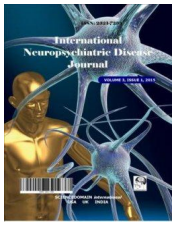

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Suffering from the Disease and Be Offended of: Stigmatization of Individuals with Mental Illnesses in Cameroon

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Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

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ABSTRACT

Background: Mental illnesses and types of disorders are reported across cultures, and their burden continues to grow with significant impacts on health and major social, human rights and economic consequences in all countries. There is growing evidence that mental health literacy has improved worldwide in recent years. The question arises as to whether this trend is paralleled by an improvement of attitudes towards people with mental problems.
Objectives: This paper aims at providing an overview on stigmatization towards people with mental illnesses, by examining the way in which mental illnesses are portrayed in Cameroon.
Methods: A trend analysis was carried out using data from a cross-sectional population survey conducted in urban settings of Cameroon in 2014 and 2015. By means of fully structured questionnaires, the questions assessed the presence and intensity of stigmatizing attitudes towards individuals with mental illnesses. Data was analyzed using descriptive statistics.
Results: Empirical findings and qualitative evidence indicate that stigma against mental illnesses remains rampant in Cameroon, constituting a significant barrier to successful treatment, reducing key life opportunities, and predicting poor outcomes over and above the effects of mental illness per se. In fact, individuals with mental illnesses receive harsh stigmatization, resulting in decreased life opportunities and a loss of independent functioning over and above the impairments related to

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mental disorders themselves.
Learning Objective: Mental health literacy is the most easily modifiable factor. Potential strategies of stigma reduction include education about mental health, promoting contact between the community and persons with mental illness.

Keywords: Stigmatization; mental illnesses; public opinions; social rejection; urban area; Cameroon.

1. INTRODUCTION

Mental illnesses represent four of the ten leading causes of disability worldwide and it is estimated that they account for 14% of the global burden of disease [1]. Mental illnesses repeatedly constitute a double risk for those affected because of stigmatization by members of the community [2]. In fact, stigmatization of people with mental illnesses continues to be a principal warning to prevention and treatment efforts. Recent reviews of research on stigma documented discrimination against persons with mental illnesses in schools, housing, jobs, and social interactions [3,4]. Furthermore, published empirical studies have revealed that greater concern about stigmatization among persons with mental illnesses was associated with lower self-esteem, discontinuation of medications, and social impairment [5-8]. In one hand, some of those empirical works have most assessed stigma associated with mental illness by surveying the public attitudes towards individuals with mental illness in terms that likely evoke images of chronic psychopathology [9,10]. Therefore, it is unclear whether evidence of stigma is indicative of prejudice toward all mental illness or only its more severe forms. In the other hand and thanks to media coverage, other studies have focused on the stigma associated with specific disorders, namely psychological disorders such as depression, bipolar disorder, and schizophrenia [11]. A review of the limited empirical and theoretical literature indicates that current mass media representations of mental health service users appear to emphasize violence, dangerousness and criminality. This is despite the empirical evidence that indicates a decline over the last 40 years in the number of homicides carried out by people identified as suffering from mental health problems [12]. Such inappropriate representations do much to increase stigma, ostracism, harassment and victimization of these individuals by the public. Roughly speaking, researches have established that the public holds negative beliefs about persons with mental illnesses. Moreover, these negative perceptions have been remarkably constant despite advances in scientific understanding of mental illnesses and extensive efforts to improve public understanding [13,14]. Negative views such as those implying that people with mental illnesses are irresponsible and therefore incapable of making their own decisions are dangerous and are to be feared, are widespread. Studies conducted in Africa have suggested that the experience of stigma by people with mental illness may be common [15,16], but there is no information on how widespread negative attitudes to mental illness may be in the community. As noted, it is unclear whether the lack of empirical data partly explains the speculation that stigmatization of mental illness may be less common among Africans [17,18]. From then on, concerns about stigma are on the political agendas of many mental health advocacy groups. It has also recently become the focus of extensive research from which a major goal is to facilitate means of accurately measuring stigma against mental illness as an important step toward reducing its pernicious effects [19,20]. This study has three goals. First, we explore stigmatizing attitudes towards people with mental illnesses focusing on public-stigma. Second, we examine relationship between familiarity/intimacy and magnitude of stigma. Third, concepts of mental health, mental illnesses and that of stigma are discussed.

