# RESULTS OF CURE-COVID SURVEY OF HEALTH WORKERS[1]

## INTRODUCTION

According to the Department of Health as of 5 May 2020 the number of healthcare workers in the Philippines infected with the coronavirus disease 2019 (COVID-19) has reached 1,819. That means one out of every five COVID-19 infected persons in the Philippines is a health care worker. Of the total infected among health professionals, 685 are nurses, 590 are doctors 107 are nursing assistants, 70 are medical technologists, 34 are radiologic technologists, 21 are midwives, 20 are respiratory therapists, and 15 are pharmacists. Meanwhile, 277 are classified as "other healthcare workers" which consist of dentists, barangay health workers, and administrative aides.[2]

The World Health Organization (WHO) has sounded the alarm on the high number of healthcare workers in the Philippines who have been infected with COVID-19. At 19% of total cases, the rate of infection among frontline health workers in the Philippines is by far the highest among 37 member states in the WHO-Western Pacific Region including China — the epicenter of the coronavirus disease. The average for the region is just 2-3 percent.[3]

This survey reveals some of the major factors that worsens the COVID-19 vulnerability of frontline health workers in the Philippines. The survey results reflect the opinion or perceptions of the respondents about their conditions of work and the Philippine government's response to the COVID-19 pandemic. While these may be considered subjective, they should be given due consideration as they are based on the concrete day to day experience of professionals at the frontlines of the fight against COVID-19.

## BRIEF DESCRIPTION OF SAMPLE AND METHODS

The online survey was conducted between 24 April and 3 May 2020. A total of 487 initial respondents were tallied, of which 457 (93%) are considered valid.

The univariate and bivariate analyses were performed using SPSS Version 21, while graphs were generated using Microsoft Excel. The primary method used for bivariate analyses is the chi-square test of independence, which is a statistical test for determining whether there exists a significant relationship **between two categorical variables**, as all variables in this study are**.** It tests against the null hypothesis that the two categorical variables are independent; that is, knowledge of one variable does not help predict the other variable. We want this null hypothesis rejected, in favor of the alternative hypothesis that there exists an association between the two categorical variables. The results of chi-square tests are comparative and should not be taken as absolute, e.g. "weakness" in one category is in relation to the strength of another.

**All tests are conducted at 5% level of significance.** In the tables to be presented, the "p-value" should be less than 0.05 for us to reject the null hypothesis, or to say that there exists a significant relationship between the two variables. Once we confirm that the variables are associated, we then look into the contingency table to examine the relationship. The Chi-square tests and contingency tables are included in the Appendix.

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[2] Esguerra, D. J. (2020, May 5). 1,819 PH health workers infected with COVID-19. *Inquirer.Net*. https://newsinfo.inquirer.net/1270097/1819-health-workers-infected-with-coronavirus-doh

[3] CNN Philippines Staff. (2020, April 22). *WHO works with PH on 'worrisome' COVID-19 infection rate of frontliners*. CNN Philippines. https://www.cnn.ph/news/2020/4/22/COVID-19-frontliners-healthcare-workers-coronavirus.html

**Important assumptions:**

i. Convenience sampling was used, and responses were collected via an online survey. The findings are only generalizable insofar as the sample is heterogenous enough and may be considered representative of the population.
ii. Observations from workers from the same health facility are independent.
iii. Due to low sample sizes, as well as the appropriateness of the questions, responses from workers in infirmary, community health units, and "others" are excluded in all bivariate analyses.

**SUMMARY OF FINDINGS**

1) Health workers directly face multiple risks of contracting COVID-19, but workers in public hospitals are disproportionately exposed to these risks. Not surprisingly, our findings also show that workers in Metro Manila—the epicenter of the pandemic in the country—are reportedly at greater risk of contracting the virus. However, only 42.2% of all respondents reported that all symptomatic health care workers in their facility are tested for COVID-19 and only 30.2% report that asymptomatic but at-risk health care workers are tested.

2) Flattening the curve not only requires the slow transmission of the virus, but also the adequate capacity of local healthcare systems, particularly the sufficiency of human resources for health. However, more than half of the respondents noted that their health facilities do not meet even half of what they perceive as the adequate number of health personnel and the sufficient number of infection, prevention and control (IPC) supplies and personal protective equipment (PPE). Around two-thirds of respondents believe there is severe lack of doctors, nurses and nurse assistants as well as administration and utility personnel in their health facilities. An even bigger proportion of respondents indicate that there is severe lack of counsellors/therapists as well as midwives. Across all types of medical frontliners, less than 10% of respondents believe there is adequate or near adequate number of personnel.

3) Similarly, across all types of IPC supplies and PPEs needed for handling COVID-19 patients, respondents reported severe or moderate shortage of supplies in their facilities, especially for N95 masks, COVID-19 testing kits, mechanical ventilators and isolation quarters. In general, the shortage is felt more acutely by workers in national government hospitals. On the other hand, there is evidence that LGU hospitals disproportionately face shortage of water, medication, and mechanical ventilators.

4) Compounding these issues which magnify the risks faced by medical frontliners, many of them also work excessively long hours while earning very little pay. The majority of the respondents worked less than 45 hours in the reference week of the survey (71%) but the rest (29%) – a sizable proportion – worked in excess of 45 hours per week. Some (6.6%) even reported working as much as 90 or more hours per week. More than one in every five respondents reported earning less than P15,000 per month, while nearly half of the respondents said they are earning between P15,000 and P30,000.

