

Exposure to SARS-COV-2 of health care workers at Sally Mugabe Central Hospital

Fortunate Mugabe^{1,2,3}, Memory Mucheka¹, Ngoni M. Muguti¹, Hopewell Mungani¹, Marcelyn Tsitsi Magwenzi^{2,3} and Christopher Pasi¹

1. Sally Mugabe Central Hospital 2. Bindura University of Science Education 3. Infection Control Association of Zimbabwe

Continuous monitoring of IPC practices and adherence to recommended IPC measures by all health workers in the workplace are necessary to minimize occupational exposures to SARS-CoV-2

BACKGROUND & CHALLENGES TO IMPLEMENTATION

Setting

Sally Mugabe Central Hospital, Harare, Zimbabwe
Second largest Teaching Government Hospital
Bed capacity - 1200
Staff compliment - over 2000 clinical and ancillary staff.

Challenge

- All health workers have had several trainings in COVID-19 infection prevention and control (IPC) and case management since the pandemic started in 2020
- Personal protective equipment and standard operating procedures were available in all departments

but

during the third wave of the pandemic (June – August 2021) many healthcare workers (243) tested COVID-19 positive leading critical staff shortages and poor service delivery.

Objective

To determine factors leading to health worker exposures to SARS-CoV-2 in the work place.

METHODS

Study design: cross sectional

Period: 21 June to 13 August, 2021

Study population: All health care workers (HCWs) presenting at staff clinic with respiratory symptoms

Data collection: structured interview of those testing COVID-19 positive to determine how they could have been exposed to the virus.

RESULTS

- 927 HCWs presented at staff clinic with respiratory symptoms and were tested for COVID-19 during the study period.
- 243 (26.2%) tested positive for COVID-19
- Nurses and student nurses were the most affected accounting for (72%)
- 27% who tested positive were fully vaccinated, 40% had received first dose and 47% were not vaccinated.

RESULTS

Table 1. SARS-CoV-2 infections by health workers profession or department from June to August 2021

Profession / Department	Nurses	Student nurses	Nurse Aides	Hospital hands	Accounts	Laboratory	Doctors	Counsellors	Public Relations	Security guards	Drivers	Public works	Stores
N	126	50	14	31	7	2	2	2	1	3	1	2	2

- HCWs were at different stages of getting vaccinated against COVID-19.

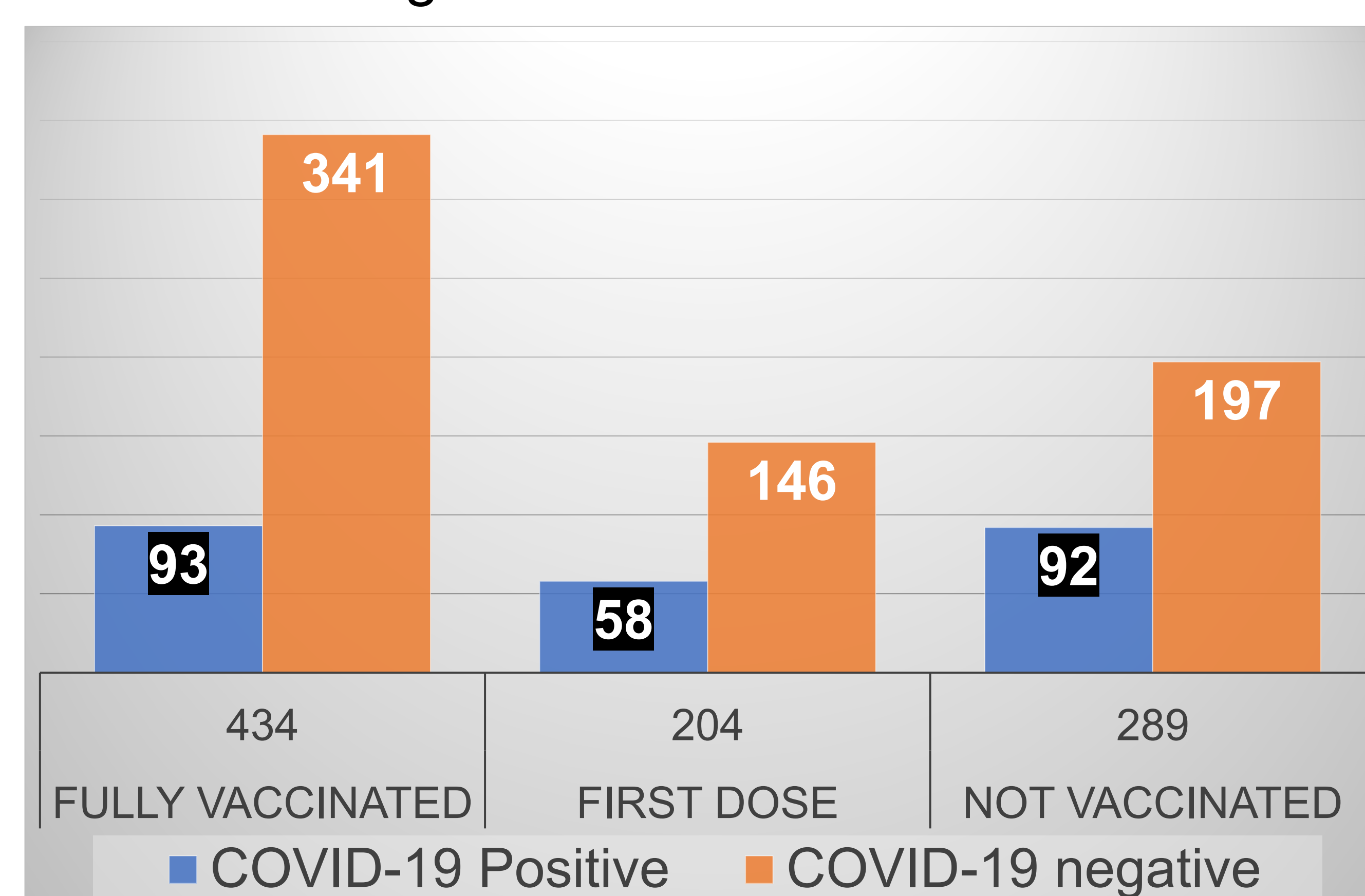


Fig 1. Vaccination status of health workers with respiratory symptoms seen at SMCH Staff Clinic from June to August 2021

The interviews revealed that COVID-19 IPC protocols were not being complied with. Particular risks for transmission of COVID-19 included:

- Inappropriate PPE use and not following donning and doffing sequences
- overcrowding in COVID-19 isolation unit,
- physical distancing not maintained in waiting areas and during tea and lunch breaks.
- Other areas implicated with potential high risk of transmission were study discussion groups among student nurses and overcrowding in staff buses.

RESULTS



The following measures were taken to reduce staff exposure to SARS-CoV-2 in the work place included:

- Mandatory testing of all patients before treatment
- Decongesting waiting areas
- Creation of an additional COVID-19 Isolation unit
- Refresher trainings for all HCWs
- Monitoring of COVID-19 IPC practices in all departments.

CONCLUSIONS

- HCWs are the backbone of health delivery but are faced with high occupational risk of SARS-CoV-2 infection.
- It is necessary to re-enforce recommended COVID-19 IPC practices amongst HCWs through continuous monitoring and feedback in order to maintain quality services during this pandemic.

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CONTACT

Fortunate Mugabe email: fortunatemugabe8@gmail.com.



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