Covid-19 Psycho-social Impact among United Nations Staff in Burundi

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Abstract

The coronavirus (Covid-19) is a pandemic that threatens many people's lives. The objective of this study was to explore the Covid-19 psycho-social impact on Staff working in the United Nations in Burundi from October 2021 to 31st January 2022. This was a cross-sectional study involving 312 study participants. Univariate and bivariate analysis were processed using SPSS 25, and the Chi-square test was calculated with a p<0.05. As a result, all psycho-social components assessed were affected by Covid-19. The Staff experienced a very high level of psycho-social impact (very severe) which varied from 31% for being afraid of financial problems and unhappiness due to missing professional support from colleagues to 47% for being afraid of a family member infected by Covid-19. Also, we assessed their particularity of psycho-social impact due to the exposure of being clinical or non-clinical Staff, whereby, clinical Staff had a lower risk of being affected compared to the non-clinical Staff in some components. For instance, clinical Staff was 0.39 times more affected by fear of being infected by Covid-19 compared to non-clinical Staff (CI= (0.23,0.65). Also, there are some components where the impacts were similar for clinical and non-clinical Staff (Chi-square test p-value > 0.05 and CI of odds ratios cross 1). Thus, UN employees were negatively affected by Covid-19 from a psycho-social standpoint. The study recommends UN agencies in Burundi support staff by providing emergency psychological support and, if required to give medical treatment for job optimization. Hence, staff psycho-social status must be constantly checked and kept stable.

Keywords: *Covid-19, Impact, Psycho-social, Staff, United Nations.*

Introduction

This study focused on Covid-19's psycho-social impact among United Nations staff in Burundi, which is a landlocked country in East Africa. Based on little information on the health workforce and non-clinical Staff, this study aimed to identify the negative psycho-social impact of Covid-19 on Clinical and non-clinical Staff working in the United Nations in Burundi from March 2020 to 31ST January 2022. According to different works of literature, the Covid-19 pandemic has caused severe changes across the world, distressing all areas of life including psycho-social life and time in general. Furthermore, the Covid-19 pandemic has had significant psycho-social effects on the population, including psycho-social stigmatization, complete lockdown in different cities, flight cancelation, closure of different business centers, suspension of common transport, and psycho-social isolation in general [1]. Equally important, psycho-social distance

and security measures have affected the connection among people and their insight of empathy toward others [2]. From this standpoint, information and technology devices played significant roles in decreasing the undesirable effects of the pandemic [3]. Also, in different institutions, some staff started their retirement early, while others postponed their annual leave and/or started their leave for fear of being contaminated by Covid-19 [3]. Furthermore, in the year 2020 due to Covid-19, many countries suspended most of their airlines, many airports closed their flight trips, or the number of flights was reduced, compared with situations from the previous year, 2019 [4]. Additionally, the Covid-19 pandemic caused different psycho-social problems, including psycho-social distancing, whereby the normal community living with mutual sharing and ceremonies was stopped since then, the lifestyle changed, and some people started to stigmatize others by excluding those who are perceived to be probable sources of disease with the possibility to contaminate others in the society [4]. In the same way, it was highlighted that the stigma was found among the people connected with being an infected patient and having close contact with those infected. Therefore, it was recommended that based on the negative effects of stigma, there is a need to mitigate all possible reasons that may cause stigma, instead of being focused on Covid-19 treatment and prevention [4]. Also, to decrease the spreading of Covid-19, global leaders implemented a lockdown of different societies and activities to protect both workforces and owners around the globe using different changes to protect Staff, including working from home and release from different jobs [5]. More importantly, apart from governments restrictions to protect the population from Covid-19 contamination, different people opted to avoid public transport and shifted to the use of their own cars, bicycle, mobile, teleworking, and online services were used as probable alternative solutions to prevent the spreading of Covid-19 in the society [6].

Limitations

The study was limited to the Staff of the United Nations in Burundi from 1st March 2020 to 31st January 2022. Also, due to Covid -19 variation or mutation, we were unable to perform interviews and/or focus groups to minimize the spreading of infections.

