



(RESEARCH ARTICLE)



Covidophobia: Psychiatric and addiction impacts in patients in the psychiatry department of Toamasina Madagascar University Hospital

Herilanja Hiarenantsoa RATOBIMANANKASINA ^{1,*}, Fidelis Raphaël RANDRIANARIVO ², Bertille Hortense RAJAONARISON ³ and Adeline RAHARIVELO ³

¹ *Psychiatric Department, University Hospital Center of Analankininina Toamasina, Madagascar.*

² *Psychiatric Department, University Hospital Center of Majunga, Madagascar.*

³ *Faculty of Medicine, Antananarivo University, Madagascar.*

World Journal of Advanced Research and Reviews, 2022, 16(02), 016–021

Publication history: Received on 13 September 2022; revised on 25 October 2022; accepted on 27 October 2022

Article DOI: <https://doi.org/10.30574/wjarr.2022.16.2.1081>

Abstract

Introduction: The Covid-19 pandemic changes radically the modalities of care for almost worldwide hospitals, such as in the Psychiatry Department of the University Hospital of Analankininina Toamasina Madagascar. Phone exchanges reduced the transferal dimension of care approach, which is so important for patients treated in Psychiatric Department. The objective of this study is to describe the psychiatric and addictological impacts of the pandemic in patients in the Psychiatry Department Hospital of Toamasina Madagascar.

Methods: This is a single-center descriptive prospective study conducted in the Psychiatric Département of Analankininina Toamasina University Hospital, which is the only hospital reference for mental disorders in the eastern region of Madagascar. The population studied were made up of outpatients and those hospitalized from September 01st to October 31st, 2021, more specifically, after the first pandemic of Covid-19 infection and after the first Lock-down period. Were included patients having or not a Covid-19 infection and who presented psychological disorders, a depressive mood, anxiety disorders, obsessive-compulsive disorders or a delusional state, with or without psychiatric and addiction past. Were excluded patients whose authorization was not obtained. Questionnaires translated into the local dialect were used.

Results: Thirty patient cases were included with Male-Female equitability. The average age was 42 years old. The study showed the predominance of psychiatric disorders in low-income patients (56.66%), who had mainly moderate forms of Covid-19 infection (66.67%). The majority of them (93.33%) presented significant psychological disorders according to the Mental Health Inventory-5 (MHI-5) Scale. Depression mood was found in 26.67% of cases according to the Hospital Anxiety and Depression Scale. A significant proportion of patients (90%) presented pathologic anxiety according to the same scale. Post-Traumatic Stress Disorder was observed in 46.66% of patients, according to the PTD Check List DSM5 (PCL-5) Scale. An increase of alcohol and cigarettes addiction and heroin withdrawal precisely due to financial problems have been noticed.

Conclusion: Despite health restrictions due to spread of Covid-19 infections, contact and touch should always be at the heart of medical practice because according to traditional Malagasy belief, touch is synonymous of healing.

Keywords: Covidophobia; Psychiatric Disorders; Depression; Addiction; Toamasina

* Corresponding author: Herilanja Hiarenantsoa RATOBIMANANKASINA
Psychiatric Department, University Hospital Center of Analankininina Toamasina, Madagascar

1 Introduction

The Covid-19 pandemic had transformed almost modalities of Psychiatric care around the world, as in the Psychiatry Department of the Hospital Center of Analankinina Toamasina Madagascar. Teleconsultation to limit the number of hospitalizations and to enforce social distancing was required. However, phone exchanges reduced the transferal dimension of care, which is so important for patients treated in Psychiatry. Psychological disorders was felt in fragile patients. Physical and somatic suffering is often compensated. They are directly observed. However, psychological pain, which is sometimes hidden are then neglected. Or psychological suffering compromises somatic care and vice versa. If they are not correctly treated, residual personality disorders would be doubtful. The objectives are to describe through an observation study the psychiatric and addiction impacts of the pandemic in the patients of the Psychiatry Department of University Hospital of Analankinina Toamasina and to describe the methods of care and the clinical evolution of patients concerned.

1.1 Generalities

Covidphobia is an extreme and obsessive fear of infection and transmission of the virus and of contact with people infected by Covid-19 Virus.

