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## EPIDEMIO-CLINICAL PROFILE OF DEPRESSIONS SEEN AT THE PSYCHIATRIC USFR (HJRB) AND AT THE MENTAL HEALTH SECTION (EUSSPA) ANTANANARIVO

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### ABSTRACT

**Introduction:** Depression is one of the five most common diseases in the world, with a high degree of mortality related to suicide risk and also accompanied by a high degree of disability, depression is the main cause of DALY. Its clinical presentation differs according to the culture. Our study aims to describe its clinical presentation in Madagascar. **Methods and patients:** It is a prospective, observational and descriptive study over a 10-month period, from July 2013 to April 2014. 98 patients were retained. **Results:** The prevalence of depression is 12.34% female was the majority with a sex ration of 0.34 the mean age was 36.32 with extremes of 16 and 71 years. The majority of patients had a low socio-economic level (72%), married. They suffered chronically (more than 24 months) (47%) and the triggering factor was mainly conflicts (51%), the presentation was rather masked (65.4%), the main signs were sleep disorders (79%) followed by pain and somatic complaints (69%). more than 25% of patients had already consulted more than two doctors without being diagnosed. Only 10% of patients had received antidepressant treatment and the rest received only fortifiers and painkillers. More than half of our patients take toxic substances and 47% have stopped their socio-professional activities. **Conclusion:** Depression is very frequent in Madagascar, clinical presentations are mostly masked by somatic complaints. Health workers seem to have little knowledge and competence in this area. Government and political actions are needed

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## INTRODUCTION

Depression is a very varied illness or set of symptoms leading to a change in physical, psychological, social and professional functioning that breaks with the previous state and has been progressing for at least two weeks. Depression is one of the five most common diseases in the world, with a very high mortality rate and also accompanied by a high degree of disability and chronic psychosocial problems (Martin, 2010). The severity of depression lies mainly in the risk of suicide, as there is a clear correlation between depression and attempted

suicide, in the United States, 70% of adolescents suffering from a major depressive state displayed suicidal behaviour in the following three years (Myers, 1991). However, it remains an under-diagnosed and under-treated pathology (Clement, 1999). According to the World Health Organization (WHO), it affects 300 million people worldwide, an 18% increase from 2005 to 2015 (Brunier, 2017). In Madagascar, according to a study by Andriantseho et al, in Mahajanga province, depression affected 139 patients out of 376 or 37% (Andriantseho, 2004) in medical settings. In Madagascar,

epidemiological data on mental health are still insufficient and only concern a few provinces. Our aim in this study is to provide epidemiological data on the different clinical aspects of depression in the context of a developing country like Madagascar.

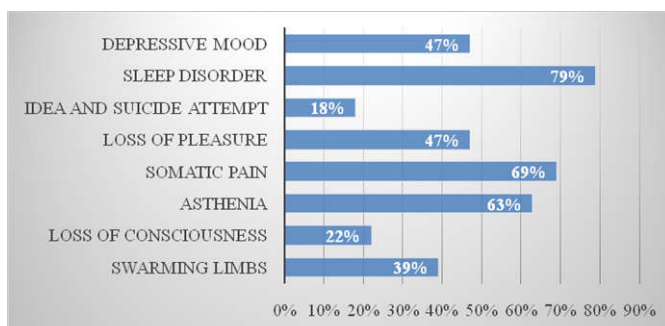
## MATERIALS AND METHODS

We conducted a descriptive prospective observational study over a period of 10 months from July 2013 to April 2014, conducted at the HJRB Psychiatry and Mental Health Department EUSSPA Antananarivo. We included in the study all patients 16 years of age and older, patients with typical signs of depression according to DSM-4, patients with somatic pain and complaints that are not due to specific somatic diseases, and we excluded from the study any incomplete records and patients who refuse to participate. Patients were recruited consecutively.

The parameters studied were: age, gender, occupation, education, marital status, residential area, clinical signs, history and Hamilton's depression scale.