2. MATERIALS AND METHODS

2.1 Research Setting

Irrespective of where they live or of their social background, Cameroonians are exposed to mental health. However the problem seems to be more troublesome in cities; what has motivated us to focus on urban settings, such as Yaoundé. Situated between latitudes 3º47'N and 3º56'N and 11º10E' and 11º45'E, Yaoundé is experiencing very rapid urbanization. In 1926, date of the first population census, Yaoundé had 100 000 inhabitants. With an estimated annual growth rate of 4.5 per cent since 1980, urban population has grown from 812,000 inhabitants in 1987 to 1,500, 000 inhabitants in 2000, and to about 2, 100, 000 inhabitants in 2011. However,

this rapid urbanization process has modified the epidemiologic feature of the city. In fact, city dwellers which were formerly and almost exclusively suffering from infectious communicable diseases are currently facing also chronic and non-communicable diseases such as diabetes, hypertensive diseases, cardiovascular diseases, and mental illnesses.

2.2 Data Collection and Management

Data used are drawn from an interdisciplinary research programme designed and implemented by Institute for Training and Research in Demography/Université de Yaoundé II (Cameroon) and under supervision of the Institut Douglas de Santé Mentale/McGill University (Montréal – Canada). It was a descriptive cross-sectional survey conducted from October 2014 to March 2015. A structured questionnaire was used. To measure familiarity, we used the Level of Contact Report which lists twelve situations of varying degrees of intimacy that involve persons who have mental illness; whereas Stig-9 model was used to measure stigma (Perceived mental illness stigma). Stig-9 is a free and open source self-report questionnaire which consists of nine items and one example item [21], and these were rated in relation to each of the disorder types.. On a four point Likert scale, respondents indicate the degree to which they expect negative societal beliefs, feelings, and behaviors towards someone who is mentally-ill or who has been treated for a mental disorder. Response categories are: Disagree (0), somewhat disagree (1), somewhat agree (2), and agree (3). The item responses are summarized in a sum score (range 0-27 points). "High scores on Stig-9 correspond with high expectations of negative societal beliefs, feelings, and behaviors towards 'mentally ill people". In addition, a range of demographic data was included: Sex, age, educational level, professional/managerial occupations, marital status, income, religious belief of the respondent, area of residence. To measure ‘’familiarity with mental health’’, we did not resort to categorical measurement (“Do you know someone with a mental illness?”) which has limited statistical power [22]. Rather, we used the Level of Contact Report developed in 2000 by Corrigan and which lists twelve situations of varying degrees of intimacy that involve persons who have mental illness [23]. Then, drawing on scales used in stigma research, we ranged those situations from the least intimacy (“I have never observed a person that I was aware had a serious mental illness”) to medium intimacy (“I have worked with a person who had a severe mental illness at my place of employment”) to high intimacy (“I have a mental illness”). Participants were asked to check all of the situations on the 12-item list that they had experienced in their lifetime. The index of familiarity was the rank score of the most intimate situation the participant checked.

The sample size was approximately 1 030 adults, selected to be representative of adults in Yaoundé, using a random location sampling methodology. Participant’s verbal consent was obtained before their participation in the study. They received an explanation that the study results would be of benefit to the general practice of mental health. Confidentiality of results was assured. The software used were Epi info 3 (for raw data recording, verification, and validation of the data collected), SPSS software package for windows, version 15.0 (for statistical analysis and tabulation).

3. RESULTS

From the 1 030 persons selected for this study, about 944 did adhere and properly respond to all items of the questionnaire, that is an acceptable coverage rate of 91.6%.