Materials and Methods

This research was conducted under a cross-sectional study design and used a self-administered questionnaire to 312 United Nations (UN) Staff that visited the UN Clinic in Burundi during the period of 4 months starting from October 2021 to 31st January 2022. An approval letter was obtained from the UN health Manager in Burundi. The inclusion criteria were being UN staff involved in different working activities during the study period and accepting to participate in the study, and the exclusion criteria were not being UN staff and not accepting to participate in the study. Furthermore, consent forms were signed by participants, and participation was voluntary. Therefore, using systematic random sampling, a sample size of 312 participants from the study population of 1429 staff were included in this study. Univariate and bivariate analysis were processed using SPSS 25, and the Chi-square test was calculated with a $p<0.05$.

For the assessment of the prevalence of psycho-social and social impact due to Covid-19 on UN staff in Burundi, we used a variety of questions translated into English and French for quantitative data collection. Those questionnaires were addressed to UN staff who participated in the study to assess different dimensions of psycho-social impact, whereby 3 nurses and the researcher participated in data collection. Also, we explored the particularity of psycho-social impact due to the exposure of being a clinical or non-clinical department of Staff. Consequently, the dimensions of psycho-social impacts were re-scaled into two levels instead of four, the "None-to-Moderate" level and the "Severe-to-Very-Severe" level, to

compare the variations of high level to the insignificant (low) level and absence of impacts for clinical and non-clinical Staff. A Chi-square test was used to measure the presence of an association between a department as an exposure factor and the psycho-social impact level as an effect of Covid-19 at 5% statistical significance. The odds ratios were also calculated to determine the extent of the association. In the same way, clinical/non-clinical staff exposures were independent variables, while Covid-19 psycho-social negative impact was the dependent variable.

Results

Regarding the prevalence of psycho-social and social impact due to Covid-19 on UN staff in Burundi, all psycho-social components assessed were affected, including fear of being infected or a member of the family being infected by Covid-19, loneliness due to Covid-19, fear of job loss, etc. Higher proportions of Staff experienced a very high level of psycho-social impact (very severe) which varied from 31% for being afraid of financial problems and being unhappy due to missing professional support from colleagues to 47% for being afraid of a family member being infected by Covid-19. A high level of psycho-social impact (severe) was experienced at proportions varying from 13% for envisaging to leave the job due to Covid-19 as well as being stressed by flight booking cancellations and being stranded abroad to 28% for having frustration caused by the pandemic. Proportions of Staff who experienced a moderate level of psycho-social impact (Moderate) were closer to those of high-level impact and varied from 11% for envisaging leaving the job as well as being stressed by flight booking cancellations and being stranded abroad to 22% for being afraid of financial problems. The range of proportion of Staff who experienced minimal impact varied from 4% for those who were afraid of a family member being infected, those who had an idea to leave their job due to Covid-19, and those who were stressed by

flight booking cancellations and stranded abroad to 15% for those who were afraid of death due to the Covid-19. The absence of any psycho-social impact was observed at relatively lower proportions varying from 4% who did not fear a member of the family being infected to 28% who have not had an idea of leaving their job due to Covid-19, except the absence observed at being stressed by flight booking cancellations and stranded abroad where 55% of Staff did not experience a related impact (ref. Table1).

Also, regarding the effect of clinical exposure on the prevalence of psycho-social impact due to Covid-19, this study emphasized on exploring the particularity of psycho-social impact due to the exposure of being a clinical or non-clinical based on the department of Staff. Dimensions of psycho-social impacts were re-scaled into two levels instead of four, the "None-to-Moderate" level and the "Severe-to-Very-Severe" level, to compare the variations of high level to the insignificant (low) level and absence of impacts for clinical and non-clinical Staff. A Chi-square test was used to measure the presence of an association between a department as an exposure factor and the psycho-social impact level as an effect of Covid-19 at 5% statistical significance. The odds ratios were also calculated to determine the extent of the association. The psycho-social components where the department was a risk factor of Covid-19 psycho-social impact include fear of being infected by Covid-19, fear of a family member being infected, loneliness, frustration, feeling of worthless, negative thinking and fear of having health complications due to Covid-19 (p-values < 0.05). For all those components, the clinical Staff had a lower risk of being affected compared to the non-clinical Staff. For instance, clinical Staff were 0.39 times more affected by fear of being infected by Covid-19 than non-clinical Staff (CI = (0.23,0.65)), and they were 0.27 times affected by loneliness (CI = (0.16,0.47)).

