

Schizophrenia and Other Psychotic Disorders at Kamenge Neuropsychiatric Center (Burundi, Africa) 2009-2021

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Abstract

Schizophrenia is a complex psychiatric illness that results in severe mental disorders. Schizophrenia affects 60 million people worldwide, half of whom are unaware. This work focused on the epidemiology of schizophrenia in comparison to other psychoses of patients treated at the Kamenge Neuropsychiatric Center in the period between 2009- 2021. A cross-sectional study involved 3,000 households in a survey, recruited by a systematic random sampling technique. Data was collected using a questionnaire. Central tendency variables (frequency, mean) and percentages analysis were fitted. In Burundi, out of 3,000 households surveyed, 33.4% had experienced traumatic events, 8.9% suffered from anxiety, 4.4% of acute psychosis, and 4.5 % of schizophrenia. According to this survey, more than 6% of the surveyed population declared having seriously thought about suicide and 4% would have tried to suicide. The schizophrenia cases are 21.62% of the total of all psychoses in 2019 and 28.58% that of other psychoses in 2020; and 27.25% of the number of other psychoses in March 2021. The results graph shows that the number of schizophrenia cases is 21.62% of the total of all psychoses in 2019; 28.58% of other psychoses in 2020. This ratio becomes 27.25% of psychoses in March 2021. These percentages show that the number of consultations with schizophrenic patients gradually increased during these 3 years and remained above those of other psychoses.

Keywords: Anxiety, Anxious, cross-sectional study, Epidemiology, Mental disorders, Psychosis, Suicide, Trauma, Survey

1. Introduction

Burundi is the third most densely populated country in Sub-Saharan Africa with an estimated 435 inhabitants per km² in 2015 and its rapidly rising population (12,291,500 million) is expected to double as early as 2040 [1]

A high level of psychosocial functioning is essential for survival in many resource-poor countries and is needed for development in these regions. Organized violence, often in combination with other stressors such as poverty and familial conflict, however, result in a range of mental disorders and damage socio-economic progress [2].

There is scant documentation of the mental health characteristics of low-income communities recovering from armed conflict. Based on interviews (Familiar, I., Sharma, S., Ndayisaba, H et al. 2013), identified four locally defined idioms/terms relating to mental distress in Burundi: ihahamuka (anxiety spectrum illnesses), ukutiyemera (a mix of depression and anxiety-like syndrome), akabonge (depression/grief-like syndrome) and Kwinana ubwoba bungee (anxiety-like syndrome) [3].

War experiences are associated with the risk of long-term mental health problems. Knowledge of postwar contexts may inform policy and guide interventions on postwar psychosocial adjustment and reintegration in conflict-prone Great Lakes region of Africa (Rwanda, Burundi, DRC Congo, Uganda, Central Africa Republic, and South Sudan) [4]

By 2050 a significant increase in population growth and aging will result in an estimated increase of 130% the burden of mental disorders and substance abuse in sub-Saharan Africa to 45 million YLDs. As a result, the required mental and from 2010 to 2050 health workforce will increase by 216,600 full-time equivalent staff and by far more compared to the existing workforce. In sub-Saharan Africa, the growth in Mental and substance use disorders by 2050 is likely to significantly affect health and productivity.

To reduce this burden packages of care for key mental disorders should be provided by increasing the mental health workforce towards targets outlined in this paper. This requires a shift from current practice in most African countries, involving substantial investment in the training of primary care practitioners, supported by district-based mental health specialist teams using a task-sharing model mobilizes local community resources, with the expansion of inpatient psychiatric units based in district and regional general hospitals [5].

This work focused on the epidemiology and the evolution of schizophrenia [6-7] in comparison to other psychoses [8-9] of patients who received treatment at the Kamenge Neuropsychiatric Center in the period between 2009- 2021.

2. Methods and materials

2.1. Study settings and popular institution-based cross-sectional study design among people of 3,000 households in Bujumbura Mairie, Gitega, Ngozi, Rumonge has been. We used a retrospective patient chart review for other psychoses and

schizophrenia data collection at the Neuropsychiatric Center of Kamenge. Central tendency variables (frequency, mean) and percentages analysis were fitted.

2.2. Measurement: The items of the questionnaire were about the presence of psychotic diseases and troubles in the life of the members of the surveyed households.

