

## Perception of COVID-19 by the Mentally ill Patients

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### Abstract

### Original Research Article

**Background:** Patients with mental illness constitute a population at risk of being easily infected by corona virus (COVID-19), and they can also spread the infection to others by neglecting protective measures. The confrontation of this pandemic depends above all on their adherence to barrier measures, largely affected by their knowledge, perception and practices. **Objectives:** This work aimed to assess the perception of COVID-19 in patients with mental illness; by conducting a survey on their knowledge, attitudes and practices. **Methods:** This is a descriptive cross-sectional study. 118 consultant patients with schizophrenia, bipolar disorder or chronic delusional disorder agreed to participate in the study. It was conducted at the psychiatric university department at Ibn Nafis hospital in Marrakech, during the month of October 2020. We used a pre-established questionnaire. The choice of patients was made given the frequency of perception disorders, cognitive deficit and inappropriate behaviors. **Results:** The mean age of the participants was 38 years. The majority were male (64%), single (56%), with a low level of education (32%). The patient's average COVID-19 knowledge score was 9.27, suggesting an overall correct answer rate of 71% on this knowledge test. Almost a quarter of the patients did have a poor knowledge of COVID-19 (30%). Notably, more than half of the patients surveyed (62%) were not aware that there are asymptomatic forms of COVID-19 infection, and that there are no specific treatment or vaccine against COVID-19 currently. Two-thirds of patients (63%) considered COVID-19 infection to be a serious and dangerous illness, twenty-five patients (21%) had given no comments, nine patients (8%) believed that it was a conspiracy, six patients (5%) thought it was a devil and four patients (3%) thought it was a lie. In terms of attitudes, more than half of the patients surveyed had expressed their fear when thinking of COVID-19, and the majority of patients (90%) were convinced that hand washing, distancing and wearing a mask protect them against COVID-19. The assessment of practices showed that 64% of patients left their homes during confinement; however, almost 46% of patients did not wear their masks, did not wash their hands frequently, and did not follow distancing measures when going outside. **Conclusion:** Our study showed that these patients have a lack of knowledge about COVID-19 compared to the general population. This could influence their perception and therefore affect their daily behaviors and practices towards this disease.

**Keywords:** COVID-19, perception, mental illness.

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## INTRODUCTION

Since the emergence of the new coronavirus disease (COVID-19) in China in late 2019, it has spread rapidly around the world, resulting in a very significant morbi-mortality. It was declared an international pandemic on March 11, 2020 by the World Health Organization (WHO) [1]. The first case of COVID-19 in Morocco was reported on March 3, 2020, involving a Moroccan citizen from Italy [2]. As part of public health interventions to reduce the rate of transmission,

the Moroccan government declared a health emergency with traffic restrictions on 20 March 2020 and strict lockdown at home [3]. This situation also required the implementation of programs to raise awareness of barrier actions and COVID-19 prevention measures, such as mask wearing and hygienic measures, through the targeted chains, radio and social networks.

To date, there is no cure for COVID-19. In addition, clinical trials of vaccines have not yet been

completed. The challenge of this pandemic depends primarily on public buy-in to infection control measures, which are greatly affected by their knowledge, perception and practices [4, 5].

Global attention has focused primarily on the emotional impact on COVID-19 patients, healthcare professionals and the general public [6, 7]. However, the concerns of patients with mental illness have not been addressed. These patients are at risk of being easily infected and can also transmit the infection to others by neglecting preventative measures [8, 9]. This is why our work aims to assess the perception of COVID-19 among patients with mental illness by investigating their knowledge, attitudes and practices regarding COVID-19.

## MATERIALS AND METHODS

This is a cross-sectional, descriptive study carried out in 118 consulting patients followed for schizophrenia, bipolar disorder or chronic delirious disorder, at the Ibn Nafiss hospital at CHU Med VI in Marrakech, during the month of October 2020. We used a pre-established questionnaire after obtaining verbal consent from the patients interviewed.

This questionnaire consists of 5 parts: 1) Socio-demographic data of patients including age, sex, marital status, educational level, occupation, socio-economic status and living environment; 2) Patient history; 3) Knowledge about COVID-19; 4) Attitudes to COVID-19; and 5) Practices relevant to COVID-19.

The COVID-19 Knowledge Assessment consists of 15 questions, two of which were open-ended and 13 questions had the answer option of "True", "False" or "I don't know". A point is assigned to each correct response, while an incorrect or uncertain response is assigned to 0 points. The total score ranged from 0 to 13. A high score indicates a better knowledge of COVID-19.