3.1 Stigmatizing Attitudes towards Persons with Mental Illnesses

The study revealed higher levels of stigma towards individuals with mental illnesses. Table 1 shows that attitudes towards intellectual disabilities and developmental disorders including autism are less stigmatized: for example, only 7.54% and 4.2% persons suffering from intellectual disabilities and of development disorders are considered dangerous to the others. Besides, the most stigmatized of the disorders were bipolar affective, addiction to alcohol/drugs/psychoactive substances, chronic schizophrenic/schizoaffective and other psychoses such as delusional disorders, drug-induced psychosis, panic and obsessive-compulsive disorders. The substance use and bipolar disorders were stigmatized more than the other disorders with almost three quarters of the sample reporting that persons with drug and alcohol addiction were a danger to others. 63.1% of the respondents stated that persons with bipolar disorders are not disability persons i.e. unfit of working, and 50.7% said they can not trust them for example by entrusting their child

with someone who has been treated for a mental illness. In the case of schizophrenic troubles, 76.2% of the participants reported that these individuals are not serious persons, 70.8% that they are dangerous to others and 81.0% that they are neither friendly nor nice persons. The same strong negative perception has been reported towards persons with delusional and obsessive-compulsive disorders as 32.4%, 47.3% and 54.8% of the respondents stated that they can never been treated, represent danger to/for the community, and are less serious persons.

3.2 Individual and Socio-demographic Features

The total sample (n=944) consisted of 481(51.0%) females and 463 (49.0%) males, with 817 (86.5%) aged 20-44 years. Most of them (72.1%) have the university level, what is justified by the employment status with nearly the half (49.5%) claiming the status of student. Effects of those personal characteristics on respondents' opinions towards mental disorders are summarized in Table 2. The following lines just highlight some.

With regard to attitude towards mental illnesses, compared with men, women were rather more likely to have overall negative opinions for alcohol/drugs/psychoactive products addiction (24.1% vs. 21.8%), schizophrenia (18.5% vs. 15.1%), other psychoses such as drug-induced psychosis, panic and obsessive-compulsive disorders (16.6% vs. 12.2%) and depression (13.1% vs. 10.8%). However, for intellectual disabilities, development disorders and dementia, the corresponding differences were not significant.

Respondents aged <20 years and 20-29 years were more likely than the rest to have negative overall opinion summary percentages for most of the illnesses; exception of intellectual disabilities, where on the summary percentage, 7.9% of 30-40 and ≥45 year were in the two less negative categories compared with 19% for the combined <20 years and 20-29 years. Also and concerning development disorders, far more of the <20 years and 20-29 years were in the most extreme negative category (14% vs. 6.4%). However, for alcoholism and addiction to drug and psychoactive substances, there was almost a common trend across the age groups with the greatest percentage of negative percentages among the group classes, exception of the ≥45 years (17.3%).

Overall, uneducated respondents were most likely than educated to have negative overall opinions for example for depression (25%), schizophrenia (25%) and drug-induced psychosis/panic/obsessive-compulsive disorders (50%). Among educated respondents, fewer of those who attained the university level had less percentage in the most negative category, compared with those who just attained the secondary level for alcohol/drug addiction (11.3%), intellectual disabilities (7.9%), and development disorders (12.9%), but not for schizophrenic troubles (16.3%). Few in any group had negative overall opinions for dementia.

Concerning employment status, unemployed and part-time respondents were more likely to largely have negative opinions for other psychosis that is drug-induced psychosis/panic/obsessive-compulsive disorders (respectively 21.6% and 21.7%) and for dementia (respectively 21.7% and 14.9%), compared with student and full-time respondents. Few of either group had overall negative opinions for development disorders and intellectual disabilities (less than 10% in any group). On the summary, higher percentages of negative opinions or attitudes are recorded towards illnesses such as alcohol/drugs addiction, schizophrenic troubles, and psycoses (panic/obsessive-compulsive disorders.

3.3 Familiarity with Persons Who has Suffered or Who is Suffering from a Mental Illness

Data presented in Table 3 reveal some trends: Only six percent of respondents stated that they had no experience with mental illness, and less than ten percent had been exposed to images of mental illness in films or listened broadcast documentaries on mental illness. Besides, more than a quarter (30.5%) and 17.6% of the respondents are familiar with mental health just by seeing mental persons on the street or by observing them frequently. But in a closely way, only 06.5% of the participants reported working alongside someone who had a mental illness, whereas 01.7% lives with a person with mental illness.