Table 1. Proportions of UN Staff by Levels of Psycho-social Impact due to Covid-19

No	Psycho-social effect	Number (percentage) per category				
		None	Minimal	Moderate	Severe	Very severe
1.	Fear of being infected with Covid-19	22 (7%)	24 (8%)	60 (19%)	66 (21%)	140 (45%)
2.	The fear of having your family members infected with Covid -19	14 (4%)	12 (4%)	56 (18%)	82 (26%)	148 (47%)
3.	Loneliness due to the Covid-19 pandemic	40 (13%)	18 (6%)	58 (19%)	52 (17%)	144 (46%)
4.	Fear of losing your job	62 (20%)	34 (11%)	48 (15%)	60 (19%)	108 (35%)
5.	Fear of Financial problem	44 (14%)	34 (11%)	68 (22%)	68 (22%)	98 (31%)
6.	The frustration caused by the Covid-19 pandemic	20 (6%)	36 (12%)	60 (19%)	88 (28%)	108 (35%)
7.	Feeling worthless due to the Covid-19 pandemic	66 (21%)	44 (14%)	60 (19%)	64 (21%)	78 (25%)
8.	Negative thoughts related to anything related to the Covid-19 pandemic	38 (12%)	44 (14%)	64 (21%)	64 (21%)	102 (33%)
9.	Worry about the future due to the Covid-19 pandemic	20 (6%)	28 (9%)	50 (16%)	80 (26%)	134 (43%)
10.	Fear of using public transport due to Covid-19	24 (8%)	24 (8%)	56 (18%)	74 (24%)	134 (43%)
11.	Avoid eating out / having food delivered due to Covid-19	46 (15%)	36 (12%)	66 (21%)	62 (20%)	102 (33%)
12.	Fear of dying from Covid-19	36 (12%)	46 (15%)	40 (13%)	62 (20%)	128 (41%)
13.	Working overtime due to the Covid-19 pandemic	40 (13%)	32 (10%)	52 (17%)	62 (20%)	126 (40%)
14.	Have fatigue accentuated by work due to the Covid-19 pandemic	50 (16%)	42 (13%)	46 (15%)	62 (20%)	112 (36%)
15.	Fear of developing health complications due to the Covid-19 pandemic	36 (12%)	24 (8%)	42 (13%)	68 (22%)	142 (46%)
16.	The thought of giving up your job because of the Covid-19 pandemic	86 (28%)	14 (4%)	34 (11%)	40 (13%)	138 (44%)
17.	Feeling Hopeless due to social stigmatization due to the Covid-19 pandemic	40 (13%)	32 (10%)	56 (18%)	62 (20%)	122 (39%)
18.	Being stressed by my flight booking cancellations, and being stranded abroad due to Covid-19-related international travel restrictions	172 (55%)	14 (4%)	34 (11%)	40 (13%)	52 (17%)

19.	Being unhappy due to social isolation (Inability to have a good time with family and friends) due to the Covid-19 pandemic	34 (11%)	25 (8%)	46 (15%)	77 (25%)	130 (42%)
20.	Feeling unhappy due to my annual leave postponement due to the Covid-19 pandemic	80 (26%)	32 (10%)	38 (12%)	54 (17%)	108 (35%)
21.	Feeling unhappy due to missing professional support from my colleagues due to the Covid-19 pandemic	54 (17%)	34 (11%)	58 (19%)	70 (22%)	96 (31%)

Table 2. Effect of Clinical Exposure to the Psycho-Social Impact of Covid-19

Psycho-social effect		Department		Chi-square test		Odds ratio C/NC on SVS (95% CI)
		Clinical	Non-clinical	X-squared	p-value	
Fear of being infected with Covid-19	None-to-Moderate	42	64	12.201	0.0004777	0.39 (0.23, 0.65)
	Severe-to-Very severe	42	164			
The fear of having your family members infected with Covid - 19	None-to-Moderate	30	52	4.6331	0.03136	0.53 (0.31, 0.92)
	Severe-to-Very severe	54	176			
Loneliness due to the Covid-19 pandemic	None-to-Moderate	50	66	23.28	1.401e-06	0.27 (0.16, 0.47)
	Severe-to-Very severe	34	162			
Fear of losing your job due to the Covid-19	None-to-Moderate	36	108	0.33755	0.5612	1.2 (0.72, 1.99)
	Severe-to-Very severe	48	120			
Fear of Financial problems due to the Covid-19	None-to-Moderate	44	102	1.15	0.2836	0.74 (0.45, 1.2)
	Severe-to-Very severe	40	126			
The frustration caused by the Covid-19 pandemic	None-to-Moderate	42	74	7.3555	0.006686	0.48 (0.29, 0.79)
	Severe-to-Very severe	42	154			
Feeling worthless due to the Covid-19 pandemic	None-to-Moderate	56	114	6.2202	0.01263	0.50 (0.30, 0.84)
	Severe-to-Very severe	28	114			
Negative thoughts related to anything related to the Covid-19 pandemic	None-to-Moderate	50	96	6.7973	0.00913	0.50 (0.30, 0.82)
	Severe-to-Very severe	34	132			
Worry about the future due to the Covid-19 pandemic	None-to-Moderate	28	70	0.094072	0.7591	0.89 (0.52, 1.51)
	Severe-to-Very severe	56	158			