## RESULTS

During the study period, we included 421 patients, representing an average of 12.46% of all patients who consulted (10.50% for EUSSPA and 18.45% for the HJRB Psychiatry USFR). 323 patients were excluded due to refusal to participate in the study and incomplete records. In the end, we retained 98 patients. The hospital prevalence of depression is 12.46%. The study population was predominantly female (N=72) with a sex ratio of 0.36. The age group between 36 and 45 years was the most affected with an average age of 36.32 years and the majority were in secondary school (59%). Patients with a low socioeconomic level were the most represented in our study with a rate of 72%. Regarding marital status, 47% were single and the majority of these patients were from urban areas (67%). Regarding the progression of the disease, 45% of our patients have been suffering from depression for more than 24 months. More than half (51%) of depressions were secondary to conflict (marital, emotional and family). Reactive or psychogenic depression was the most common, with 81% versus 19% of endogenous depressions. Compared to the clinical sign 58% of patients showed less than 5 signs, among his patients 14% of depressions were mono symptomatic. At the beginning, sleep disorders were the most common in 79% of cases, followed by somatic pain at 69% (Figure 1).



**Figure 1. Distribution by clinical signs presented by patients at entry**

Regarding somatic complaints, 57% of patients complained of headache and 14% of chest pain. As for sleep disorders, more than half of the sleep disorders (51%) were insomnia of falling asleep. Thirty-four point six percent of patients had typical signs of depression and 65.4% had rather atypical or masked signs. And the ratio of hidden depression to typical depression was 1.88/1. Forty-two decimal eight percent of patients suffered from moderate depression and 38.7% from mild depression and 18.3% from severe depression. Eighty-one percent had reactive or psychogenic depression compared to 19% of endogenous depressions. Ninety percent of our patients had already seen at least one doctor; 31% had received for treatment tonics, 12% anxiolytics, and only 10% of patients had received an antidepressant and 22% of patients had not received any treatment. Patients had stopped their socio-professional activities in 54% of cases.

## DISCUSSION

The hospital prevalence of depression was 12.46% among all patients (regardless of the reason for consultation or pathology). Other studies in France, Africa and Madagascar have found figures close to ours; Thus the prevalence of isolated depressive symptoms in general medicine varies between 9 and 20% in France according to CREDES in 2004 (Nemat, 2005). In Tunisia, the hospital prevalence of depression in 2013 is 10.83% over 12 months (Amamou, 2013). MarcellinAndriantseho in his community study in Madagascar in 2003 to find that the prevalence of depressive disorders is higher in Madagascar 18.5% (Andriantseho, 2008 and Andriantseho, 2003). Our study reveals that depression affects women more in 73% of cases compared to 27% of men for a sex ratio of 0.36. Amamou B et al in Tunisia found the same results with a female prevalence of 70.7% versus 29.3% male (Amamou, 2013); other studies along the same lines show that the risk of developing depression over the life course varies from 10 to 25% for women, and from 5 to 12% for men (Palazzolo, 2007). On the surface, women are therefore twice as affected as men. This prevalence of high depression in women is believed to be due to the fact that women are more open to talking about their difficulties and also to seeking help and solutions, which is completely contrary to men. In addition, factors related to hormonal variations would also play an important role in the prevalence of depressive illness. The age group between 36 and 45 years was the most affected with an average age of 36.32 years and is consistent with the MarcellinAndriantseho study in 2003 (Andriantseho, 2003) with extremes of 16 and 71 years, the most affected age group is 36-45 years. On the other hand, Amamou B. et al. in 2013 showed an average age of 43.4 years and the most affected age group is 26 to 61 years (Amamou, 2013). Moreover, a study in Canada in February 2006 shows that the most affected age group is 15 to 25 years and, according to the same study, this is due to the problem of unemployment and other life difficulties (Patten, 2006). This difference in age group would be due to cultural difference, Canada being a northern country where entry into the professional world and distance from the social home is much earlier than Madagascar, a developing country where the family nucleus is still very strong (Andriantseho, 2003). According to Scott B Patten in Canada, educational level has no influence on the prevalence of depression (Patten, 2006), and Amamou et al reinforced this hypothesis that educational level is not a determining factor in the occurrence of depression (Amamou, 2013).