Table 1. Negative attitudes held by respondents towards people with mental illnesses (95% CI)

Attitude	Type of illness							
	Alcohol/ drugs/psychoactive products addiction	Bipolar affective	Development disorders	Dementia	Intellectual disabilities	Depression	Schizophrenic troubles	Other psychoses
Less serious	83.7% (78.0–83.9)	50.7% (45.4–53.0)	23.6% (20.2–25.9)	31.9% (26.6–32.8)	6.0% (6.1–10.2)	18.4% (17.1–21.7)	76.2% (72.4–78.8)	54.8% (51.3–58.8)
Danger to others	77.3% (72.4–78.8)	61.0% (56.9–64.2)	7.54% (5.6–9.5)	47.1% (43.7–51.2)	4.2% (3.9–5.2)	11.0% (10.9–13.2)	70.8% (65.7–72.7)	47.3% (42.4–50.0)
Unable in doing business	42.1% (38.3–45.8)	32.8% (26.6–33.6)	24.6% (21.3–27.8)	42.8% (40.6–46.8)	24.6% (21.3–27.8)	8.24% (7.9–12.5)	57.4% (54.7–62.2)	29.7% (26.6–33.6)
No improvement, even treated	21.4% (18.2–23.9)	43.6% (41.4-48.9)	32.4% (28.9–36.0)	19.4% (16.3–22.3)	25.3% (24.2–27.9)	9.0% (6.8–11.2)	42.4% (39.9–45.0)	32.4% (28.9–36.0)
Feeble-minded	55.8% (54.7–62.2)	21.1% (19.0–22.5)	16.9% (14.1–19.7)	40.4% (35.8–43.1)	36.5% (32.9–40.2)	32.8% (26.6–33.6)	45.7% (44.7–52.3)	13.6% (10.3–15.4)
Difficult to trust	50.5% (44.7–52.3)	48.2% (43.5–51.0)	19.9% (18.1–23.7)	28.3% (24.9–31.7)	4.1% (2.6–5.6)	27.9% (26.9–32.1)	43.9% (38.3–45.8)	39.2% (34.7–42.1)
Disabilty persons/unfit of working	49.1% (48.3–55.8)	63.1% (64.9–68.2)	11.0% (8.6–13.3)	39.1% (37.8–42.9)	57.8% (53.3–60.8)	19.3% (18.7–23.1)	59.4% (54.7–62.2)	27.4% (25.1–31.9)
Not friendly/nice	31.0% (28.6–33.3)	72.8% (67.4–74.2)	9.0% (6.8–11.2)	30.6% (29.1–34.6)	17.6% (14.8–20.5)	16.9% (14.1–19.7)	81.0% (78.0–83.9)	31.0% (8.6–13.3)
Dirty/eat disorder/feel different	13.0% (12.1–16.3)	17.6% (14.8–20.5)	2.6% (1.4–3.9)	13.5% (10.5–15.9)	3.8% (3.1–5.8)	12.8% (10.3–15.4)	36.4% (21.3–27.8)	28.1% (26.0–31.5)

Source: Field investigations, 2014-2015

Table 2. Stigmatizing attitudes of respondents towards mental illnesses according to their individual and socio-demographic characteristics (in percentage)

