

COVID-19 vaccine acceptance, hesitancy, and associated factors among patients attending an outpatient psychiatry clinic at a teaching hospital in North Central Province, Sri Lanka

A Ellepola

Abstract

Background

Vaccination of people against COVID-19 infection has shown success in limiting the complications of the infection. Certain populations such as people with psychiatric illnesses are found to be vulnerable to develop COVID-19 and its complications.

Aims

The objectives of this study were to determine the vaccine acceptance or hesitancy and their determinants among patients taking treatment for psychiatric disorders at the psychiatry clinic of a teaching hospital in North Central Province, Sri Lanka.

Methods

Consenting patients among those who were attending the psychiatry clinic were administered a semi-structured questionnaire to determine the vaccine acceptance or hesitancy in obtaining the vaccination, and their determinants.

Results

The majority (>89%) of the study population had accepted the COVID vaccine. The majority (>90%) of the patients who rejected the vaccine were less than 25 years and had refused it due to the fear of its side effects and doubts about the safety of the vaccine.

Conclusions

All stakeholders should take extra efforts to target the younger population with psychiatric illnesses to educate them regarding the safety and side effects of the COVID vaccines to maximize the vaccination rates and also prevent the occurrence of COVID-19 infection and its complications.

Key words: COVID-19 vaccination, vaccine acceptance, vaccination hesitancy, mental illness

SL J Psychiatry 2022; 13(2): 36-39

Introduction

People with psychiatric disorders, especially severe mental illnesses, are reported to be associated with an increased risk of developing severe acute respiratory syndrome (SARS) related to COVID-19 and its complications (1). Therefore, the vaccination of people with mental illnesses is being considered a public health priority in other countries (1, 2).

Research conducted among the general population in other countries has shown hesitancy in receiving the vaccine due to its side effects or doubts about its safety and efficacy (3). A survey done in Sri Lanka from December 2020 to January 2021 reports that 86% of the respondents accepted the vaccine, while 9% refused the vaccine (4). A study conducted in 2020 surveying 13,426

people in 19 countries concluded that 71.5% of participants reported that they would be likely to take a COVID-19 vaccine, and 48.1% reported that they would adhere to the recommendations of employers related to the vaccine (5). It was highlighted that the higher levels of trust in information sources and recommendations of the employers were reasons which were associated with the likelihood of a person accepting the COVID vaccine (5).

A study conducted in Denmark demonstrated that people with psychiatric disorders demonstrated a slightly lower willingness in receiving the vaccine when compared with the general population (6). On the other hand, a study conducted in Belgium reported that 93% of the patients with psychiatric conditions had accepted the vaccine

while, 88.9% and 61.6% of the general population had received their first vaccine dose, and full vaccination respectively (7).

It is important to understand the vaccination acceptance trends among people with mental illnesses as it will help the authorities to improve vaccination campaigns targeting vulnerable groups.

To the best of the author’s knowledge, there are no published research about the COVID-19 vaccine acceptance and/or hesitancy among persons with psychiatric illnesses in Sri Lanka. Therefore, this survey was conducted to study the COVID-19 vaccine acceptance and hesitancy rates and their determinants among patients attending outpatient psychiatric services at the Teaching Hospital, Anuradhapura, Sri Lanka.

Methods

This study was conducted among a group of patients attending the psychiatry outpatient clinic at the Teaching Hospital, Anuradhapura, Sri Lanka from 1st of February 2022 to 1st of April 2022. A systematic random selection method was used to sample every third patient attending the service. Patients above the age of 18 years who were able to provide written informed consent were recruited for the study. The ethical approval for the study was obtained from the Ethics Review Committee of the National Institute of Mental Health, Sri Lanka.

Those who consented to participate were requested to complete an interviewer-administered semi-structured questionnaire prepared by the author to determine the acceptance of the vaccination or hesitance to receive it and their determinants. The data was analyzed using SPSS 28.0.1.0 (142) version. Descriptive statistics and cross tabulations were used in analyzing and presenting the data.

Results

The study sample consisted of 101 individuals, and 48 (47.5%) were males. A quarter of the sample (25.7%) was in the age range of 16 to 25 years (Table 1).

Out of the sample, 37.6% were on treatment for depression and 68.3% were receiving follow up care for one to five years from the outpatient clinic (Table 2).

Eleven patients had not received at least one dose of the vaccine, while 43.6%, 38.6% and 6.9% had received two doses, two doses plus the booster and one dose respectively (Table 3).

Out of the participants, 44.6% were self-motivated to receive the vaccine, while the rest of the patients were influenced by family (21.8%), employer (13.9%), media (6.9%) and awareness programs (1%). Most of the patients (82.2%) had taken the vaccine willingly.

There were six females and five males among the 11 patients who had not received the vaccine and 10 out of the 11 of them were in the age category of 16 to 25 years (Table 4). Seven of them were students. All the patients who did not accept the vaccine had an educational level above grade 10. The primary diagnoses of the patients who had not received at least one dose of the vaccine were schizophrenia, depressive disorder, substance dependence or an anxiety disorder.