In France, in April 2020, according to the COCLICO* Study (Coronavirus Containment Policies and Impact on the Population’s Mental Health) [1]: 33% of French people over the age of 18 questioned suffered from psychological issues during the first Lock-down period. In Madagascar, few official studies have been collected about this subject.

1.2 Health context in Toamasina Madagascar

Until this study, two periods of Covid-19 infections were happened in the Faritany of Toamasina. One period of lock-down was pronounced inbetween. Requisition and mobilization of Mental Health caregivers (Psychiatrists, Psychologists, Mental Health Nurses) in the other Faritany was also established with reinforcements from the Capital. Several appointments were cancelled. Patients were anxious to go to the hospital. Number of hospitalization was drastically decreased. Prioritization of care has been implemented

2 Methods

A single-center descriptive prospective study was conducted in the Psychiatric Department of University Hospital of Analankinina Toamasina, Madagascar, the only reference center for mental disorders in the eastern region of Madagascar. The population studied was the patients from external consultation and those hospitalized from September 01st to October 31st, 2021, precisely, after the first period of Covid-19 infection and after the first lock-down period.

Table 1 Rating scales

Scales	Exploration	Number of items	Maximal score	Meanings
Mental Health Inventory-5 MHI-5	Psychological troubles	5	100	Stress (< ou =52)
Hospital Anxiety and Depression	Depression mood	7	21	Certain depressive symptoms (> ou =11)
Hospital Anxiety and Depression	Anxiety	7	21	Certain anxiety symptoms (> ou =11)
PTD Check List DSM-5 (PCL-5)	Post-Traumatic Stress Disorder (PTSD)	5 points item	80	PTSD > 33
Oslo 3-item Social Support Scale OSSS-3	Social support	3	15	Low social support (<=8) Moderate social support (9-11) High social support (>=12) Feeling of loneliness (>5)

Consenting adult outpatients and/or hospitalized ones, suffering or not from Covid-19 infection and who presented psychological issues, depressive state, general anxiety disorders, delusional states, with or without psychological and drug-addiction histories were included. Patients not giving authorization were excluded. Questionnaires openly translated into the local dialect were used. Data was treated on Excel 2010.

The parameters studied were mainly the socio-demographic criteria of the patients, like the gender subdivided into Male and Female, the age with the average and the extremes, the actual financial statement categorized according to the narration of the patients like in comfortable, in average or in difficulty economic situation.

Then, the clinical form of Covid-19 infection was divided into simple, severe, or no infection. The psychiatric and addiction pasts of the patients were noticed. The level of psychological disorders at the time of the study was evaluated especially about the depressive state, the anxiety, the Post-Traumatic Stress State (PTSD), the level of addiction and the presence or the lack of social support. The rating scales have been described in Table 1.

Were also studied the methods of care, such as the pharmacological treatment and psychotherapy and finally the evolution of the patients after 3 months of survey.

3 Results

The number of patients included was n=30.

According to socio-demographic characteristics, the female gender was n=15 (50%) and the male gender n=15 (50%). The average age was 42 years-old with extremes from 18 to 66 years. Table 2 describes the distribution of patients according to their financial situation, clinical forms of Covid-19 infection, psychiatric history, clinical signs and level of social support.

Table 2 Distribution of patients according to their financial situation, clinical forms of Covid-19 infection, psychiatric history, clinical signals and level of social support

	Numbers (n)	Percentage (%)
Financial situation		
comfortable	39171	10 30 56,66 3,34
average		
hard		
no answer		
Clinical forms of Covid-19 infection		
simple	20	66,66 3,34 30
severe	1	
absence of infection	9	
Psychiatric history		
schizophrenia	5	16,66 20 63,34
anxiety disorder	6	
none	19	
Psychological distress		
yes	28	93,33 6,67
no	2	
Anxiety		

questionable	3	10
certain	27	90
Depression		
questionable	2	6,67 16,66
certain	5	
Post-Traumatic Stress State (PTSD)		
Yes	14	46,66 53,34
Nope	16	
Delusional state	1	3,33
Social support		
weak	20	66,67 13,33 20
moderate	4	
high	6	

Table 3 Distribution of patients according to their level of drug addiction compared with Covid-19 infection events

Products	Before Covid-19 infection	During Covid-19 infection	After Covid-19 infection
Alcohol	Moderate	Severe	Severe
Cigarettes	Moderate	Severe	Severe
Cannabis	Low	Low	Low
Héroïn	Severe	Abstinence and/or Withdrawal	Abstinence and/or Withdrawal

Table 4 Distribution of patients according to the treatment and the evolution after 3 monthsmonths of survey.

