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Epidemiological, Clinical and Therapeutic Profile of Outpatients Seen at the Psychiatry Department of the Lieutenant-Colonel Mamadou Diouf Regional Hospital Center of Saint-Louis, Senegal

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Abstract

Background: Psychiatry is the medical discipline devoted to the study, prevention and treatment of mental disorders and to the rehabilitation of patients. In Senegal, data on outpatient psychiatric activity outside the capital remain scarce. **Aim:** To describe the epidemiological, clinical and therapeutic profile of patients seen in outpatient consultation at the psychiatry department of the Lieutenant-Colonel Mamadou Diouf Regional Hospital Center of Saint-Louis. **Methods:** A cross-sectional, descriptive and retrospective study was carried out on the medical records of patients seen in outpatient psychiatric consultation between 2 January and 30 June 2025, using an exhaustive sampling method. **Results:** Of 2000 medical records reviewed, 1117 were retained. Female patients predominated (57.48%, sex ratio 1.35). The 21 - 30-year age group was the most represented (28.29%), and 47.99% of patients were single; 38.76% had between 1 and 5 children. The most frequent reasons for consultation were insomnia (19.64%), seizures (15.07%) and incoherent speech (10.21%). The time to consultation ranged from 1 to 6 months in 59.09% of patients. A personal medical history was found in 66.25% of patients, with epilepsy being the most frequent (32.5%). The most frequent ICD-11 diagnoses were epilepsy (32.50%), schizophrenia (19.25%) and acute and transient psychotic disorder (10.92%). Regarding treatment, antipsychotics (48.8%) and antiepileptics (32.4%) were the most frequently prescribed, together with psychotherapy and outpatient care. Under treatment, 60.79% of patients were in ongoing remission and 13.79% in complete remission, while 25.43% experienced relapse.

Conclusion: Outpatient consultation constitutes the first point of contact between patients and the psychiatry department. Well-conducted pharmacological and psychotherapeutic management is associated with regression of mental disorders.

Keywords

Outpatient Consultation, Epidemiology, Epilepsy, Schizophrenia, Remission, Senegal

1. Introduction

A mental disorder is defined as a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning [1]. Among the most severe disorders are schizophrenia, bipolar disorder, treatment-resistant depression, certain personality disorders, eating disorders and addictive disorders, which may, at certain points in their course, require full-time hospitalization [1].

Mental health encompasses three dimensions: positive mental health, psychological distress, and psychiatric disorders proper, the latter varying widely in severity and duration. Psychiatric disorders correspond to the criteria set out in the World Health Organization's International Classification of Diseases, currently in its 11th revision (ICD-11), or in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) [2].

A 2019 assessment of mental health in Senegal, conducted by the Mental Health Division of the Ministry of Health and Social Action, reported 38 practicing psychiatrists, 363 available beds and 13 hospital structures offering specialized care, with schizophrenia, bipolar disorder, acute delusional episodes and substance use disorders among the most frequently diagnosed conditions [3].

Several studies have already described outpatient psychiatric activity in Senegal, notably at the Fann National University Hospital Center [4] and at the Amadou Sakhir Mbaye Regional Hospital Center of Louga [5]. At the Lieutenant-Colonel Mamadou Diouf Regional Hospital Center of Saint-Louis, only one study, focused on the therapeutic itinerary of 100 patients, had previously been conducted in this department, which has been operating for about forty years [6].

Building on this earlier work, the present study aimed to describe the epidemiological, clinical and therapeutic profile of patients seen in outpatient consultation at the psychiatry department of the Regional Hospital Center of Saint-Louis, to identify the most frequent psychiatric conditions, and to characterize their management.

2. Materials and Methods

2.1. Study Setting and Period

The study was conducted at the psychiatry department of the Lieutenant-Colonel

Mamadou Diouf Regional Hospital Center of Saint-Louis, an outpatient unit annexed to the hospital comprising two consultation offices, one nursing office, an observation room and a waiting area. Staffing consisted of one professor of psychiatry (head of department), one nurse, and two residents in psychiatry. The study period extended over six months, from 2 January to 30 June 2025.