Item	Category			χ²	p-value	OR (95% CI)
Fear of using public transport due to Covid-19	None-to-Moderate	34	70	2.2176	0.1364	0.65 (0.39, 1.09)
	Severe-to-Very severe	50	158			
Avoid eating out / having food delivered due to Covid-19	None-to-Moderate	44	104	0.87226	0.3503	0.76 (0.46, 1.26)
	Severe-to-Very severe	40	124			
Fear of dying from Covid-19	None-to-Moderate	34	88	0.029247	0.8642	0.92 (0.55, 1.54)
	Severe-to-Very severe	50	140			
Working overtime due to the Covid-19	None-to-Moderate	32	92	0.053233	0.8175	1.10 (0.66, 1.84)
	Severe-to-Very severe	52	136			
Have fatigue accentuated by work due to the Covid-19 pandemic	None-to-Moderate	36	102	0.028234	0.8666	1.079 (0.65, 1.79)
	Severe-to-Very severe	48	126			
Fear of developing health complications due to the Covid-19 pandemic	None-to-Moderate	46	56	24.09	9.196e-07	0.27 (0.16, 0.45)
	Severe-to-Very severe	38	172			
The thought of giving up your job because of the Covid-19 pandemic	None-to-Moderate	44	90	3.6635	0.05562	0.59 (0.36, 0.98)
	Severe-to-Very severe	40	138			
Feeling Hopeless due to social stigmatization due to the Covid-19 pandemic	None-to-Moderate	42	86	3.3356	0.06779	0.61 (0.36, 1.00)
	Severe-to-Very severe	42	142			
Being unhappy due to social isolation (Inability to have a good time with family and friends) due to the Covid-19 pandemic	None-to-Moderate	36	69	3.8147	0.05081	0.58 (0.35, 0.97)
	Severe-to-Very severe	48	159			
Feeling unhappy due to my annual leave postponement due to the Covid-19 pandemic	None-to-Moderate	46	104	1.7077	0.1913	0.69 (0.41, 1.14)
	Severe-to-Very severe	38	124			
Feeling unhappy due to missing professional support from my colleagues due to the Covid-19 pandemic	None-to-Moderate	44	102	1.15	0.2836	0.74 (0.44, 1.21)
	Severe-to-Very severe	40	126			
Stressed by my flight booking cancellations, and being stranded abroad due to Covid-19-related international travel restrictions	None-to-Moderate	62	158	0.40346	0.5253	0.80 (0.46, 1.40)
	Severe-to-Very severe	22	70			

For other psycho-social components, the staff department was not associated with the psycho-social impacts, implying that the impacts were similar for clinical and non-clinical Staff (Chi-square test p-value > 0.05 and CI of odds ratios cross 1; ref. Table 2).

Discussion

Based on bivariate analysis, our study results showed that psycho-social stigmatization, psycho-social isolation, and common transport difficulties offered a significant relationship with a high impact grade of C-19 with X^2(df):189(12), 242(12), 201(12) and p<0.001, respectively (Table: 2). This goes together with the results of scientists whereby, it was highlighted that based on the prevention measures and health education activities, some people started to have different problems including stigmatization, psycho-social isolation, and common transport difficulties due to the fear of the disease [7]. Again, 42% of our participants were stressed due to social isolation (Inability to have a good time with family and friends) due to the Covid-19 pandemic. This is similar to another study whereby humans tend to distance themselves from those considered a source of hazard (infections), isolation, and others. However, most of the time, this may cause fear and stigmatization, whereby some of them may develop negative reactions and discrimination against people. Thus, stigmas may limit the capability to control diseases and affect psychological well-being, attempt to hide the disease, or misreport signs and symptoms [7]. In the same way, delays in early detection of the problem and treatment, mistrust in public health agencies by those stigmatized, raised depressive indications and suicide, increasing defenselessness to disease, and inconsistent allocation of health resources [7]. Additionally, 46% of our respondents confirmed that they were severely affected by fear of developing health complications due to the Covid-19 pandemic. This is like another study conducted in China whereby more people experienced