	Numbers (n)	Percentage (%)
Treatment		
CBT psychotherapy	30	100 46,66 6,67
anxiolytics	14	
antidepressants	2	
Evolution at 3 months	26	86,66 13,34
good residual anxiety	4	

Table 3 describes the level of drug addiction according to the DSM-5 scales compared with the events of Covid-19 infection. Table 4 reported the distribution of patients according to treatment and evolution after 3 months.

4 Discussion

Estrictio Concerning gender, an equivalence prevalence of men and women suffering from psychiatric disorders was observed in the study, just like published by Taylor and Co.

About the age, the average was 42 years-old, which is the same as published by the studies by Cheng and Co. The important access to social networks at this age would be the main cause.

According to the socio-economic level, the study demonstrated the predominance of psychiatric disorders in low-income patients (56.66%), which is also observed in Sweden by Lance M. McCracken and Co. Thus, joblessness could be a factor of high anxiety for vulnerable people.

About the clinical form of Covid-19 infections, the present study observed the preponderance of psychiatric and addiction impacts in patients who developed moderate forms of Covid-19 infections (66.67%). In fact, it was found by Brooks and Co. that the information disseminated about the number of healing patients from Covid-19 infection would have a weak impact on the level of perceived stress.

According to psychiatric history, the majority of patients in the study did not declare any particular psychiatric history. Studies by Mengin and Co. observed similarly. Then, it is possible that schizophrenic patients could have a positive feeling of "normalization of their behavior" during the lock-down period, because they are already used to live in a social isolation.

Concerning psychological distress, the majority of patients in the study (93.33%) presented significant psychological distress according to the Mental Health Inventory-5 (MHI-5) scale. In fact, according to McAlonan and Co., lock-down period would have caused more anger, irritability, frustration, guilt, helplessness, nervousness and avoidance behaviors.

Concerning depressive state, the study observed 8 cases (26.67%) according to the Hospital Anxiety and Depression scale. In India in the same period, Y. Krishnamoorthy and Co. found a prevalence of 42%.

Concerning anxiety, the majority of patients included in the study $n=27$, i.e. 90%, presented general anxiety disorder according to the Hospital Anxiety and Depression scale. In Italy, Gennaro Mazza and Co. observed a prevalence of 40% in the same period.

About Post-Traumatic Stress state, the present study found $n=14$, i.e. 46.66% of patients, according to the PTSD Check List DSM5 (PCL-5) scale. Blanc V. and Co. published that the duration of lock-down and the importance of the underlying somatic disorders would major the appearance of Post-traumatic Stress state in vulnerable patients.

Corresponding to social support, the present study demonstrated poor social support for patients with Covid-19 infection ($n = 20$, i.e. 66.66%). It was similar as the publication in China by Xiangyu Kong and Co. who found that the anxiety and stress levels of Covid-19 positive patients depended significantly on family support.

Concerning the level of addiction compared with Covid-19 pandemic, the study found an increase of the cases of addiction to alcohol and cigarettes and heroin withdrawal due precisely to a financial problem according to the narration of the patients. Like published by Volkow N. and Co., the rn of movement during lock-down period leads to forced drug withdrawal, craving and an increase of drug consumption if their access was possible during lock-down.

Finally, about the treatment, the patients in the study required the prescription of Medicines such as anxiolytics and anti-depressants, in addition with psychotherapy such as Cognitive and Behavioral Therapy (3 sessions averagely). According to Gerald JK and Co., depression and anxiety during Covid-19 infections induced global overconsumption of psychotropic drugs. Residual anxiousness state were observed 3 months after patient care.