The practitioner's review in 2005 showed that the profile of the depressed person in France is typically that of a woman with a low level of education (Nemat, 2005). This reconciles the results of our study, where 59% of our patients had only studied until secondary school. Concerning the socio-economic level, patients with a low socio-economic level were the most exposed (72%) and this is also reported by S Patten B in 2006 as follows: Low income could be the cause of major depression (Patten, 2006). As for marital status, 47% of patients were married. In Tunisia, Amamou et al found that 62% of their patients were married (Amamou, 2013). S Patten B in 2006, contrary to our results, found that married couples have the lowest prevalence of depression (Patten, 2006). In Madagascar, the family group is still relatively intact. This could be explained by society's view of a married or divorced woman is very different, a woman who suffers in her marriage simply divorces and moves on to something else in Western countries, whereas in our southern societies divorce is very badly seen, so that women who suffer in their marriages remain married and suffer chronic stress; chronic stress is a major depressive factor (Paykel, 1992). The majority of patients were from urban areas in 67% of cases. The study by Marcellin Andriantseheno in 2003 representative of the entire Malagasy population also found a higher rate in urban areas (Andriantseheno, 2003). Similarly, Amamou B and col in Tunisia found a similar result to our study, with a figure of 67.8% (Amamou, 2013). From a clinical point of view, the proportion of patients suffering from chronic depression in our study (more than 24 months) was 45% higher than 15 to 20% in the literature, this could be justified by the absence or delay or difficulty of making the diagnosis and management of patients in Madagascar and also the particular (masked) clinical forms.

More than half (51%) of depressions were secondary to conflicts (marital, emotional, family). Nongrum R et al. published in April 2014 in the Indian Psychomed Journal, that marital conflict (domestic violence) is strongly associated with the incidence of depression (Nongrum, 2014). It should also be noted that Madagascar has gone through a long socio-political and economic crisis of 5 years, which has increased the rate of poverty and social conflict. This would have increased the rate of stress and socio-family conflicts, thus explaining our results. Depending on the type of depression, 34.6% of patients had a typical clinical picture of depression and 65.4% of patients showed atypical signs or were masked by somatic complaints. An international WHO study in 14 countries shows, as in our study, that 45% to 95% of depressions occur in the form masked by a somatic complaint (Simon, 1999). In our series the ratio of masked depression to typical depression was 1.88/1. In Spain Enric Aragones et al in 2005 found a ratio of 0.8/1 (Enric Aragones, 2005). Several studies show that patients in southern countries are more likely to present somatic complaints than those in Western or developed countries (Kleinman, 1982 and Bhatt, 1989). The result of the WHO study (Simon, 1999), among 14 countries classified as type A centres is. i. e. high level of development and type B low level of development is identical to our result, according to the first definition of somatization, that the ratio of masked depression to typical depression is on average 1.8 in type B centres (low level of development) and 1.2 in those of type A (high level of development); it has been suggested that patients mask their depression by somatization in order to avoid feelings of guilt, responsibility, or the stigmatization, rejection and clichés of society towards the depressed (Goldberg, 1988).

One of the diagnostic criteria of DSM-4 (American Psychiatric Association, 1994) and ICD-10 is the number of signs in depressed patients. Thus at least 5 symptoms must be present for at least two weeks. In our study 58% had less than 5 signs. This could be justified by the fact that DSM-4 and ICD-10 describe more typical depressions and yet not all patients have typical forms of depression, particularly in the context (Bagayogo, 2013). The clinical signs presented in the foreground of our patients were dominated by sleep disorders (79%) followed by various somatic complaints (69%) and asthenia. It should be noted that depressed subjects often consult first-line for somatic disorders (Bhatt, 1989). Simon et al, examining the relationship between somatic complaints and depression in general practice for 26,000 patients in 14 countries, found, as in our study, that 69% of patients with depressive illness present only somatic complaints. Hispanic and Black Americans and Asians are more likely to make somatic complaints than Caucasians (Simon, 1999). Headache was largely the most commonly mentioned in our series with 57% of cases of somatic complaints, 14% of chest pain, 7% of digestive pain and 22% of other localizations. Enric Aragones et al. in 2005 in their studies found that 27% of their patients had headache and 47% lumbar pain, 24% extremity pain, 11% abdominal pain and 4% chest pain and 11% other locations (Brunier, 2017). The difference between the proportion of somatic complaint locations can be explained by the fact that each complaint and its location is a language to be interpreted according to its culture. For a Malagasy to have headaches would have another meaning and to be sick to the heart would have another meaning (Andriantseheno, 2003), than in a Frenchman or other for example. Goldberg et al points out that the somatic complaint is an "admission ticket" (call for attention) for health workers in front-line health centres (Goldberg, 1988). Insomnia is a key symptom of major depression: 80-90% of patients complain about it. It includes, to varying degrees, difficulty falling asleep, repeated nocturnal awakenings and, quite characteristically, an abnormally early awakening. In our series, 79% of our patients complained of sleep disorders, more than half of the sleep disorders were sleeplessness (51%). Mosko et al have shown that 67% of patients who present to the sleep laboratory report a depressive episode in the previous 5 years and 26% describe themselves as depressed (Mosko, 1989). Among the patients, 14% had mono symptomatic symptoms. Angst, in a prospective study in the general population of the Canton of Zurich, highlighted the frequency of short-term iterative depressive moments, which do not meet the criteria for a major depressive episode as defined by the DSM-III-R. This disorder causes more suicide attempts than unipolar depressions and its prevalence in the general population seems quite high. Until then, these patients were considered to be suffering from neurotic disorders with relational difficulties linked to a conflicting dimension of personality (Angst, 1990). This form of mono-symptomatic depression is also related to the tendency of Malagasy people to hide their suffering.