	Alcohol/ drugs addiction	Bipolar affective	Development disorders	Dementia	Intellectual disabilities	Depression	Schizophrenia	Other psychosis
Gender								
Male (n=463)	21.8	08.6	07.5	09.7	05.3	10.8	15.1	12.2
Female (n=481)	24.1	07.9	07.1	08.5	04.1	13.1	18.5	16.6
Age								
<20 years (n=69)	21.7	11.6	07.2	16.0	10.1	05.8	14.5	13.0
20-29 years (n=573)	23.6	13.1	06.9	16.7	08.9	05.2	08.9	11.3
30-44 years (n=244)	20.1	04.1	02.9	20.5	02.0	15.6	17.6	17.2
≥45 years (n=58)	17.3	08.7	03.5	18.9	05.9	17.2	13.8	15.7
Educational attainment								
Uneducated (n=04)	----	----	----	----	----	25.0	25.0	50.0
Primary level (n=55)	14.5	03.6	16.4	10.9	05.4	14.5	16.4	18.2
Secondary level (n=205)	11.2	09.7	33.1	08.8	13.2	23.4	10.7	14.1
University level(n=680)	11.3	13.2	12.9	09.1	07.9	15.7	16.3	13.4
Employment status								
Unemployed (n=23)	17.4	8.7	04.3	21.7	04.5	8.7	13.0	21.7
Student (n=467)	16.0	10.1	08.3	12.4	05.6	13.5	15.0	19.1
Part-time (n=342)	14.6	11.7	06.7	14.9	05.0	12.3	13.2	21.6
Full-time (n=119)	16.0	13.5	06.7	13.4	05.0	18.5	15.1	11.8
Marital status								
Single (n=317)	27.4	06.0	05,0	09.8	11.0	11.8	15.1	13.9
Married (n=517)	18.7	05.3	05.0	14.5	13.3	11.6	16.1	15.5
Divorced (n=84)	17.8	09.6	13.1	10.7	08.4	13.1	11.9	15.5
Widowed (n=26)	07.7	15.4	11.6	03.8	19.2	19.2	07.7	15.4
Religious belief								
Christian (n=804)	17.5	10.8	11.8	07.3	06.6	10.6	18.0	17.4
Muslim (n=84)	08.4	15.5	13.1	10.7	17.8	13.1	11.9	09.6
Traditional belief (n=22)	09.4	13.7	13.7	22.7	04.6	18,2	09.1	04.6
Other (n=34)	17.6	05.9	11.8	08.8	08.8	14.7	20.6	11.8

Source: Field investigations, 2014-2015

However, we do not exactly know the level of familiarity of respondents with mental health or with people suffering from mental illnesses. Therefore, we had to build the Index of familiarity through a statistical method called "score". The method consists of classifying variables' modalities from the more familiar to the most familiar (Table 4). The low level of familiarity contains items of the first quartile, while the medium and high levels of familiarity contain items of respectively the second and third quartiles. Overall, 32.1% of respondents are of low level of familiarity, particularly as constituent items here point out loose and weak connections/ties with mental health or with mentally ill persons. Only few respondents (11.2%) have a high level of familiarity because they seem to be very close to persons with mental disorders.

Did the above levels of familiarity have an influence on negative attitudes of respondents towards persons with mental illnesses? Table 5 below illustrates that the extent of negative attitude varies according to level of familiarity of the respondents. Only less than a quarter of respondents (21.9%) with high level of familiarity are influenced in their perceptions and attitudes towards persons with mental illnesses, whereas respondents of medium and low index of familiarity are highly influenced in their judgements towards mentally-ill individuals.

4. DISCUSSION

Our findings indicate that in general, people in Cameroon hold more stigmatizing attitudes towards persons with mental illnesses. This finding is not surprising because stigmatization of persons with mental illnesses is a worldwide cultural phenomenon. In fact, empirical findings and qualitative evidence indicate that stigmatization against mental illnesses are still rampant in many societies, constituting a significant barrier to successful treatment [24-26].

Nevertheless and according to some nations, several mental illnesses are more stigmatized than others. In Cameroon for example, we realize that stigma was greatest towards individuals with bipolar affective, addiction to alcohol/drugs/psychoactive substances, delusional disorders; contrary to Sri Lanka where people were rather harsher towards individuals with depression and schizophrenia [27], or in Ghana where affective disorders and development disorders (learning disabilities, communication disorders, autism, attention-deficit hyperactivity disorder, developmental coordination disorder) were the most blamed mental illness [28].

Stigmatizing attitudes were endorsed by men and women of all ages and of all social background and cultures, as reported in some previous studies [29,30]. Nevertheless, there are some features to underline: Respondents aged <20 years and 20-29 years were more likely than the rest to have negative overall opinion summary percentages for most of the illnesses, exception of intellectual disabilities. But, the findings concerning alcoholism and drug addiction are in contrast with the reported wide

Table 3. Circumtance of familiarity with mental health or with persons with mental illness