2.3. Data collection: Data were collected by trained collectors using a questionnaire related to mental illness. Other information about schizophrenia evolution was collected from Kamenge Neuropsychiatric Center the information system department.

2.4. Data processing and analysis: Data were checked for completeness and consistency. Descriptive statistics were used (frequency, mean, and percentage) were used to summarize the data distribution of variables.

3. Results

Burundi has no national mental health policy or strategy. However, since 2002, it has created a national mental health service integrated within the Ministry of Public Health, the budget of which represents only about 0.43% of the overall budget allocated to health. Legislation in the area of mental health is deficient in that some codes and laws in the country only generally speak of the capacity and protection of the mentally ill. In addition, healthcare staff is not sufficiently trained in protecting the rights of users of mental health services. Medico-legal hospitalization structures are non-existent.

At the national level, there is only one neuropsychiatric hospital, Kamenge Neuropsychiatric Center and two outpatient mental health care structures which treat 41% of mental health users and among them 38% are women and 20% are children and adolescents. There is no epidemiological surveillance and research data in mental health and the Ministry of Public Health has not provided a system for collecting information from the various stakeholders to compile some important data in this sector. There were 65 inpatient beds out of an estimated population of 7,600,000 (2006). Psychosocial treatment is seldom used in psychiatric hospitals (1-20%) while it represents 50-80% in outpatient facilities.

Doctors in basic care facilities are authorized to prescribe psychotropic drugs with certain restrictions. However, they do not have a mental health care and assessment protocol. The country has very limited human resources with rarely continuing training or retraining (1-3%). The proportion per 100,000 inhabitants is 0.013 for psychiatrists, 0.026 general practitioners, 0.42 nurses, 0.51 psychologists and 0.408 social workers. Mental health promotion and public education activities are not well coordinated by the departments of the ministry. Collaboration between mental health services and other services is not close except in certain areas such as the basic health program, the fight against HIV / AIDS, and child protection.

In 2014, more than 11,000 people were consulted for mental illness and 741 were hospitalized. The reception capacity of this center is 152 beds, and the average hospital stay is 38 days. The worrying figure was unveiled this Tuesday, October

08/2019 by the Permanent Secretary at the Ministry of Health, Dr. Jean Baptiste Nzorironkankuze, while from 2010 to 2015, only 2,500 cases had been identified. In August / 2019, the ministry, in close collaboration with the Swiss Cooperation, conducted a mental health survey in 4 provinces - more or less representative of the country (Bujumbura Mairie, Gitega, Ngozi, and Rumonge).

The surveyed population: 3,000 households.

Results: 33.4% had experienced traumatic events, 8.9% suffered from anxiety disorders, 4.4% of acute psychosis, and 4.5% of schizophrenia.

In addition, Burundi has only 3 public psychiatric centers - in Bujumbura, Gitega, and Ngozi - the study notes that from 2015 to 2017, more than 22,000 cases of mental disorders were recorded in the three centers. From 2010 to 2015, the figure did not exceed 2,500 cases.

From 2015-2017, 22,808 psychiatric cases were registered in the Kamenge Neuropsychiatric Center, Gitega Mental Care Center, and neuropsychiatric Center of NGOZI.

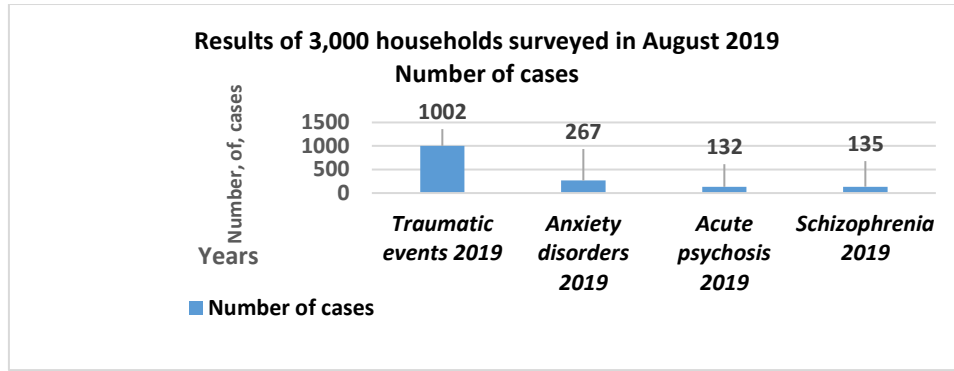
According to the survey carried out at NGOZI, GITEGA, BUJUMBURA TOWN HALL, and Rumonge in 2019, on 3000 households.

