

RESEARCH ARTICLE

## Assessment of Covid-19 Obsession Among Hospital Workers in Jos-South LGA Plateau State Nigeria

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### Abstract

The research assess COVID-19 obsession among hospital workers in Jos-South local government area of Plateau State Nigeria. A total of 162 hospital workers (82, 50.6% males and 80, 49.4% females) with mean age of 34.01 participated in this survey research. Four hypotheses were tested utilizing Chi-square at  $p = 0.05$  level of significance, result revealed that older hospital workers had higher prevalence of COVID-19 obsession compared to younger hospital worker,  $\chi^2 = 6.139$ ,  $df = 1$ ,  $p = 0.013$  ( $p < 0.05$ ). The prevalence of COVID-19 obsession did not differ among hospital workers in terms of gender,  $\chi^2 = 0.009$ ,  $df = 1$ ,  $p = 0.924$  ( $p > 0.05$ ). Furthermore, results revealed that hospital workers with tertiary education had higher prevalence of COVID-19 obsession compared to those with lower educational status,  $\chi^2 = 7.168$ ,  $df = 3$ ,  $p = 0.028$  ( $p < 0.05$ ). Finally, prevalence of COVID-19 obsession did not differ among hospital workers in terms of marital status,  $\chi^2 = 6.996$ ,  $df = 3$ ,  $p = 0.072$  ( $p > 0.05$ ). The authors concluded that more attention should be given to hospital workers in terms of policy formulation being that they are at the forefront in the fight against COVID-19. Also, there is need for setting up of psychological service centres across hospitals in Nigeria which would go a long way in not just evaluating the mental health status of hospital workers in relation to COVID-19 but it will be beneficial to the general public in assessing psychology services easily.

**Keywords:** Covid-19; Obsession; Hospital Workers; Prevalence

### Introduction

Corona virus (COVID-19) is a pandemic that has affected the whole world, health workers are more exposed to the danger of being infected with the virus. Globally, health workers are working round the clock on finding a lasting solution to COVID-19. Due to the nature of the virus and adherence to COVID-19 protocol, people are becoming obsessed due to the virus. The virus, COVID-19 was reported in Wuhan, China, at the end of 2019 (Lu, Stratton, & Tang, 2020). The mental health status of individuals should be taken into consideration during and after the COVID-19 pandemic (Saleh, Arobo, Abel, Ibrahim, Damilep, Dakama & Terry, 2020). The manner at which an individual can be infected with COVID-19 is enough reason for people to be scared of the virus. The spread of COVID-19 has lead to frequent hand washing in line with COVID-19 safety protocol. Thus, the researchers in this study are interested in assessing COVID-19 obsession among health workers, with emphasis on understanding the prevalence of COVID-19 obsession among health workers in relation to age, gender, educational status and marital status. Benatti, Albert, Maina, Fiorillo, Celebre and Nicolaia (2020) reported obsessions and compulsions relating to COVID-19 to include frequent internet checking, avoidance behaviours, work difficulties and sleep

disturbances. Among health workers in a South-Eastern Nigerian state, Mbachu, Azubuike, Mbachu, Ndukwu, Ezeuko, Udigwe, Nnamani, Umeh, Ezeagwuna, Onah, Eze, Okereke, and Orji-Ifeanyi, (2020) reported that fear of death and lack of personal protective equipment had strong impact on healthcare workers attitude, with female healthcare workers having poor attitude to work than their male counterparts. According to Lu, et al (2020), the growing number of cases, deaths and fear in relation to COVID-19 have spread around the world as COVID-19 continues to dominate the world's attention. Coronavirus disease 2019 has significant morbidity and mortality (Alhousseini, Sajid, Altayeb, Alyousof, Alsheikh, Alqahtani & Alsomali, 2021). According to Jelinek, Moritz, Miegel and Voderholzer (2021) outbreak of COVID-19 have exposed large percentage of the world to multiple burdens, such as risk of social isolation, infection and economic insecurity.