Familiarity items	Frequency	Percentage
Never observed someone with mental illness	55	05.8
Watched movie about mental illness	33	03.5
Watched television documentary about mental illness	49	05.2
Observed, in passing, someone with mental illness	166	17.6
Observed person with mental illness frequently	288	30.5
Worked with a person with mental illness	61	06.5
Job includes services for persons with mental illness	102	10.8
Provides services to persons with mental illness	85	09.0
Family friend has mental illness	38	04.0
Relative has mental illness	42	04.5
Lives with a person who has mental illness	16	01.7
Has a serious mental illness	09	00.9

Source: Field investigations, 2014-2015

use of alcohol and drugs by young people [31-33]. This may indicate that the young people who use these substances do not think of themselves as potential abusers and do not identify with those who are. If so, the findings would be relevant to campaigns that seek to prevent drug abuse among young people by warning of the consequences of addiction.

Stigmatizing attitudes were more expressed by uneducated respondents. And among educated respondents, fewer of those who attained the university level had less percentage in the most negative category, compared with those who just attained the secondary level. This finding, though consistent with that of [34,35] suggests that anti-stigma campaigns should pay particular attention to young people.

Opinions about the people with psychiatric disorders are subject to many influences, including accounts in the media and, in some cases, personal knowledge of a person with the illness. One of the aim of this study being to address the relationship between familiarity and stigmatizing attitudes about mental illness, the results seem to support the hypothesis that familiarity with a fact or phenomenon influence someone's behaviour. We realize that respondents who are relatively familiar (high level of familiarity) with serious mental illness were less likely to misconduct and offend persons who have psychiatric disabilities. Besides, higher perceptions of unpredictable/dangerousness/hardto talk/unfriendly were associated with respondents with low and medium levels of familiarity with mental health, thus reflecting the social distance that general public holds towards the disease and towards persons with mental diseases [36,37]. In fact, these findings are consistent with some previous works that support the role of familiarity in the stigma surrounding mental illness [38-40]. According to those authors, people who have greater knowledge or/and experience about/with mental illness are less likely to stigmatize persons with mental disorders. Moreover, these people are less likely to discriminate against persons who have serious mental illness by avoiding them. This suggest that misconduct held by general public may be due to ignorance and to the fact that generally, most of mentally ill persons are confined to remote, close and hidden areas. Since few respondents (08.7%) have reported learning about mental illness from movies, we would have expected media to help people got familiar with mental health, unfortunately media attention still often focuses public attention on the most negative attributes of mental illnesses, thus perpetuating the stigma surrounding mental illness. Media analyses have shown that on the whole, people who have mental illness are represented in movies as being unfriendly, dangerous, and need much attention and help [41,42]. This study pointed out that only few people have fairly intimate contact with people who have mental illness (06.5% have reported working with someone who had a mental illness and 09.0% providing services to persons with mental illness). It is likely that these low numbers do not reflect the reality, because in one hand, people who have mental illness learn that keeping their history from coworkers and friends can protect them from public disapproval [43], and in another because mental disorders impact not just on the individuals affected, but also on those around them - including immediate family and other relatives and friends. It is assumed that the disease leads to a variety of emotional effects for parents/brothers/sisters and friends, for example the feelings of frustration, anger, resentment and guilty. The important message here is that stigma is not uniquely directed towards mentally ill persons, but it is also extended to family and friends of the patients. This suggests that further researches must focus on people living and working with mentally ill patients.

In any event, stigma appears as one of the most important obstacles for a successful integration of persons with mental illness into the society. Stereotypes associated with mental disorders are frequently the main obstacles preventing early and successful treatment, particularly in the case of intellectual disabilities, schizophrenia and other psychoses. However, the fact that people misconduct or show abusive behaviour towards mentally ill persons, brings to wonder about the understanding and clear knowledge of mental health and stigma. Are people not mixing by considering a mental disease to an other and consequently misconduct? Studies so far having, however, put little emphasis on types of mental disorders, we would like to clarify in the box below, what are mental health, mental disorders, and stigma.