According to the results of the same survey, more than 6% of the surveyed population declared having seriously thought about suicide and 4% would have tried to commit suicide: "The main causes of mental disorders, which can push the individual to suicide, are between others: poverty, sexual and gender-based violence, the socio-political crisis, the loss of property and loved ones, the abuse of psychoactive substances (alcohol, drugs), the feeling of isolation, etc. ", informed the director of the chronic non-communicable diseases program, Dr. Etienne Niyonzima.

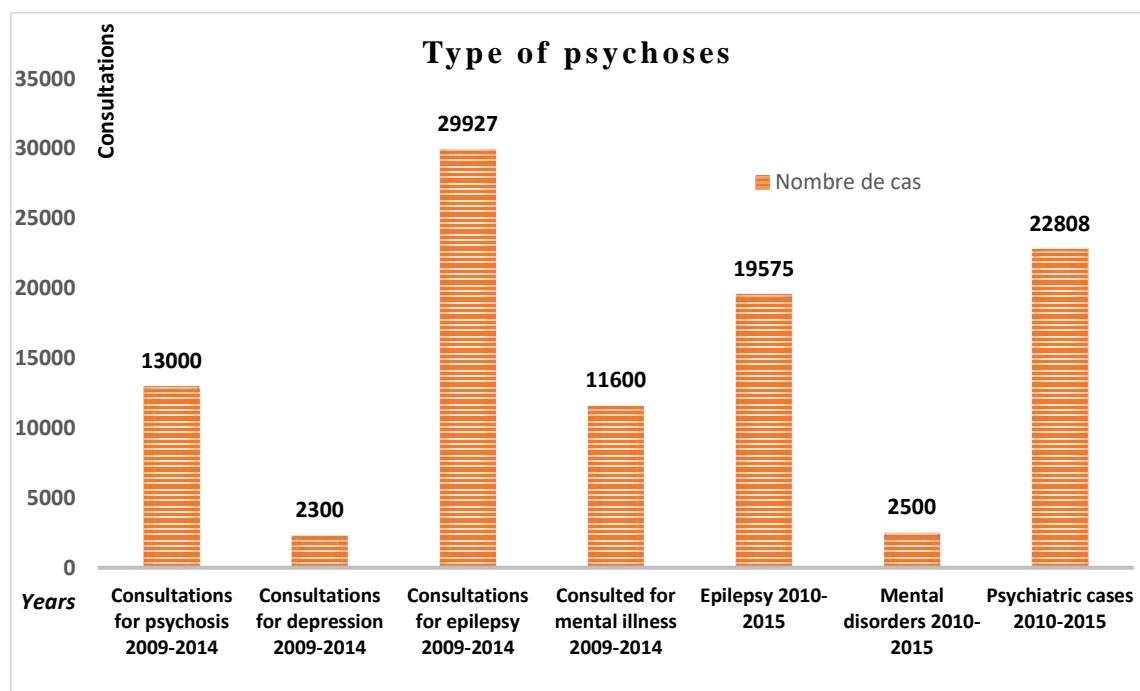
Although these centers for the care of mental disorders ensure the good recovery of patients, the doctor exposed the challenges that persist: "The ignorance of the population about the treatment, the care of a family member affected by mental disorders often stigmatized and discriminated against, often referring to repetitive relapses, or even suicides, expensive treatments given that patients are treated on the term,... ". Moreover, according to Dr. Niyonzima, with only three psychiatric centers nationwide, it is only a tiny fraction of the needy being treated. And to indicate that the ministry mentions as a future perspective, "the decentralization and integration of mental health care at all levels of care"

At the level of the Neuro-Psychiatric Center of Kamenge, the benchmark center of the country, some strategies are proposed to prevent or counter cases of suicide or repetitive relapses: "We must carry out actions at the level of the population. Educate, inform and sensitize Burundians on the behaviors to adopt with patients with mental disorders. We also advise early detection, as well as special attention to medication intake.