stigma, and psychological distress, precisely posttraumatic stress disorder at 69.47% (95% confidence interval (CI): 66.81%-72.13%) of the measured Wuhan due to Covid-19 [8]. This looks like another study conducted in Pakistan whereby it was found that 21.8% of healthcare professionals suffered from moderate to severe depression symptoms, 15.5% from moderate to severe anxiety, and 65.5% from moderate symptoms of fear [9]. Also, another study in Chile aiming to determine the variables attributable to the fear of contracting Covid-19 demonstrated that the length of the pandemic has unquestionably affected the behavior of people and has generated fear in many people as there is an intensification in the risk of getting sick, exclusively after morbidity enlarged or one of the family members became ill or died. As a result, 54.6% of respondents had more fear of getting Covid-19, and women's fear was augmented by 89% while men increased by 30% [10].

Also, the bivariate analysis showed that all five variables were significantly associated with the negative psycho-social impact of Covid-19 among United nations employees, p<0.001. In addition, the stigma and psycho-social isolation were 36 times associated with high psycho-social impact, p<0.001. This is like another study conducted in Nepal to assess stigma related to Covid-19 patients among health Care Workers and explore its impact on their professional quality of life during the Covid-19 pandemic, it was revealed that about two-thirds of the study, participants presented a discriminating disrespect to patients with Covid-19 connected with only low satisfaction. Moreover, others demonstrated negative behavior in accepting patients with Covid-19 due to low burnout with fatigue and a discriminatory attitude towards Covid-19 patients, which was associated with only satisfaction. Therefore, it was recommended to establish strategies that may diminish the fear and discrimination against patients with Covid-19 [11]. The results of this study demonstrated that 41% of participants

were severely afraid of dying from Covid-19. This goes together with the International Council for Nurses conducted a study and revealed that 10% of patients contaminated by Covid-19 were health workers, and more than 1000 nurses died due to Covid-19 in different countries. Consequently, 70% and more nurses were discriminated against and isolated, and 60% of them developed mental problems [12].

More importantly, our study results demonstrated that 46% of our respondents were severely affected by loneliness due to the Covid-19 pandemic. This is like another mixture of longitudinal studies aimed to synthesize relevant, high-quality primary studies narratively and statistically, revealed increased loneliness due to the Covid-19 pandemic and prevention measures, including physical distancing confirmed as risk factors for loneliness, even if observed effects were small and heterogeneous, suggesting that the loneliness pandemic is likely excessive and creates a risk for early mortality and mental and physical health [13].

Additionally, our findings revealed that 35% of our respondents were severely frustrated, 25% of them had felt worthless severely, 33% of were severely had negative thoughts related to anything related to the Covid-19 pandemic, 43% were afraid of using public transport, 33% severely avoided eating out / having food delivered due to the Covid-19. This is like another study whereby the stigma associated with Covid-19 caused a negative impact on the lives of healthcare providers, patients, and those recovering from the disease, whereby some attacks on healthcare workers and health facilities were well highlighted. Consequently, harassment, stigmatization, and physical violence, some staff were avoided by their families or the public due to stigma or anxiety, whereby some healthcare workers were excluded from using public transport, disrespected in the street, and expelled from hired apartments [14]. Also, some patients were abandoned by their families and named different

names like corona, and some of them were suffering mental stress, and some staff has faced harassment in public places as they were considered as a higher risk source of transmission [15]. Again, in another study, it was revealed that healthcare workers developed mental anxiety. They were disconnected from their families and were unhappy due to the loss of their patients, their co-workers, and their friends [16].