Mental health…

First to coin in the mid-19th century by William Sweetser under the term "mental hygiene", the term "mental health" formerly considered by Clifford W. Beers (1876-1943) as a person's overall emotional and psychological condition, has emerged after 1945 thanks to the mental hygiene movement [44]. Generally viewed as the psychological well-being and satisfactory adjustment to society and to the ordinary demands of life, mental health is a state of emotional and psychological well-being in which an individual is able to use his or her cognitive and emotional capabilities, function in society, and meet the ordinary demands of everyday life [45]. Thus, it includes "subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential, among others. According to WHO, it is related to the promotion of well-being, the prevention of mental disorders, and the treatment and rehabilitation of people affected by mental disorders; which means that mental disorders are one aspect of mental health. The scientific study of mental disorders is called psychopathology.

….Mental disorders

Also called mental illnesses/diseases, psychological disorders or psychiatric disorders, mental disorders are a general term applied to severe emotional problems or psychiatric disorders. According to DSM-IV, a mental disorder is a psychological syndrome or pattern, which occurs in an individual, and causes distress via a painful symptom or disability, or increases the risk of death, pain, or disability [46]. However and from a medical view point, mental disorders are any of various psychiatric conditions, usually characterized by impairment of an individual's normal cognitive, emotional, or behavioral functioning, and caused by physiological or psychosocial factors. They comprise a broad range of problems, with different symptoms [47]. They are generally characterized by some combinations of abnormal thoughts, emotions, behaviour and relationships with others. According to the two widely established systems (The International Classification of Diseases produced by the WHO and the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) produced by the American Psychiatric Association), mental disorders are classified separately from neuropsychiatric disorders, learning disabilities or intellectual disability. Overall, 241 mental illnesses or disorders have been identified. However, the most common worldwide are: depression, bipolar affective disorder, schizophrenia and other psychoses, dementia, intellectual disabilities and developmental disorders including autism. The causes of mental disorders are generally complex and vary depending on the particular disorder and the individual. Although the causes of some mental disorders are unknown, it has been found that different biological, psychological, and environmental factors can all contribute to the development or progression of mental disorders [48].

Stigma…

The word *stigma* originated in ancient Greece which in its origins (1580-90) referred to a type of marking or tattoo that was cut or burned into the skin of criminals, slaves, or traitors in order to visibly identify them as blemished or morally polluted persons. These individuals were to be avoided or shunned, particularly in public places. The short definition of *stigma* is a 'mark of disgrace or reproach', but it is currently defined as a set of negative and often unfair beliefs that a society or group of people have about something or someone [49]. Given these two representations for the meaning of stigma, anyone can see that stigma is a deeply negative mindset and provides no value to society in general. Goffman (1963) who is the first sociologist to research on stigma identified three forms of stigma: stigma of character traits, physical stigma, and stigma of group identity; all of them being transmitted through lineages and could contaminate all members of a family [50]. USAID points out the 3 followings: external or social stigma, internal stigma (depicts as a three-part cycle: First, the person internalizes the stigma, feels loss of control and accepts denigration; this leads to a self-perception of shame, guilt and fear, which leads to protective action, usually the individual avoiding others and living in isolation), tribal stigma (passed on genetically like race and ethnicity or generationally like religion) [51]. But within the field of mental health, stigma is divided into two distinct types: ***social stigma*** (characterized by prejudicial attitudes and discriminating behaviour directed towards individuals with mental health problems), and ***perceived stigma* or self-stigma** (is the internalizing by the mental health sufferer of their perceptions of discrimination) [52]. Stigma matters because it embraces both prejudicial attitudes and discriminating behaviour towards individuals with mental health problems, and the social effects of this include exclusion, poor social support, poorer subjective quality of life, and low self-esteem. As well as it influences the quality of daily living, stigma also has a detrimental affect on treatment outcomes, and so hinders efficient and effective recovery [53]. In short, stigma brings experiences and feelings of shame, blame, hopelessness, distress, reluctance to seek and/or accept necessary help. These factors represent significant reasons for attempting to eradicate mental health stigma and ensure that social inclusion is facilitated and recovery can be efficiently achieved.