Females were more likely to experience psychological distress among health workers (Felice, Tanna & Grossi, 2020). Similarly, Shaukat, Ali and Razzak (2020) reported that female health workers and nurses were disproportionately affected by COVID-19 obsession. Being female was significantly associated with having moderate/high stress (Saeed, Shabila & Aziz, 2020). Similarly, in a study among health service providers in Nepal, Kafle, Shrestha, Baniya, Lamichhane, Gurung,

Tandan, Ghimire and Budhathoki, (2021) reported that females and participants who were doctors experience more distress. Contrarily, Oginni, Oloniniyi, Ibigbami, Ugo, Amiola, Ogunbajo, Esan, Adelola, Daropale, Ebuka, and Mapayi, (2021) reported that COVID-19-related stressors are associated with higher anxiety and depressive symptoms, with these effects being larger in men than to women. Al-Shatanawi, Sakka, Kheirallah, Al-Mistarehi, Al-Tamimi, Alrabadi, Alsulaiman, Al Khader, Abdallah, Tawalbeh, Saleh, Hijazi, Alnsour, and Younes (2021) found that females were more prone of having COVID-19 obsession. Similarly, findings of a web-based study among Indian population showed that the prevalence of obsession due to COVID-19 was 12.47%. Furthermore, significant higher obsession score was found among females compared to males (Srivastava, Bala, Srivastava, Mishra, Shamim, & Sinha, 2020). In relation to age, findings of a cross-sectional study among students and employees of Lumbini Medical College Teaching Hospital Palpa, Nepal, significant association between COVID-19 fear and age was reported (Atreya, Nepal, Menezes, Shurjeel, Qazi, Ram, Usman, Ghimire, Marhatta, Islam, Sapkota, & Garbuja, 2022). Cuning and Hodes, (2021) reported that COVID-19 pandemic appears to be associated with obsessive-compulsive symptoms in younger people. Srivastava, et al (2020) reported that higher age group had significant COVID-19 obsession. Among adolescents, Octavius, Silviani, Angelina, and Juliansen, (2020) reported that COVID-19 has been found to be associated with mental health challenge. Al-Shatanawi, et al (2021) reported that students that attend COVID-19 lectures were more obsessed compared to those that didn't. Participants with higher knowledge of COVID-19 were more obsessed. Contrarily, obsession with COVID-19 based on educational level was not found (Srivastava, et al, 2020). However, findings by Nguyen, Dinle, Colebunders, Fodjo, Tran and Van vo, (2021) revealed that low knowledge increased stress during the COVID-19 outbreak. Similarly, Elbqry, Elmansy, Elsayed, Mansour, Tantawy, Eldin and Sayed (2021) reported that the level at which an individual is educated on COVID-19 can increase the rate of COVID-19 obsession of that individual. Nursing students had significant functional impairment due to COVID-19 compared to other medical professionals (Atreya, Nepal, Menezes, Shurjeel, Qazi, Ram, Usman, Ghimire, Marhatta, Islam, Sapkota, & Garbuja, 2022). Among secondary school students the prevalence of COVID-19 obsession and anxiety was 40.27% and 38.1% respectively (Tesema, Shitu, Adugna, & Handebo, 2021). Individuals that were married were more obsessed with COVID-19 compared to those that were singles (Srivastava, et al, 2020). In a study of obsession with COVID-19 among Health care providers, Jasem, and Al-Jubouri, (2020) did not find significant difference between marital status and COVID-19 obsession.