4. Data mining and discussion



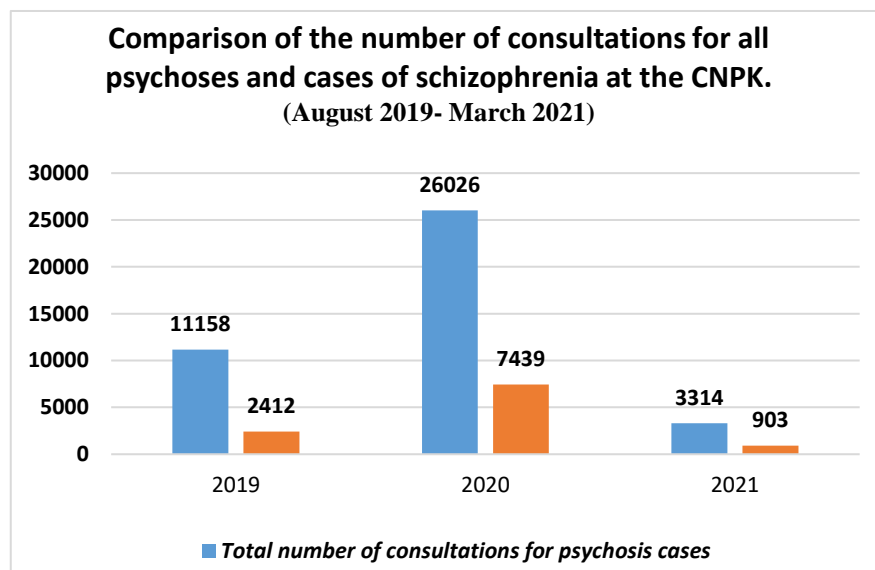
Out of 3,000 households surveyed, 33.4% had experienced traumatic events, 8.9% suffered from anxiety disorders, 4.4% of acute psychosis, and 4.5% of schizophrenia. According to this survey, 47.5% are probably experiencing an episode of more severe disorders, more than 6% of the population surveyed declared having seriously thought about suicide and 4% would have tried to suicide. *Mental health in Burundi - districts of Gitega, Kirundo, Muramvya and, Bujumbura (2009-2017)*



Interpretation: The number of consultations for psychosis is almost 6 times the number of consultations for depression, while the number of consultations for epilepsy is 2.3 times the number of other psychoses combined. The number of epilepsy consultations is more than 13 times the number of consultations for depression. In addition, the number of consultations due to psychosis remains

almost constant for the entire period covering 2009-2014 (between 12,000 - 13,000) and turns above 11,000 in 2014.

Comparison of the number of consultations for all psychoses against cases of schizophrenia at the Kamenge Neuropsychiatric Center (- Period August 2019-February 2021).



Interpretation

The number of cases of schizophrenia is 21.62% of the total of all psychoses in 2019. It is 28.58% of that of other psychoses in 2020. This ratio becomes 27.25% of the number of psychoses in March 2021.

These annual percentages show that the number of consultations with schizophrenic patients gradually increased during these 3 years, always reducing the number of schizophrenic patients to the total of other psychoses, for each year considered.

5. Conclusion and recommendations

The results graph shows that the number of consultations of Schizophrenic patients varied between 3,113 and 3,549 for the period between 2016 and 2019. This number is almost double in 2020, or 5019 consultations. The number of schizophrenia cases is 21.62% of the total of all psychoses in 2019. It is 28.58% of that of other psychoses in 2020. This ratio becomes 27.25% of the number of psychoses in March 2021. These annual percentages show that the number of consultations with schizophrenic patients gradually increased during these 3 years.

It is desirable to have a realistic plan, even an evolving plan that allows different donors to finance what is urgent or priority when they cannot support everything at the same time (WHO. 2008). It is necessary that the State of Burundi covers the health care of the mentally ill and in particular the schizophrenic patients whose burden of treatment extends over a lifetime; drugs are normally too expensive. It is more than desirable that benefactors intervene to alleviate the burden of medical

care of the mentally ill, to relieve families suffering from the purchase of overpriced and lifelong mental drugs (e.g. schizophrenic patients). It is highly recommended that benefactors intervene in mental health to support the efforts made by the State of Burundi to facilitate access to mental medicines for all.

Data availability: The data used to support the findings of this study are available for the corresponding author upon request.

6. Ethical approval

The research certificate was obtained from the University of Burundi and the Kamenge Neuropsychiatric Center gave a data access authorization. After explaining the study, informed consent of the participants was obtained during the survey. Confidentiality was maintained by omitting their identifications

Consent: Informed consent was obtained from participants and confidentiality was maintained by omitting the individual identifications during the survey.

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Conflict of interest: The author declares that he has no competing interests.

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