental illness more than females in this study may be connected with the issue of empathy. The male gender may express less empathetic attitude towards the mentally ill compared to the female gender, or it could be due to the socio-cultural environment where the study was conducted. This is in agreement with studies conducted by Chambers et al [17] and Preti et al [18] but contrast with studies conducted by Jang et al [19] which showed that men and women did not differ in expressing prejudice towards mental illness, yet without controlling for prejudice, social distance increase in females compared to males.

Age group 55-64 showed more stigmatizing attitude towards the mentally ill than other younger age groups in this study. This may be due to cultural misconceptions, in which the older adults may believe that mental illness is a sign of personal weakness or as a result of drug addiction. This is in agreement with studies conducted by Yuri et al [20] and Jang et al [19] where the older age group stigmatized mental illness than the younger age group.

Those with clinical experience of 10 years and above showed more stigmatizing attitude than those with less than 10 years of experience in this study. This may be due to the fact that professional attitudes may be biased by greater contact with patients who have chronic or recurrent disorders or may be fuelled by notions of causation that suggest that affected people are in some way responsible for their illness.

This is in agreement with studies conducted by Sivakumar et al [21] which showed that favourable attitudes do not persist 1 year after work commences.

Notwithstanding it contrast with study conducted by Adewuya et al [13]. Among Doctors where those with less than 10 years of clinical experience stigmatise mentally ill patient than those with clinical experience of more than 10 years.

## Conclusion
The present study revealed that gender, age, professional group and years of clinical experience were significantly associated with stigmatizing attitudes towards people with mental illness among health care providers at a Tertiary Healthcare centre.

## Key points
The study revealed factors associated with mental illness stigma among health care workers. The study revealed among others, that more years of clinical experience is associated with mental illness stigma among health care workers than less years of experience. Knowing these factors will aid in planning of effective and well targeted initiative to change the attitudes and behaviours of health care providers towards people with mental illness

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