Mental Retardation in Children and Teenagers in the Psychiatric Department of Conakry

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ABSTRACT

Introduction
Mental retardation is defined by the American Psychiatric Classification as a “significant below-average general intellectual functioning, occurring before the age of 18 and with limitations of adaptive functioning in many areas of ability such as communication, autonomy, school learning, social life, individual responsibility, work, leisure, health and safety.”

In this work, we sought to determine the prevalence, describe the socio-demographic profile and identify the clinical forms of mental delay in children and teenagers.

Materials and methods:
This descriptive transverse retrospective study of a duration of ten (10 years) from January 1, 2008 to December 31, 2017 involved 62 cases of patients suffering from mental retardation. Included in our study were records of patients of any sex and age admitted to the department who were diagnosed with mental delay regardless of their origin and who had a correctly completed record.

Results:
The prevalence of mental delay was 0.8%. The age group from 15 – 19 was the most represented equivalent to 56.5% and the average age of our patients was 9.5 years. Both sexes were affected with a male predominance of 66% versus 34% of females with a sex ratio of 1.9. The majority of our patients came from the city of Conakry (84% versus 16% from outside Conakry). The reasons for consultations were dominated by academic difficulties, i.e. 72.5%. Severe form was the most represented equivalent to 66.1%

Conclusion:
An extended study in the general population would be necessary for better care.

Key words: mental retardation–child–teenager–Conakry

1 INTRODUCTION:
The mental retardation is defined by the American Classification of Psychiatry as a "significant below-average general intellectual functioning, occurring before the age of 18 and with limitations of adaptive functioning in many areas of ability such as communication, autonomy, school learning, social life, individual responsibility, work, leisure, health and safety." The quantitative characterization of mental retardation is based on the measurement of the intelligence
from the respective [2].

20 and 35, between 35 and 50, and between 50 and 70, respectively [2].

Its etiology remains unknown in about 50% of cases [3]. But in general, it is caused by a condition or event that disrupts brain development before birth (prenatal), during birth (prenatal) or during childhood (postnatal) [4].

The proportion of mental retardations due to a chromosomal abnormality is currently estimated at 10-15% [5].

The installation of mental retardation is early and affects the main psychomotor acquisitions such as the holding of the head, the first smile, sitting, walking, the appearance of the first word, sphincter mastery [6].

Its diagnosis and severity are therefore approximated by the measurement of intellectual performance [7].

Mental retardation is a major public health problem that remains unappreciated, underestimated and little studied. It is also a heterogeneous pathology both clinically and genetically [8].

It manifests itself in all races and cultures [9].

Although the prevalence of mental retardation is extremely difficult to assess because of the strong socio-cultural connotation and the existence of biases in psychometric assessment, it is estimated to be between 2 and 3% of the general population [10].

In Quebec, 228,000 people live with an intellectual disability [11].

In France, in 2013, PATRICE B [12], in a study reported that 700,000 people suffered from intellectual disabilities.

In Africa, studies on mental retardation are rare. Thus in Togo, in 2003, KOLOU SD [13] in a study on the social profile of people with mental retardation aged from 4 to 18 in three health districts of Togo would be 47,000.

In this work, we sought to determine the prevalence, describe the socio-demographic profile and identify the clinical forms of mental retardation in children and teenagers.

2 MATERIALS AND METHODS:

Our study was conducted at the Psychiatry Department of Donka National Hospital, Conakry University Teaching Hospital. It is the only national reference center in the country for the management of mental and behavioral disorders, including cases of addiction. The data were collected using a data collection form, the consultation records and individual patient records.

This was a descriptive transverse retrospective study of a duration of ten years from January 1, 2008 to December 31, 2017 inclusively. Included in our study were patients of any sex and age admitted to the department for whom the diagnosis of mental retardation was made regardless of their origin and having a correctly completed file.

Table 1. Prevalence of mental retardation compared to other pathologies

| Pathologies                           | (%) |
|---------------------------------------|-----|
| Depression                            | 3147| 38.1|
| Mania                                 | 1950| 23.6|
| Delirious puffs                       | 932 | 11.3|
| Schizophrenia                         | 776 | 9.4 |
| Mental disorders of Epilepsy          | 438 | 5.3 |
| Dementia                              | 357 | 4.3 |
| Hallucinatory Psychosis               | 226 | 2.7 |
| Paranoid psychosis                    | 154 | 2   |
| Mental confusion                      | 143 | 1.7 |
| Mental retardation                    | 62  | 0.8 |
| Psychiatric manifestation of the puerperium | 36  | 0.5 |
| Infantile psychosis                   | 14  | 0.2 |
| Enuresis                              | 9   | 0.1 |
| Total                                 | 8244| 100 |

Table 2. Distribution of 62 patients by age group

| Age range | Number of cases | Percentage |
|-----------|----------------|------------|
| 0-4 Years | 2              | 3.2        |
| 5-9 Years | 6              | 9.7        |
| 10-14 Years | 19            | 30.6       |
| 15-19 Years | 35            | 56.5       |
| Total     | 62             | 100        |

Table 3. Distribution of 62 patients according to the level of education

| Level of Instruction | % |
|----------------------|---|
| None                 | 31 50 |
| Primary              | 30 48.4 |
| Secondary            | 1 1.6 |
| Total                | 62 100 |