### Statement of the Problem

Findings of an online cross-sectional survey showed that residents in North - Central Nigeria had good knowledge of

COVID-19, positive attitudes toward the adherence of government infection prevention control but it was perceived that Nigerian government is not doing enough to curtail COVID-19 in Nigeria (Reuben, Danladi, Saleh, & Ejembi, 2020). Government's inability to do much in the fight against COVID-19 as perceived by most Nigerians seems to make most people scared and obsessed of COVID-19. No wonder, Olaseni, Akinsola, Agberotimi, and Oguntayo, (2020) reported that Nigerians experienced psychological distress during COVID-19 pandemic. COVID-19 pandemic has come with many challenges, anxiety, and the stress of adhering to COVID-19 protocols. Health workers are the front line workers in the fight against the spread and management of COVID-19. The fear of COVID-19 has increased among the general public likewise, most health workers have reported obsession like symptoms in relation to COVID-19 most especially due to inadequate personal protective equipments in most Nigeria hospitals. Thus, this study seeks to assess COVID-19 obsession among health workers in Jos-South local government area of Plateau State Nigeria. Therefore it is hypothesized that;

1. Older hospital workers will have higher prevalence of COVID-19 obsession compared to younger hospital worker.
2. Prevalence of COVID-19 obsession will differ among hospital workers in terms of gender.
3. Hospital workers with tertiary education will have higher prevalence of COVID-19 obsession than those with lower educational status.
4. Prevalence of COVID-19 obsession among hospital workers will differ in terms of marital status.

### Method

#### Design

The research design adopted for the study is cross-sectional survey design. Cross-sectional survey design was utilized in order to assess COVID-19 obsession among hospital workers in Jos-South local government area of Plateau State Nigeria.

#### Selection technique

Participants of interest in this study were selected across Jos-South local government area of Plateau State utilizing snowball sampling technique.

#### Inclusion/Exclusion Criteria

Those that work in the hospital irrespective of their profession were included in the study. While those that don't work in the hospital were excluded considering that the study aims at assessing COVID-19 obsession among hospital workers.

#### Participants

The total of 162 hospital workers (82, 50.6% males and 80, 49.4% females) with mean age of 34.01 participated in this

study, majority 82(50.6%) were older participants while 80(29.4%) were younger participants. In terms of educational status, majority 119(73.5%) had tertiary education, 26(16.0%) secondary school and 17(10.5%) primary school. Majority 72(44.4%) were married, 61(37.7%) singles, 18(11.1%) widows/widowers and 11(6.8%) were divorced. Majority 38(23.5%) identified their occupation as others, 32(19.0%) lab technicians, 23(14.2%) as nurses, 21(13.0%) as ward attendants, 17(10.5%) were pharmacists, 17(10.5%) were security men and 14(8.6%) were doctors.

**Instruments of Data Collection Obsession with COVID-19 scale (OCS)**

The instrument obsession with COVID-19 scale (OCS) developed by Lee (2020) was used for data collection in this study. It is a self-report mental health screener of persistent and disturbed thinking about COVID-19. The OCS was developed to help clinicians and researchers efficiently identify cases of individuals functionally impaired by their COVID-19 related thinking patterns, the scale consist of four (4) items (Lee, 2020).The Psychometric properties of OCS was developed on two large samples of adults (n = 775; n = 398) residing across the United States. The OCS is a reliable instrument ( $\alpha > .83$ ), with solid factorial (single-factor) and construct (correlated with coronavirus anxiety, spiritual crisis, alcohol/drug coping, extreme hopelessness, and suicidal ideation) validity. The diagnostic properties of the OCS (81% to 93% sensitivity and 73% to 76% specificity) are

comparable to related screening instruments, such as the General Health Questionnaire (Lee, 2020).

**Procedure**

Data were collect among hospital workers within Jos-South Local government area of Plateau state Nigeria utilizing snowball sampling technique. Those that participated in the study consent to individually, those that decline were excluded from the study. Confidentiality was assured to each participant, respect of human participant was ensured during data collection and participation was voluntary, those that consent to participate signed the consent form. Hospital workers that were known to the participants were recruited to participate in the study after which those recruited, recruit other participants that subsequently participate in the study.