2.2. Study Design and Population

This was a cross-sectional, descriptive and retrospective study based on the medical records of patients seen in outpatient psychiatric consultation during the study period. Sampling was exhaustive. Records of patients seen during the study period were included; damaged or incomplete records were excluded.

2.3. Data Collection, Entry and Analysis

Data were collected using a survey form designed with Google Forms, covering sociodemographic characteristics (age, sex, marital status, occupation, region of origin), clinical data (reasons for consultation, personal history, time to consultation, duration of illness, ICD-11 diagnosis) and therapeutic modalities. Data entry was performed with Microsoft Excel 2013 and analysis with Epi Info software, version 7.2.6.0. The reasons for consultation, medical history, psychiatric diagnosis, and treatments were extracted chronologically from the medical records using a digital survey form, in the order they appeared on the files. Only one or two diagnoses were selected based on the indication listed in the medical file, including the patients' personal medical or surgical history. It was the investigator who took care of checking the coding according to ICSD-11.

2.4. Limitations and Ethical Considerations

The main limitations of the study were the poor archiving of some medical records and the absence of an inpatient ward in the department. Data collection was carried out with strict confidentiality and respect for patient anonymity. The study was approved by the Director of the Saint-Louis Regional Hospital.

3. Results

Of the 2000 medical records identified during the study period, 883 were excluded for incompleteness and 1117 were retained for analysis. The variables that led to the exclusion were:

- lack of sociodemographic data (place of origin, employment status);
- absence of information on the year of the very first monitoring of the disorder, the onset date of current symptoms, the absence of a comprehensive psychiatric examination;
- medical records (handwritten on A4 paper) lost or incomplete, with some pages missing;
- stopped medical follow-up, some patients came once or twice and were not seen again until the end of the study.

Excluding these files affected the depth of the patients' biographical and clinical data. This made it difficult to assess treatment effectiveness and symptom progression in our results.

3.1. Sociodemographic Characteristics

Female patients predominated, accounting for 57.48% of participants versus 42.52% male, corresponding to a female sex ratio of 1.35. The 21 - 30-year age group was the most represented (28.29%), followed by the 31 - 40-year group (22.74%). Single patients accounted for 47.99% of the sample and married patients for 42.88%. Among women, married status (50.31%) exceeded single status, whereas among men, single status predominated (64.42%). More than half of the patients (53.18%) had no children, and 38.76% had between 1 and 5. Occupationally, housewives represented 39.30% of the sample, followed by informal-sector workers (22.74%); only 6.36% of patients held a formal-sector occupation. Almost all patients (86.57%) resided in the Saint-Louis region. Sociodemographic characteristics were presented in Table 1.

Table 1. Main sociodemographic characteristics of patients (n = 1117).

Variable	n	%
Female sex	642	57.48
Age group 21 - 30 years	316	28.29
Marital status: single	536	47.99
Marital status: married	479	42.88
No children	594	53.18
1 - 5 children	433	38.76
Housewife	439	39.30
Informal sector	254	22.74
Residing in Saint-Louis	967	86.57

3.2. Clinical Data

The most frequently reported reasons for consultation were insomnia (19.64%), seizures (15.07%), incoherent speech (10.21%), psychomotor agitation (8.08%) and various somatic complaints (5.67%), several reasons often coexisting in the same patient. Consultation was jointly requested by the patient and family in 38.32% of cases, by the family alone in 26.41% of cases, and by the patient alone in 35.00% of cases. The time elapsed between symptom onset and consultation was between 1 and 6 months for 59.09% of patients, less than one month for 9.40%, and more than 6 months for 31.51%. Women tended to consult slightly earlier than men, both within the first month (10.44% versus 8.00%) and between 1 and 6 months (59.19% versus 58.95%).

Among the patients, 71.89% were already followed in the department and 28.11% were consulting for the first time. A personal psychiatric history was found

in 47.45% of patients. Regarding general medical history, 66.25% of patients had no notable antecedent; epilepsy (32.5%) and hypertension (5.3%) were the most frequent. The duration of illness at the time of diagnosis was 1 to 5 years in 29.10% of patients, 6 to 10 years in 18.98%, and less than 6 months in 12.26%. Substance use was reported by 5.64% of patients.