To assess attitudes and practices around COVID-19, patients were asked questions that answered "yes" or "no".

Patients were chosen because of the frequency:

- ✓ Perceptual disorders
- ✓ cognitive impairment
- ✓ Inappropriate behavior

The inclusion criteria were:

- a) Age > 18 years
- b) Diagnosis: schizophrenia, bipolar disorder or chronic delirious disorder according to DSM V classification
- c) A minimum change of one year
- d) Clinically stable patients in the last 3 months (clinical stabilization was defined as no therapeutic

change and no hospitalization in the last 3 months prior to the study).

## RESULTS

### 1. Socio-demographic data:

A total of 118 patients were included in our study. The average age was 38 (18-63), the majority of patients were male (64%), single (56%), could not pass college in their studies (69%), and had no work (64%). The diagnoses found were schizophrenia in 59% of patients, a bipolar disorder in 29% and a chronic delusional disorder in 12% respectively. The medical comorbidities observed were high blood pressure (hypertension) in 4% of patients, diabetes 4%, epilepsy 4%, and coronary artery disease 2% (Table 1).

### 2. Knowledge Assessment:

The average patient knowledge score for COVID-19 was 9.27, suggesting an overall good answer rate of 71% on this knowledge test. The majority of patients (90%) were aware of COVID-19.

When the level of knowledge was classified according to the score, poor knowledge corresponded to score  $\leq 10$ , average knowledge to score between 11 and 14 and good knowledge referred to score  $> 14$ . Accordingly, the number of participants with poor, average and good knowledge was 36 (30%), 70 (60%) and 12 (10%), respectively (figure 1).

More than 80% of patients were also aware of the mode of transmission, the means of prevention, and the need to seek medical attention in the event of an onset of COVID-19 symptoms. Twenty-six patients were unaware of the symptoms of COVID-19 (22%). More than half of the patients interviewed were not aware that there are asymptomatic forms of COVID-19 infection, which young subjects must take precautions despite their good immunity, and there is currently no specific treatment or vaccine for COVID-19.

Two-thirds of patients (63%) considered COVID-19 to be a serious and dangerous illness, twenty-five patients (21%) gave no feedback, nine patients (8%) believed it was a conspiracy, six patients (5%) considered him a devil and four patients (3%) thought he was a lie.

### 3. Attitude Assessment

More than half of the patients interviewed expressed fear about COVID-19 (55%). More than a quarter of patients (27%) thought they were at higher risk of being infected with COVID-19 by being mentally ill. The majority of patients (90%) believed that hand washing, distancing and wearing masks protect them from COVID-19, and that containment helps control the spread of COVID-19. More than one-third of patients (39%) thought they were at higher risk of COVID-19 in hospital compared to other public places.

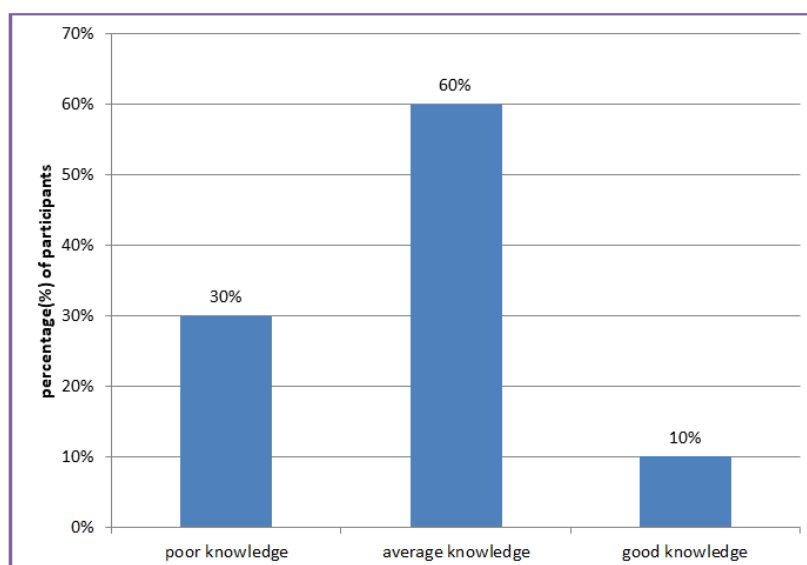
#### 4. Practice Evaluation

Almost two-thirds of the patients surveyed (64%) were discharged from their homes during the lockdown. Among them, 32% went out for a walk and 44% went to the pharmacy to buy their treatment. However, almost half of the patients did not wear their masks, did not wash their hands frequently, and did not follow distancing measures when going outside during

the lockdown. Regarding the management of psychiatric pathology, the majority of patients (90%) took their treatment regularly. Patients also reported other protective measures: the consumption of thyme in two patients, the consumption of olive oil in one patient, praying to God and reading the Qur'an in four patients.