**Data Analysis**

Data collected in this study were analyzed utilizing Chi-Square. Statistical package for social science (SPSS) was used in analyzing all data. Chi-square was selected as the appropriate method of data analysis considering that the study only focus on discovering the prevalence of COVID-19 obsession among hospital workers.

**Results**

**Hypothesis 1**

Older hospital workers will have higher prevalence of COVID-19 obsession compared to younger hospital worker.

**Table 1:** Chi-square analysis of the prevalence of COVID-19 obsession across age

		Age		Total	Chi-square ( $\chi^2$ )	Df	p-value
		Younger Hospital Workers	Older Hospital Workers				
	Normal	26	13	39			
Obsession with COVID-19	Dysfunctional thinking with COVID-19	54	69	123	6.139	1	0.013
Total		80	82	162			

Result of table 1 shows that older hospital workers had higher prevalence of COVID-19 obsession compared to younger hospital worker,  $\chi^2 = 6.139$ ,  $df = 1$ ,  $p = 0.013$  ( $p < 0.05$ ). The hypothesis that older hospital workers will have higher prevalence of COVID-19 obsession compared to younger hospital workers was supported.

**Hypothesis 2**

Prevalence of COVID-19 obsession will differ among hospital workers in terms of gender

**Table 2:** Chi-square analysis of prevalence of COVID-19 obsession across gender

		Gender		Total	Chi-square ( $\chi^2$ )	Df	p-value
		Male	Female				
	Normal	20	19	39			

Obsession with COVID-19	Dysfunctional thinking with COVID-19	62	61	123	0.009	1	0.924
Total		82	80	162			

Result of table 2 shows that prevalence of COVID-19 obsession did not differ among hospital workers in terms of gender,  $\chi^2 = 0.009$ ,  $df = 1$ ,  $p = 0.924$  ( $p > 0.05$ ). The hypothesis that prevalence of COVID-19 obsession will differ in terms of gender among hospital workers was not supported.

**Hypothesis 3**

Hospital workers with tertiary education will have higher prevalence of COVID-19 obsession than those with lower educational status

**Table 3:** Chi-square analysis of prevalence of COVID-19 obsession across Educational Status

		Educational Status			Total	Chi-square ( $\chi^2$ )	Df	p-value
		Primary	Secondary	Tertiary				
	Normal	1	3	35	39			
Obsession with COVID-19	Dysfunctional thinking with COVID-19	16	23	84	123	7.168	2	0.028
Total		17	26	119	162			

Result of table 3 reveals that hospital workers with tertiary education had higher prevalence of COVID-19 obsession than those with lower educational status,  $\chi^2 = 7.168$ ,  $df = 3$ ,  $p = 0.028$  ( $p < 0.05$ ). The hypothesis that hospital workers with tertiary education will have higher prevalence of

COVID-19 obsession than those with lower educational status was supported.

**Hypothesis 4**

Prevalence of COVID-19 obsession among hospital workers will differ in terms of marital status

**Table 4:** Chi-square analysis of prevalence of COVID-19 obsession across Marital Status

		Marital Status				Total	Chi-square ( $\chi^2$ )	Df	p-value
		Single	Married	Divorced	Widow/widower				
	Normal	21	15	1	2	39			
Obsession with COVID-19	Dysfunctional thinking with COVID-19	40	57	10	16	123	6.996	3	0.072
Total		61	72	11	18	162			

Result of table 4 reveals that prevalence of COVID-19 obsession did not differ among hospital workers in terms of marital status,  $\chi^2 = 6.996$ ,  $df = 3$ ,  $p = 0.072$  ( $p > 0.050$ ). The hypotheses that prevalence of COVID-19 obsession will differ among hospital workers in terms of marital status was not supported.