According to ICD-11, epilepsy was the most frequent diagnosis (32.50%), followed by schizophrenia (19.25%), acute and transient psychotic disorder (10.92%), bipolar disorder (5.73%), and mental or behavioral disorders associated with pregnancy, childbirth or the puerperium (5.10%), as mentioned in Table 2. Epilepsy and intellectual developmental disorder predominated among patients under 20 years, whereas schizophrenia, bipolar disorder and acute psychotic disorder were more frequent after age 20; neurocognitive disorders predominated after age 60 (25.68% in this age group).

Table 2. Distribution of the main psychiatric diagnoses according to ICD-11 (n = 1117).

Diagnosis (ICD-11)	n	%
Neurological diagnosis		
Primary headache disorders (8A80)	37	3.31
Epilepsy (8A60)	363	32.50
Psychiatric diagnosis		
Acute and transient psychotic disorder (6A23)	117	10.92
Insomnia disorder (7A00)	12	1.07
Schizophrenia (6A20)	215	19.25
Mixed anxiety and depressive disorder (6A73)	39	3.49
Anxiety or fear-related disorder (6B00)	54	4.83
Bipolar disorder (6A60)	64	5.73
Personality disorder (6D10)	1	0.09
Secondary mood syndrome (6E62)[a]	4	0.36
Persistent delusional disorder (6A24)	37	3.31
Depressive disorder (6A70)	24	2.15
Dissociative disorder (6B60)	11	0.98
Disorders of intellectual development (6A00)	21	1.88
Mental or behavioural disorder associated with the puerperium (6E20)	57	5.10
Disorders due to substance use (6D40)	19	1.70
Neurocognitive disorders (6D70)	34	3.04
Secondary psychotic syndrome (6E61)[b]	5	0.44
Other[c]	3	0.27
Total	1117	100.00

3.3. Therapeutic Management

Antipsychotics constituted the most frequently prescribed therapeutic class (48.8%), followed by antiepileptics (32.4%), synthetic antiparkinsonian agents (28.8%), anxiolytics (16.3%) and hypnotics (11.9%). The Table 3 summarized therapeutic modalities. Supportive psychotherapy was provided to 4.2% of patients. Outpatient care was delivered in the absence of a dedicated inpatient ward in the department. Under treatment, 60.79% of patients were in ongoing remission, 13.79% in complete remission, and 25.43% experienced relapse, most often following treatment discontinuation.

Table 3. Therapeutic management modalities (n = 1117, multiple responses possible).

Therapeutic modality	n	%
Antipsychotics	545	48.8
Antiepileptics	362	32.4
Synthetic antiparkinsonian agents	322	28.8
Anxiolytics	182	16.3
Hypnotics	133	11.9
Mood stabilizers	95	8.5
Antidepressants	92	8.24
Other treatments	48	4.3
Psychotherapy	47	4.2
Medical referral	21	1.88
Outpatient care	19	1.7

4. Discussion

4.1. Sociodemographic Characteristics

The female predominance found in our study (57.48%) is comparable to that reported by Sall *et al.* at the Thiaroye National Psychiatric Hospital Center in 2025 [7], but differs from the results of Fall *et al.* in 2008 at the same institution [8], who found a male predominance. This difference could be explained by a tendency of women to seek medical help earlier, whereas the male predominance observed in other studies could reflect the demographic structure of the country, the Senegalese population comprising 50.6% men versus 49.4% women according to the 5th general population census [9], as well as a higher population density in Dakar.

The 21 - 30-year age group, which predominated in our sample, corresponds to the typical age of onset of many mental disorders [10]. This result is close to that of Sall *et al.* [7] and Gueye *et al.* in Saint-Louis [6], as well as that of Belghazi *et al.* in Morocco [11]. The mean age of the Senegalese population, estimated at 23.6 years in 2023 [9], partly explains the high proportion of young adults.

The high proportion of single patients, particularly among men (64.42%), and the absence of children in more than half of the patients (53.18%) may be explained by the presence of pupils and students in the sample, but also by the functional impact of chronic mental disorders, particularly psychotic disorders, which are recognized as disabling and may compromise access to marriage and family life [12].