Table 4. Building's process of the index of familiarity with mental health/ill persons

4a : familiarity items (by sum of valid elements, increasing order)				4b:Index of familiarity		
	Valid	**Freq.**	**%**	**Level of familiarity**	**Freq.**	**%**
	1	55	05.8	Low	303	32.1
1rst quartile (weak/loose	2	33	03.5	Medium	536	56.7
connection)	3	49	05.2	High	105	11.2
	4	166	17.6	Total	944	100
	5	288	30.5			
2nd quartile (moderate	6	61	06.5			
connection)	7	102	10.8			
	8	85	09.0			
	9	38	04.0			
3rd quartile (close/tight	10	42	04.5			
connection)	11	16	01.7			
	12	09	00.9			
	Total	944	100			

**Constituent items (12) : see table 3 for labels; Source: Field investigations, 2014-2015*

Table 5. Magnitude of negative attitudes towards mentally ill persons according to familiarity index

Level of familiarity	Magnitude	
	Frequency	**Percentage**
High (n=105)	23	21.9
Medium (n=536)	430	80.2
Low (n=303)	221	73.0

X^2 calculated (24,13) > X^2 observed (3,84) for a risk of 1% with 1ddl. Source: Field investigations, 2014-2015

5. CONCLUSION

Stigma has been identified as one of the most important obstacles for a successful integration of people with mental illnesses into the society. Research about stigma has shown negative attitudes among the public towards people with mental illness. In our study, stigmatizing opinions were endorsed commonly by men and women from all social classes. There were, however, differences in the nature and extent of the stigma attached to the eight mental disorders encountered in Cameroon. The study shows that in Cameroon as in other countries, stigma is a multidimensional construct. Though, there were differences in the magnitude of negative perceptions, indicating the need for social distance analysis of stigma before use in a given culture. Persons with severe mental illness are often stigmatized as a result of their psychiatric condition, which likely contributes to their difficulties in interpersonal relations, occupational functioning, and self-esteem. Given the pervasive effects of stigma on the adjustment of persons with severe mental illness, it is necessary to identify potential strategies for reducing barriers that interfere with their acceptance into the community. Such potential strategies of stigma reduction include education about severe mental illness, promoting contact between the community and persons with severe mental illness, and "value self-confrontation," a technique used to reduce prejudice toward persons in ethnic minorities. In that view and if we agree with Murray and Lopez (1997) that '*one in four*' of us will experience a mental illness personally at some stage of our lives, then mental illnesses requires that stigmatizations be reduced alongside improvements in prevention, treatments and self-help strategies [54]. From the experience of anti-stigma campaigns on diseases like HIV/Aids and leprosy, common recommendation on stigma reduction is that education is the best means of preventing and eliminating discrimination and social distance towards mental health and mental disorders.

6. LIMITATION

One concern about this study is that, as in all opinion surveys, mostly when it deals with a socio-cultural constructed and multi-faceted disease like mental illnesses, we cannot be certain that expressed opinions accurately reflect true opinions or that opinions reflect actual

behaviour. Nevertheless, the broad similarities of our findings with previous works encourage confidence in the reliability of the results.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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Appendix: Stig's free and open source self-report questionnaire

Please, rate how much you agree with the following statements, by crossing the appropriate box

I think that most people…	Disagree	Somewhat disagree	Somewhat agree	Agree
…take the opinion of someone who has been treated for a mental illness less seriously.	☐	☐	☐	☐
… consider someone who has been treated for a mental illness to be dangerous.	☐	☐	☐	☐
... hesitate to do business with someone who has been treated for a mental illness.	☐	☐	☐	☐
... think badly of someone who has been treated for a mental illness.	☐	☐	☐	☐
... consider mental illness to be a sign of personal weakness.	☐	☐	☐	☐
... hesitate to entrust their child with someone who has been treated for a mental illness.	☐	☐	☐	☐
… do not even take a look at an application from someone who has been treated for a mental illness.	☐	☐	☐	☐
... do not enter into a relationship with someone who has been treated for a mental illness.	☐	☐	☐	☐
... feel uneasy when someone who has been treated for a mental illness moves into the neighbourhood.	☐	☐	☐	☐

Example:

I think that most people…	Disagree	Somewhat disagree	Somewhat agree	Agree
... avoid contact with someone who has been treated for a mental illness	☐	☒	☐	☐

If you think that most people rather avoid contact with someone who has been treated for a mental illness, then please cross "somewhat agree".
Sources : Link et al., 1989, Gierk et al., 2015

Peer-review history:
The peer review history for this paper can be accessed here:
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