Texila International Journal of Academic Research
Special Edition Apr 2022
DOI: 10.21522/TIJAR.2014.SE.22.01.Art023

Impact of Covid-19 Pandemic on Clinical and Non-Clinical Staff Working in United Nations in Burundi

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Abstract

Coronavirus disease (Covid-19) is a very serious pandemic disease which threatens many people's life around the world. Covid-19 has currently killed 5,783,776 people and with 404,910,528 Confirmed cases. The objective was to explore the Impact of the Covid-19 Pandemic on Clinical and non-Clinical Staff working in the United Nations in Burundi from 1st March 2020 to 31st January 2022. This research was conducted under a cross-sectional study design and used a self-administered structured questionnaire. A total of 1400 participants out of 1432 were included in this study from 1st March 2020 to 31st January 2022. Univariate and bivariate analysis were processed using SPSS 25, and Chi-square test were calculated with a $p<0.05$. The findings of this study showed that 188(13.4%) of females and 224(16%) of males were covid-19 positive. Different age structures with Covid-19 were respectively, 29(2.1%) were with 21-30 years, 109(7.8%) with 31-40 years, 130(9.3%) with 41-50 years and 142(10.2%) with >50 years. However, the gender and age structure relationship for contracting Covid-19 was not statistically significant, $X^2=0.01$, $p=0.9$ for gender and $x^2=6.4$, $p=0.9$. The clinical staff with covid-19 were 33(2.4%) out of 66. Thus, 33(50%) for clinical employees were positive. Also, the positivity rates in non-clinical employees were 379(27.1%) among 1334 participants, while only 28.4% were positive. The relationship was highly significant, $X^2=14.1$, $p<0.001$. As a conclusion, the evaluation of the Covid-19 morbidity impact was crucial to emphasize on the invested effort to protect the non-clinical UN employees and to plan a highly monitored policy for clinical employees to minimize their infection rate.

Keywords: *Covid-19, Clinical staff, Impact, non-clinical staff, United Nations.*

Introduction

Covid-19 is both an international health emergency and a worldwide financial danger. To decrease the spreading of covid-19, global implemented a lockdown of enterprises and activities that were to protect both employees and employers around the globe. Consequently, different changes were implemented to protect staff, including work from home, and dismissal from different posts, whereby some staff started to search for the nation-specific comparable unemployment benefits. Furthermore, in more institutions, the economic shutdowns and most of them were closed [1].

Globally, by the beginning of 2021, the World Health Organization (WHO) reported approximately 111 million confirmed cases of Covid-19, including less than 2.5 million deaths [2]. Based on its rapid transmission and its mortality rates in the world, the Covid-19 is upsetting the health of people, causing staffing

Received: 12.02.2022 ***Accepted: 15.04.2022*** ***Published on: 18.05.2022***
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problems in health care institutions and the community in the general [1]. the information on morbidity and mortality rates in the general population is regularly recorded.

There were 19,954 cases of covid-19, 287 vaccine doses have been administered and 14 deaths as of 26th October 2021 [3]. However, although Staff is exposed to covid -19 due to their involvement in the treatment of patients and serving the population in different sectors, there is limited information on morbidity impact on Clinical and non-Clinical Staff working in United Nations. Therefore, this study explored the morbidity impact of the Covid-19 Pandemic on Clinical and non-Clinical Staff working in United Nations in Burundi, and the results of this study will help to inform decision-makers about staffing in response to Covid-19.

Materials and Methods

This research was conducted under a cross-sectional study design and used a self-administered structured questionnaire to all United Nations (UN) Staff that visited the UN Clinic in Burundi during the period of 23 months starting from March 2020 to 31st January 2022. An approval letter was obtained from the UN health manager in Burundi. Also, the inclusion criteria were being a UN staff involved in different working activities during the period of study and accepting to participate in the study; and exclusion criteria were not being a UN staff and not accepting to participate in the study.

Furthermore, consent forms were signed by participants, and participation was voluntary. Therefore, a sample size of 1400 participants from the study population of 1432 clinical and non-clinical staff were included in this study from 1st March 2020 to 31st January 2022. Univariate and bivariate analysis were processed using SPSS 25, and the Chi-square test were calculated with a $p<0.05$.

Results

The findings of this study showed that 188(13.4%) of females and 224(16%) of males were covid-19 positive. Different age structures with Covid-19 were respectively, 29(2.1%) were with 21-30 years, 109(7.8%) with 31-40 years, 130(9.3%) with 41-50 years and 142(10.2%) with >50 years. However, the gender and age structure relationship for contracting Covid-19 was not statistically significant, $X^2=0.01$, $p=0.9$ for gender and $x^2=6.4$, $p=0.9$. The clinical staff with covid-19 were 33(2.4%) out of 66. Thus, 33(50%) of clinical employees were positive. Also, the positivity rates in non-clinical employees were 379(27.1%) among 1334 participants, while only 28.4% were positive. The relationship was highly significant, $X^2=14.1$, $p<0.001$.

Discussion

Based on the results of this study, 188 (13.4%) of females and 224 (16%) of males were covid-19 positive. Also, different age structures with Covid-19 were 29 (2.1%) with 21-30 years, 109(7.8%) with 31-40 years, 130(9.3%) with 41-50 years and 142(10.2%) with >50 years. However, the gender and age structure relationship for contracting Covid-19 was not statistically significant, $X^2=0.01$, $p=0.9$ for gender and $x^2=6.4$, $p=0.9$.

Furthermore, the clinical staff with covid-19 were 33(2.4%) out of 66. Thus, 33(50%) of clinical employees were positive. This goes together with another study conducted in Bangladesh, whereby many nurses, doctors, and other health care providers developed psychosocial problems contaminated by Covid-19 whereby 73 doctors died, and it was well clarified that 10% of all infected people were found among health workers [4]. In the same way, in a study conducted in Ghana for health care providers, it was found that 14% of frontline workers allocated to perform their duties in covid-19 treatment centres were at high risk [5].

Additionally, the positivity rates in non-clinical staff were 379(27.1%) among 1334 participants, and only 28.4% were positive. The relationship was highly significant, X^2=14.1, p<0.001. This differs from another study conducted to assess the Covid-19 Impact on Hospital Healthcare Workers, and it was revealed that there are differences in infection rates between clinical and non-clinical staff whereby it was found that fewer health care workers were covid-19 positive than other staff. Therefore, the risk factors were co-worker connected rather than patient-related [6].

Conclusion

Based on the findings of this study, the positivity rate was higher in Clinical than non-clinical staff that were working in United Nations in Burundi.

Therefore, the evaluation of the Covid-19 morbidity impact was crucial to emphasize on the invested effort to protect the non-clinical UN employees, and we recommended planning a highly monitored policy for clinical employees to minimize their infection rate.

Table 1. Clinical and Non-clinical Participants

Variable	Covid-19 Positive	Covid-19 negative	Total	Statistic test
Clinical participants	33(2.4%)	33(2.4%)	66(4.7%)	X^2=14.1
Non-clinical participants	379(27.1%)	955(68.2%)	1334(95.3%)	Df=1
Total	412(29.4%)	988(70.6%)	1400(100%)	P<0.001

Disclosure Statement

The authors report no conflicts of interest.

Acknowledgement

It is a great pleasure to express my deep sense of gratitude and respect to Dr Ziad Khatib, my guide, for his valuable advice and suggestions, expert guidance, constructive criticism, and encouragement to complete this work. It is with pride that I express to express my sincere gratitude to all staff University of Texila American University for their valuable skills, suggestions, and advice.

Finally, I must acknowledge the patience and motivated support that I received from my family members all along.

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