4.2. Reasons and Time to Consultation

Insomnia and incoherent speech were among the leading reasons for consultation, as in the study by Sall *et al.* [7]. The high frequency of seizures in our series reflects the organization of the department, which historically dedicates specific consultation days to epileptic patients, the head of department also being a neurophysiologist and epileptologist. This finding differs from that of Notue *et al.* in Mali, where aggressiveness and substance use dominated the reasons for consultation [13].

The time to consultation, between 1 and 6 months for the majority of patients, was longer than that reported in several Ivorian studies conducted between 2007 and 2013, where the delay was generally under 3 months [14] [15]. Initial recourse to religious guides or traditional healers, lack of awareness of psychiatric care options, financial constraints and distance from care facilities are among the explanations put forward in the local literature for this delay [6].

4.3. Psychiatric Diagnoses

Epilepsy was the most frequent diagnosis in our series (32.50%), followed by schizophrenia (19.25%) and acute and transient psychotic disorder (10.47%). This predominance of epilepsy is explained by the historical organization of the department, which, since its creation in 1987, has managed both psychiatric and neurological patients, a practice maintained even after the creation of a separate neurology department [16]. Schizophrenia is one of the recurring disorders in our study (19.25%). The illness generally begins in late adolescence or young adulthood between 15 and 25 years of age, with the first episodes occurring before age 18. The age of onset is generally later in women compared to men; the sex ratio is fairly balanced, although there is a slight predominance and more debilitating forms in men [10]. Neurocognitive disorders predominated after age 60, in line with the dementia literature [17].

4.4. Management and Outcome

The use of antipsychotics in neurological conditions is indicated for interictal epileptic psychoses. These encompass all psychotic disorders occurring in full consciousness in an individual previously diagnosed with epilepsy, and which do not immediately follow the onset of a seizure. Some antipsychotics (clozapine, olanzapine, quetiapine) can lower the seizure threshold, but prescribing antipsychotics to an epileptic patient already treated with antiepileptic drugs is, in prac-

tice, safe [18] [19]. Psychotherapy, delivered by the department's psychiatrists, remained marginal (4.2%), a finding similar to that reported by Loucar *et al.* in Dakar [20]. In the absence of an inpatient ward, ambulatory injectable treatment combined with oral medication allowed sustained management until the next scheduled visit.

Remission, complete or ongoing, was observed in more than 70% of patients under well-conducted treatment, a result higher than that of Fall *et al.*, who reported a favorable outcome in 55% of patients [8]. Stopping antipsychotic treatment carries a high risk of psychotic relapse, often exceeding 75% in cases of abrupt discontinuation. This risk is slightly above 50% when the discontinuation extends between 1 and 10 weeks, and approaches 30% for discontinuation lasting more than 10 weeks [21]. This risk decreases if the reduction is very gradual and carefully managed, but a recurrence of symptoms remains common.

4.5. Study Limitations

This study has the limitations inherent to its retrospective, single-center design, notably the loss of numerous medical records due to insufficient archiving, as well as the absence of an inpatient service, which may have influenced the profile of patients managed exclusively on an outpatient basis.

5. Conclusion

Outpatient consultations are the first level of contact between patients and the medical team. Drug or psychotherapeutic treatment promoted the regression of psychiatric symptoms. This study shows a predominantly young and female population, with epilepsy and schizophrenia as the leading psychiatric diagnoses, and a time to consultation frequently exceeding one month. Well-conducted pharmacological and psychotherapeutic management is associated with a significant regression of mental disorders. Strengthening the human and material resources of the department, together with raising public awareness of the need for early care-seeking, appears to be important levers for improving mental health care in this region of Senegal.

Ethical Considerations

Data collection was carried out with strict confidentiality, and patient anonymity was respected throughout the study.

Author Contributions

Conceptualization: Ba, F. and Wandji, J.B.T.; methodology: Ba, F. and Wandji, J.B.T.; software: Guene, A.; validation: Ba, F., Wandji, J.B.T., Guene, A. and Ba, E.H.M.; formal analysis: X.X.; investigation: Wandji, J.B.T.; resources: Ba, F. and Wandji, J.B.T.; data curation: Wandji, J.B.T. and Guene, A.; writing—original draft preparation: Ba, F.; supervision: Ba, F.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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