The main reasons for their hesitancy to accept the vaccine were fear of side effects and doubts about its safety. The vaccine had not been received due to fear of side effects in 8.9%, doubts about its safety 6.9%, feeling that it is not necessary 3%, mixed information on social media 3% and myths 1%.

Age in years	Number	Percentage %
16-25	24	27.6
26-35	18	20.7
36-45	22	25.3
46-55	8	9.2
56-65	7	8.0
>65	8	9.2
Total	87	100.0

Table 2. Psychiatric diagnosis of the study population		
Psychiatric diagnosis	Number	Percentage %
Depression	38	37.6
Schizophrenia	20	19.8
Substance dependence	13	12.9
Anxiety disorder	8	7.9
Bipolar affective disorder	6	5.9
Obsessive compulsive disorder	5	5.0
Dementia	4	4.0
Adjustment disorder	2	2.0
Morbid jealousy	2	2.0
Delusional disorder	1	1.0
Intellectual disability	1	1.0
Impulse control disorder	1	1.0
Total	101	100.0

Table 3. Acceptance of the vaccine		
Number of vaccine doses received	Number	Percentage %
None	11	10.9
1 dose	7	6.9
2 doses	44	43.6
2 doses plus booster	39	38.6
Total	101	100.0

Table 4. Age and vaccine acceptance among the population						
		None	1 dose	2 doses	2 doses plus booster	Total
Age categories in years	16-25	10	6	8	2	26
	26-35	1	1	14	5	21
	36-45	0	0	12	12	24
	46-55	0	0	6	4	10
	56-65	0	0	2	7	9
	>65	0	0	2	9	11
Total		11	7	44	39	101

Discussion

The current study is the first of its kind looking into the acceptance and hesitancy of receiving the COVID vaccine and their possible determinants among patients with psychiatric disorders in Sri Lanka. The results of the survey showed that there was a high vaccination acceptance among the study population.

Most of the people who refused the vaccine were in the age group of 16 to 25 years and had an educational level of ordinary level or beyond. Fear of side effects and doubts about safety prevented them from taking the vaccine. Most of the patients who accepted the vaccine were self-motivated and had taken the vaccine willingly.

The acceptance rate of the COVID-19 vaccine has been highly variable around the world ranging from 90% in China to less than 55% in Russia while the figures from Sri Lanka are around 86% (3, 4). A large online survey in 2020 and 2021 examined the levels and predictors of acceptance of COVID-19 vaccine in Denmark, France, Germany, Hungary, Sweden, Italy, the United Kingdom, and the USA (total N=18 231). The data showed large variations in vaccine acceptance ranging from 83% in Denmark to 47% in France and Hungary. Poor vaccine acceptance was found to be associated with a lack of trust in authorities and scientists, conspiratorial thinking, and a lack of concern about COVID-19 (8).

Limitations

The sample included patients attending outpatient psychiatric services only, therefore results may vary from patients from acute inpatient care, rehabilitation, and private sectors.

Conclusions

Information on vaccine acceptance in vulnerable groups is important for policy makers. A large, nationwide quantitative research will provide a better understanding regarding this matter.

Conflicts of interest


None.

Funding

Self-funded.

A Ellepola, Teaching Hospital, Anuradhapura, Sri Lanka

E-mail: anu.ellepola@gmail.com

 <http://orcid.org/0000-0001-9699-2777>

References

1. Mazereel V, Assche K, Detraux J, De Hert M. COVID-19 vaccination for people with severe mental illness: why, what, and how? *Lancet Psychiatry* 2021; 8(5): 444-50.
2. De Picker LJ, Dias MC, Benros ME, et al. Severe mental illness, and European COVID-19 vaccination strategies. *Lancet Psychiatry* 2021; 8(5): 356-9.
3. Sallam M. COVID-19 vaccine hesitancy worldwide: a concise systematic review of vaccine acceptance rates. *Vaccines (Basel)* 2021; 9(2): 160.
4. Wijesekara NWANY, Kodithuwakku KALC, Bulathsinghe BAMP, Sachinthani JPT, Lakshani MMM. Eighty-six percent of Sri Lankans wish to receive COVID-19 vaccine: a window of opportunity for rolling out a successful vaccination campaign. *Int J Commun Resilience* 2021.
5. Lazarus JV, Ratzan SC, Palayew A, et al. A global survey of potential acceptance of a COVID-19 vaccine. *Nat Med* 2021; 27(2): 225-8.
6. Jepsen OH, Kølbæk P, Gil Y, et al. COVID-19 vaccine willingness among patients with mental illness compared with the general population. *Acta Neuropsychiatr* 2021; 33(5): 273-6.
7. Mazereel V, Vanbrabant T, Desplenter F, De Hert M. COVID-19 vaccine uptake in patients with psychiatric disorders admitted to or residing in a university psychiatric hospital. *Lancet Psychiatry* 2021; 8(10): 860-1.
8. Lindholt MF, Jørgensen F, Bor A, Petersen MB. Public acceptance of COVID-19 vaccines: cross-national evidence on levels and individual-level predictors using observational data. *BMJ Open* 2020-048172; 11(6): e048172.