**Discussion**

This study assess COVID-19 obsession among hospital workers in Jos-south local government area of Plateau State, Nigeria. Four hypotheses were tested. The result of hypothesis one reveals that older hospital workers had higher prevalence of COVID-19 obsession compared to younger hospital worker. This implies that older individuals have higher likelihood of being obsess with

COVID-19 compared to their younger counterparts. Result of hypothesis one is significantly possible considering that more of the older hospital workers compared to the younger ones had dysfunctional thinking with COVID-19 (COVID-19 obsession). Result of this study reflected the findings of Atreya, et al, (2022), significant association between COVID-19 fear and age were found. Also, Srivastava, et al (2020) reported that higher age group had significant COVID-19 obsession.

Result of hypothesis two shows that prevalence of COVID-19 obsession did not differ among hospital workers in terms of gender. COVID-19 obsession between male and female hospital workers did not significantly differ in this study considering that both males and females had similar COVID-19 obsession. Sixty-two males and 61 females had COVID-19 obsession. Similarly, Oginni, et al (2021) found

that COVID-19-related stressors were more in men than women. Although most studies reported that female health workers experience more COVID-19 obsession compared to male health workers (Shaukat, et al, 2020; Saeed, et al, 2020; Kafle, et al, 2021).

Findings of hypothesis three revealed that hospital workers with tertiary education had higher prevalence of COVID-19 obsession than those with lower educational status. This implies that the more educated you are the higher the possibility of experiencing COVID-19 obsession. In this study hospital workers with tertiary education had higher prevalence of COVID-19 obsession possibly due to the fact that majority of the participants had tertiary education. Elbqry, et al (2021) found a significant correlation between COVID-19 psychological stress and satisfactory level of knowledge among medical participants. According to Al-Shatanawi, et al (2021) student with higher knowledge of COVID-19 were found to be more obsessed. The prevalence of COVID-19 anxiety among secondary school students was 40.27% (Teseman, et al 2021).

Finally, result of the fourth hypothesis reveals that prevalence of COVID-19 obsession did not differ among hospital workers in terms of marital status. Result of hypothesis four in this study is not significant possibly because there was no statistical significant difference between participants that were married and those that were singles, divorced, widow/widowers. Although those that were married had higher number of individual with COVID-19 obsession. Result of this study is in line with results of a study conducted by Jasem and Al-Jubouri (2020) the authors did not find significant difference between marital status and COVID-19 obsession. Contrarily, Srivastava, et al, (2020) reported that individuals that were married were more obsessed with COVID-19 compared to those that were singles.

## Conclusion

Corona Virus (COVID-19) is a global pandemic that has affected the world. Globally, health workers are more exposed to the danger of being infected with the virus considering the vital role they play in the fight against COVID-19. Thus, the authors in this study conclude that,

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older hospital workers had higher prevalence of COVID-19 obsession compared to their younger counterparts. Prevalence of COVID-19 obsession did not differ in terms of gender. While, hospital workers with tertiary education had higher prevalence of COVID-19 obsession compared to those with lower educational status. Also, prevalence of COVID-19 obsession did not differ among hospital workers in terms of marital status. Thus, considering the virus COVID-19 as a pandemic that affect the world more attention should be given to hospital workers in terms of policy formulation being that they are at the forefront in the fight against COVID-19. Therefore, there is need for further psychological evaluation of hospital workers in other to ascertain their mental health status, also, there is need for setting up of psychological service centres across hospitals in Nigeria which would go a long way in not just evaluating the mental health status of hospital workers but it will be beneficial to the general public in assessing psychology services easily.

## Limitations

The research is not without some few challenges and limitations encountered in the course of carrying out the study. Some of which are: This study fails to explore other health challenges associated with COVID-19 that hospital workers faces order than obsession. The voice of hospital workers is not heard aside the quantitative approach of data collection; qualitative approach would have been utilized in data collection. Also, the number of participants is limited which may affect generalization of findings

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## Conflict of interest statement

There is no conflict of interest declared by the authors in this stud.

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