3 RESULTS:

The prevalence rate of mental retardation in the department was 0.80% Table 1. The most affected age groups were from the age 10 to 14 and 15 to 19 with 30.6% and 56.5% Table 2. About the time between the beginning of the sickness and the first psychiatric consultation, 47% of our patients had time between the beginning of the disease and the first psychiatric consultation between 1 and 5 years. As for sex, we noted a male predominance of 66% against 34% of females with a sex ratio equal to 1.9. At the origin level, the majority of our patients came from the city of Conakry 84%, followed by 14% from the interior of the country, 2% from outside Guinea. Regarding the level of education, half of the patients had no level of education in their study Table 3. The unmarried people were the most numerous 95% then followed the married 5%. The most predominant reasons for consultation were school difficulties 72.5%, misunderstanding 69%
and language impairment 51.6% Table 4.

In cultural interpretation, mental retardation was considered as devil’s disease in 68% of such cases, as mental sickness 32% of cases. The severe form was the most found clinical form 66.1%, followed by the moderate form 19.7%, the deep form 9.7% and the light form 4.8% Figure 1.

**Table 4. Distribution of 62 patients by reason of consultation**

| Reasons for consultation | Number of cases | Percentage |
|--------------------------|-----------------|------------|
| Language disorder        | 32              | 51.6       |
| School Difficulty        | 45              | 72.5       |
| Hyperactivity            | 19              | 30.6       |
| Enuresis                 | 8               | 13         |
| Dysgraphia               | 5               | 8          |
| Incomprehension          | 43              | 69         |
| Total                    | 62              | 100        |

**Figure 1. Distribution of 62 patients by clinical form of mental retardation**

4 DISCUSSION:

During the study period 8244 patients consulted at the psychiatric department of the Donka National Hospital, Conakry University Hospital, among which 62 cases of mental retardation equivalent to 0.8% of hospital frequency.

BARRY IB. [14] in his medical doctorate thesis on mental disorders in refugee camps reported 1.17% mental retardation.

KOFFI KS and COLL [15] reported in their study of the epidemiological and clinical profiles of children with mental disabilities a rate of 33%.

This predominance of age group 5-14 can be explained by the lack of early detection or effective management of disability as in most African countries [16].

We found that the majority of our patients or 47% had a change before the first psychiatric consultation between one to five years (1-5 years) against 11% who had a change before the first psychiatric consultation greater than five years (5 years).

This result is explained by a misinterpretation of mental illnesses and leads to a therapeutic wandering. The use of specialized structures is late.

Both sexes were affected with a male predominance of 66% versus 34% of girls with a sex ratio H / F equal to 1.9.

SOTO-ARES.G and COLL [17] reported in their study on magnetic resonance imaging of non-specific mental retardation 58.02% male.

This inequality of distribution could be explained in one hand by the location in boys of the gene of mental retardation on the X chromosome [1].

The vast majority of our patients came from Lower Guinea (92% of cases), which could be explained by the fact that the psychiatry department that deals with mental disorders, including cases of addiction, is there.

In our study, half of our patients had no education at 50% and 48.4% had primary education. This result is comparable to those of DASSA.SK and COLL [16] and LAURENT [18] who reported respectively 54% and 25% out of school.

This result could be explained by the repercussions of mental retardation on school life due to cognitive difficulties encountered, a decrease in the speed of information processing and memory as well as all the problems of attentional control for learning.

In our study, singles were the most represented, 95.2% of cases followed by married couples 4.8%.

This high proportion of singles (bachelors) could be explained by the fact that most of our patients were children and teenagers so they were not old enough to get married.

Our study shows that mothers with a low level of education were the most represented at 62.9%.

This predominance of mothers with a low level of education is explained by the influence of the customs and traditions that hinder the schooling of girls, and those who go to school drop out of school to devote themselves to household chores.

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Academic difficulties, language disorders were the most represented reasons for consultation. DASSA.S.K and COLL [16] in their study reported 22.9% of speech impairments.

Our study found that 68% of parents and family members thought that mental retardation was synonymous with devil’s disease compared with 32% who gave no interpretation. This result could be explained by the impact of culture or tradition in mental health and the lack of awareness of psychopathological disorders.

In our study the most dominant form was the severe system with 66.1% followed by the average form with 19.4% the light form was the least represented with 4.8%.

This finding is contrary to that of GOLDENBERG.A and COLL [2] who reported in their study on genetic mental retardation that the light form was ten times more common than all other forms. This result would confirm the delay of consultation of our patients.

5 CONCLUSION:
Mental retardation is a major public health problem that remains unappreciated, underestimated and little studied in our communities.

We found a hospital frequency of 0.8% of cases. The age group of 5-14 years was the most affected with a predominance of the male sex. Most of our patients came from the city of Conakry.

Patients with no education levels were the most represented in this study (50%). This illness is often responsible of academic issues and leads to major disorders generally interpreted by the neighborhood as supernatural phenomenon or devil, hence the delay in medical care and the severe clinical form was the most common.

In view of all these factors, a broader study in the general population would be necessary for better care.

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