Among patients with depression 42.8% had moderate and severe depression 38.7% had mild depression and 18.3% suffered from severe depression. Aragones et al find that the somatically masked depressions as in our study are of mild to moderate intensity compared to typical depressions (Enric Aragones, 2005). Psychogenic depression is primarily a depressive reaction related to external stresses that exceed the subject's ability to adapt. These types of depression are mostly of moderate intensity (Spitzer, 1978). 81% of our patients had

reactive or psychogenic depression. Considering the factors that trigger depression in patients in our series, it seems logical that reactive depression is higher here in Madagascar. And also the stresses caused by the socio-political-economic crises of the last 5 years. The general practitioner is by far the first professional to be consulted when mental health symptoms occur (Lamboy, 2005). More than 90% of our patients had consulted at least one doctor without being diagnosed. According to Briffault et al, less than one in four people with depression who have consulted a general practitioner is diagnosed and treated appropriately (Briffault, 2009). The difficulty of diagnosing and managing depression is not only related to the doctor, but also depends on the patient's behaviour. The depressed patient does not spontaneously talk about his psychological problems (Nemat, 2005). Health professionals are often confronted with a difficult clinical picture because they are marked by incomplete or misleading and often masked symptoms. It is not mainly a problem of access to care but above all of little competence on the subject on the part of health professionals.

Only 10% of the patients in our study had received an antidepressant and 12% an anxiolytic, the majority of our patients had received only fortifiers (31%) and analgesics (25%) and 22% of the patients had not received any treatment. This result reinforces that of Marcellin Andriantseho in 2003, who noted that depression is particularly frequent and that the many syndromes encountered in clinics are attributed to magnesium deficiency, calcium deficiency or "overwork" (Andriantseho, 2003). Depression remains an under-diagnosed and under-treated condition as shown in the entire literature (Clement, 1999) and this in developed and affluent countries where 50 to 60% of depressions are not treated or even diagnosed. These errors and delays in diagnosis and treatment are serious because they involve not only the functional prognosis but also the vital prognosis of patients, this being linked to the risk of suicide (Myers, 1991) and they are one of the factors that would precipitate the transition to chronicity. More than half (56%) of our patients have had to stop their socio-professional activities because of depression. Several studies show, as in ours, that nearly half of depressed subjects present professional difficulties (absenteeism, reduced productivity, problems with colleagues). Among mental disorders, depression is the main cause of DALY (Disability-Adjusted Life Years). DALY represents a healthy life year that is lost (Andriantseho, 2004). Hence the importance of making an early diagnosis in order to initiate appropriate management.

## Conclusion

Depression is the main cause of DALY. However, it remains an under-diagnosed and under-treated condition in developed and affluent countries where 50 to 60% of depressions are untreated or even diagnosed. Its clinical presentation differs greatly depending on the socio-cultural context. Although our study is not representative of the entire general Malagasy population and was mainly observational and descriptive, the results showed that depression is a real major and frequent health problem. The majority of patients suffer from it chronically. This may be due to its clinical presentation, which is most often masked, and also to the fact that health workers have little knowledge and competence on the subject of depression. All this would increase the diagnostic and therapeutic difficulty of depression.

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