**Table 1: Sociodemographic variables**

	Number of Patients (n)	Frequency (%)
<b>Gender</b>		
Male	76	64
Female	42	36
<b>Marital status</b>		
Single	66	56
Married	32	27
Divorced	18	15
Widowed	2	2
<b>Educational background</b>		
illiterate	16	13
Primary	38	32
Middle School	28	24
High School	20	17
University	16	14
<b>occupation</b>		
employee	42	36
jobless	76	64
<b>Previous medical history</b>		
Epilepsy	4	4
Diabetes	4	4
HTA	4	4
Heart disease	2	2
<b>Diagnosis</b>		
Schizophrenia	70	59
Bipolar disorder	34	29
Chronic Delusional Disorder	14	12



**Figure 1: Bar diagram showing percentage of participants with poor knowledge (total knowledge score  $\leq 10$ ), average knowledge (total knowledge score 11-14) and good knowledge (total knowledge score  $> 14$ )**

## DISCUSSION

This study shows that all patients with mental illness had heard of COVID-19. Almost a quarter of them did have a poor knowledge of COVID-19 (30%), including symptoms, modes of transmission and prevention. A study in India reported a low level of knowledge in 72% of patients with severe mental illness, of which 8.3% were completely unaware of the COVID-19 epidemic [10]. This study was conducted at the very beginning of the pandemic, which could explain the difference in the results found compared to our study. According to an online survey of Moroccan citizens' attitudes to the COVID-19 pandemic, conducted during September 2020, the majority of respondents were aware of COVID-19 symptoms (96%) and modes of transmission (95%) [11]. A similar high level of knowledge among the general population has been observed in other countries: such as Saudi Arabia (good knowledge 90.7%) and China (good knowledge 90%) [12, 13]. The low level of knowledge in these patients with mental illness may be due to negative symptoms, cognitive impairment or relapse of psychiatric symptoms.

More than half of the patients in our study expressed their fear of COVID-19 as a serious illness, while other patients had no perception, or perceived it as a conspiracy, a devil or a lie. This perception is also reported among the general population in Morocco; of which 33% of citizens thought it were a mystical disease and 5% thought it was a fake virus [11]. This may be related to uncertainty and lack of knowledge about COVID-19, as this is a new health issue without curative treatment. This perception could also be related to patients' religious beliefs. The reduction of uncertainty through clear information is strongly advocated [14].

Almost a quarter of patients thought they were at higher risk of being infected with COVID-19 by being mentally ill, and 39% thought they were at higher risk at the hospital level. This could have a negative impact on the management of patients, since they avoided coming to their psychiatric appointment. Despite this, only ten percent of patients were poorly observed. This could be explained by the facilities applied by the Ministry of Health during the lockdown for proxy treatment; by the extension of the validity of prescriptions prescribed before the lockdown. According to Muruganandam *et al.*, twenty-two percent of the mentally ill have stopped their psychiatric treatment because of the unavailability of drugs, the absence of means of transport, strict restrictions on confinement, the psychiatric relapse that makes patients not-co-operators and the fear of COVID-19 [10].

In terms of practice, forty-six percent of patients in our study did not meet COVID-19 protections, and almost one-third of patients reported unreasonable exits during lockdown. Several factors are

associated with the practice of COVID-19 preventative behaviors: fear, level of knowledge and trust in sources of information [15]. According to Chang *et al.*, patients with mental illness generally suffer from poor mood control and cognitive impairment, which can lead to difficulties in practicing preventive behaviors [16].

Based on the results of our study, we can recommend:

- ✓ The urgent need to create awareness programs that primarily target this vulnerable population to further prevent the spread of COVID-19, given the lack of knowledge about its severity.
- ✓ The need for continuity of psychiatric interventions during pandemics for prevention and management of relapses.
- ✓ The establishment of a structured protocol for managing the management of the mentally ill during infectious pandemics in the future.
- ✓ Patient awareness of COVID-19 practices should be part of the psychiatric counselling program.

## CONCLUSION

The mentally ill are a vulnerable population, who are at high risk for infectious diseases in general, including COVID-19. Our study showed that these patients have a lack of knowledge about COVID-19 relative to the general population. This could influence their perception of COVID-19 and therefore negatively impact their daily behaviors and practices in dealing with this disease.

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