In the same way, in another study, it was well clarified that more factors were identified, including organic illness, gender (female), family problems, worry of infection, shortage of personal protective equipment (PPE), and long exposure to staying with Covid-19 [17]. Furthermore, a significant statistical analysis was well found and confirmed that stigma caused by Covid-19 was well-identified in tertiary hospitals in low-middle-income countries. Therefore, it was recommended to implement different strategies that may help to reduce/ prevent and eliminate the above problem [18].

Equally important, our study revealed that 17% out of 312 participants were severely stressed by flight cancellation (ref. tab 1). This shows that many people were stranded abroad for a long time. This goes together with different studies whereby flight suspension activities were implemented to prevent the spreading of Covid-19. Whereby due to the spread of Covid-19 between March 2020 and May 2020, airlines started to suspend national and international flights. Consequently, the cancellation of flights caused different challenges whereby some family members were living on different planets waiting for the airport to reopen [19]. Another essential point, 39% of our respondents experienced hopelessness severely due to social stigmatization, and 31% were severely unhappy due to missing professional support from my colleagues due to the Covid-19 pandemic. This goes together with another study whereby the world health organization recommended health systems from different countries to provide

psycho-psycho-social support to healthcare workers during and after the management of patients with Covid-19 due to the stress and mental disorders related to Covid-19, isolation, and stigmatization [20]. In the same way, in the study conducted in Hong Kong, it was well clarified that some staff missed work socialization, missed their supervisors, missed support from information technologies Technicians, and had communication barriers [21]. Furthermore, our study revealed that 44% of our study participants severely thought of giving up their job because of the Covid-19 pandemic. This is like another study conducted in Belgium to investigate the expected impact of the Covid-19 crisis on career outcomes and career aspirations revealed that 21% were afraid of losing their jobs, and 14% were worried that they would even lose their jobs soon. Also, 26% expect to miss out on the promotions that they would have acknowledged if the Covid-19 crisis had not occurred [22]. Another essential point is that since the beginning of Covid-19, it was well noted that the global could not afford enough Staff to help patients in clinical institutions as well as in their homes. Consequently, community health workers were the only solution to close the gap by protecting Health care workers, reducing the virus, and continuing the management of other diseases as it was before Covid-19 [23]. Also, in another study, it was well noted that community health workers experienced psycho-social isolation and family stigmatization. Thus, it was recommended to provide more motivation, such as transport, incentives, and others as it has been well fixed in previous pandemics [24].

Equally important, in another study, based on the complications of Covid-19, it was recommended that all states must have the regular maintenance of psycho-social or familial networks [25]. More importantly, the psycho-social distance and the safety measures have affected the relationship among different individuals, families, and their insight of empathy toward others [26]. In the same way,

our results were like another study conducted in Saudi Arabia whereby psycho-social aspects impacted more than educational ones, and they confirmed that they have high to moderate levels of agreement perceptions of the positive and negative impact of the Covid-19 pandemic on their lives [27]. In addition, psycho-social distancing, self-isolation, and travel restrictions caused different complications whereby many institutions were reduced worldwide and caused many jobs were lost.

Conclusion

More than half of United Nations employees in Burundi were severely affected by Covid-19 from the psycho-social perspective. Hence, this study recommends psychological counseling and ensuring psycho-social recovery through combined efforts to improve employee morale and production. Also, the United Nations in Burundi must make sure that clinical/non-clinical Staff have emergency psychological support and if compulsory, have medical treatment since Covid-19 psycho-social problems necessitate specific attention to the psychological well-being of Staff in general for job optimization based on how this pandemic was an extraordinary health condition worldwide. By the end, more studies, including qualitative studies, are recommended to explore more and suggest additional recommendations for staff health safety which should be addressed through different programs.

Equations

$$n = \frac{N}{1 + N * (e)^2}$$

n: the sample size
N: the population size
e: the acceptable sampling error
*:   95% confidence level and p = 0.5 are assumed

Using the formula of Yamane (1967), the sample size was calculated as follows: n=N/1+N (e)^2;   n=1429/1+1429(0.05)^2=1429/1+3.58

=1429/4.58= 312.00875= 312 (rounded).

Theoretical Framework

A descriptive cross-sectional study was conducted on all un staff working in Burundi. in the same way, staff exposure (being a clinical/non-clinical) was the independent variable, then Covid-19 was the intervening variable while the dependent variable was the Covid-19 psycho-social impact.

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Conflict of Interest

The authors declare that the research was conducted in the absence of any profitable or financial affairs that could be interpreted as a potential conflict of interest.

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