5 Conclusion

Meeting, conference and conversation are the specifics of Psychiatric speciality. Some patients in the study said: "I feel listened during teleconsultations, but the doctor does not feel my emotions and my expressions". So, contact and touch should always be at the heart of medical practice because according to the traditional Malagasy belief, touch is synonymous of healing.

Compliance with ethical standards

Acknowledgments

We would like to thank our Masters, Specialists, Generalists and mental health nurses from the Psychiatric Department of Analankinina Toamasina University Madagascar for all the support they have provided during the preparation of this work.

Disclosure of conflict of interest

The authors declare no conflict of interest.

Statement of ethical approval

The present research work does not contain any studies performed on animals/humans subjects by any of the authors. Permission to conduct the study was obtained from Department of Psychiatry, Analankininina Toamasina University Hospital, Madagascar.

Statement of informed consent

Informed consent was obtained from the patient included in the study. The patient information was be kept confidential during and after study period.

References

- [1] Gandré, C. and Coldefy, M. and Rochereau, T. Les inégalités face au risque de détresse psychologique pendant le confinement - Premiers résultats de l'enquête COCLICO du 3 au 14 avril 2020. 2020 <https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/249-lesinegalites-%20face-au-risque-de-detresse-psychologique-pendant-le-confinementpremiers-%20resultats-enquete-coclico.pdf>
- [2] Taylor MR, Agho, KE, Stevens, GJ, & Raphael, B. Factors influencing psychological distress during a disease epidemic: data from Australia's first outbreak of equine influenza. *BMC public health*, 2008; 8(1):347.
- [3] Cheng, C, Jun, H, Liang, B. Psychological health diathesis assessment system: A nationwide survey of resilient trait scale for Chinese adults. *Stud. Psychol. Behav.* 2014; 12:735–742.
- [4] Lance M. McCracken Psychological impact of COVID-19 in the Swedish population: Depression, anxiety, and insomnia and their associations to risk and vulnerability factors <https://doi.org/10.1192/j.eurpsy.2020.81>
- [5] Brooks, SK, Webster, RK, Smith, LE, Woodland, L, Wessely, S, Greenberg, N, & Rubin, GJ. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*. 2020.
- [6] Mengin, A, Alle, M, Rolling, J, Ligier, F, Schroder, C, Lalanne, L, & Brunault, P. Conséquences psychopathologiques du confinement. *L'encephale*. 2020.
- [7] McAlonan, GM, Lee, AM, Cheung, V, Cheung, C, Tsang, KW, Sham, PC, & Wong, JG. Immediate and sustained psychological impact of an emerging infectious disease outbreak on health care workers. *The Canadian Journal of Psychiatry*, 2007; 52(4):241-247.
- [8] Y. Krishnamoorthy, et al. Prevalence of psychological morbidities among general population, healthcare workers and COVID-19 patients amidst the COVID-19 pandemic: A systematic. Repéré sur : review and meta-analysis <https://doi.org/10.1016/j.psychres.2020.113382>
- [9] Gennaro Mazza, M, De Lorenzo, R, Conte, C, Poletti, S, Vai, B, Bollettini, I, Benedetti, F. 2020. Anxiety and depression in COVID-19 survivors: role of inflammatory and clinical predictors. *Brain, Behavior, and Immunity*. [doi:10.1016/j.bbi.2020.07.037](https://doi.org/10.1016/j.bbi.2020.07.037)
- [10] Blanc, V, & Gaudriault, P. Abstinence, ennui et dépendance. *Cliniques*, 2014 ; (1):52-65.
- [11] Xiangyu Kong^{1*}, Kailian Zheng^{1*}, Min Tang^{1*}, Fanyang Kong^{2*}, Jiahuan Zhou^{4*}, Le Diao⁴, Shouxin Wu⁴, Piqi Jiao¹, Tong Su², Yuchao Dong¹. Prevalence and Factors Associated with Depression and Anxiety of Hospitalized Patients with COVID19 <https://doi.org/10.1101/2020.03.24.20043075>
- [12] Volkow, ND. Collision of the COVID-19 and addiction epidemics. 2020.
- [13] Gerald JK, Carr TF, Wei CY, et al. A Marker of Psychological Distress? *J Allergy Clin Immunol Pract* 2015; 3(6):957–62.