5) The survey asked respondents to what extent the rights and safeguards listed by the WHO as essential to the wellbeing of health care workers at the frontline of fighting the COVID-19 pandemic are implemented in their workplace.[4] Close to half of health workers said that most of

[4] See WHO (2020). Coronavirus Disease Outbreak (COVID-19): Rights, Roles and Responsibilities of Health Workers, including Key Considerations for Occupational Safety and Health. Available from

their rights are rarely/inadequately or not at all implemented. For most of the rights and safeguards listed, just a little over half of respondents indicate that they are implemented most or all of the time. Resource- and management-related rights are specifically not implemented in public hospitals more than in private hospitals, which, on the other hand, are confronted with issues on compensation.

6) A clear majority of respondents believe that the government has not yet fulfilled any of the six criteria suggested by the WHO for lifting lockdown restrictions[5] although a significant proportion (around one-third) believe that the government is "close to fulfilling" each of the criteria. It is noteworthy that the respondents – all health care workers at the frontlines of fighting COVID-19 – rated the government response as poorest in the medical-related criteria (the first three criteria). On the other hand, the respondents perceive most progress has been achieved in terms of putting in place "preventive measures in workplaces, schools, transport terminals and other places where it's essential for people to go", possibly because they interpret this as referring to the quarantine (ECQ and GCQ) measures already being enforced since the middle of March.

**I. RESPONDENT CHARACTERISTICS**

There are more females (65%) than males (34%) in the sample, while less than 1% preferred not to specify. A third of them are working in NCR (33.5%), followed by CAR (13.6%), Davao Region (12.7%), Ilocos Region (11.4%) and Bicol Region (8.3%). An overwhelming majority of the respondents are nurses (66.9%), followed by doctors (5.7%), nurse assistants (5.5%) and medical technologists (4.2%).

In terms of employment, a majority (50.1%) of the respondents are working at a national government hospital and are regular (73.7%). **A majority of them as well are working less than 45 hours in the past week (71%) but the rest – a sizable proportion – are working more than 45 hours per week, with some (6.6%) working as much as 90 or more hours per week. More than 1 in every 5 respondents is earning less than P15,000 per month, while the plurality (47.7%) of the respondents said they are earning between P15,000 and P30,000.**

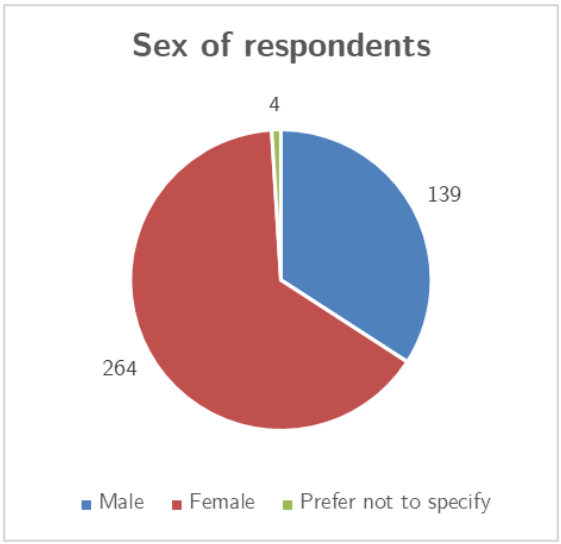
| **Region of health facility** | | |
|---|---|---|
| | n | % |
| National Capital Region | 153 | 33.5% |
| Cordillera Administrative Region | 62 | 13.6% |
| Bangsamoro Autonomous Region of Muslim Mindanao | 3 | 0.7% |
| I – Ilocos Region | 52 | 11.4% |
| II – Cagayan Valley | 3 | 0.7% |
| III – Central Luzon | 15 | 3.3% |
| IV-A – CALABARZON | 14 | 3.1% |
| IV-B – MIMAROPA | 5 | 1.1% |
| V – Bicol Region | 38 | 8.3% |
| VI – Western Visayas | 8 | 1.8% |

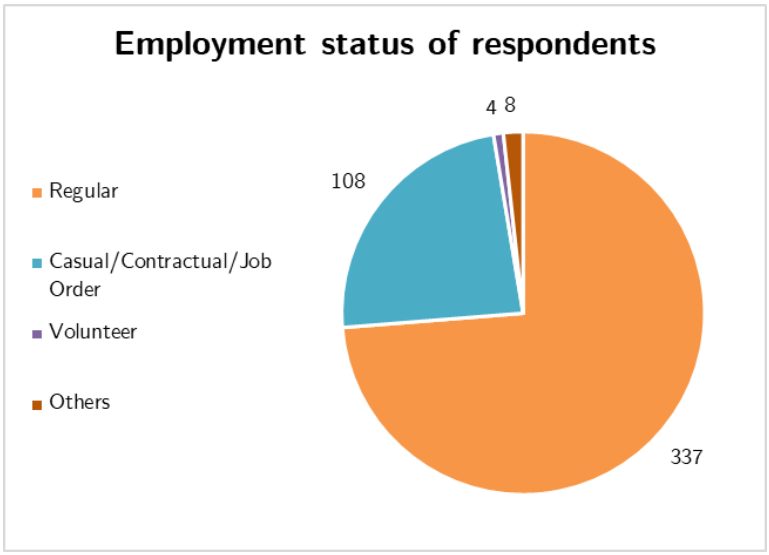
https://www.who.int/docs/default-source/coronaviruse/who-rights-roles-respon-hw-covid-19.pdf?sfvrsn=bcabd401_0

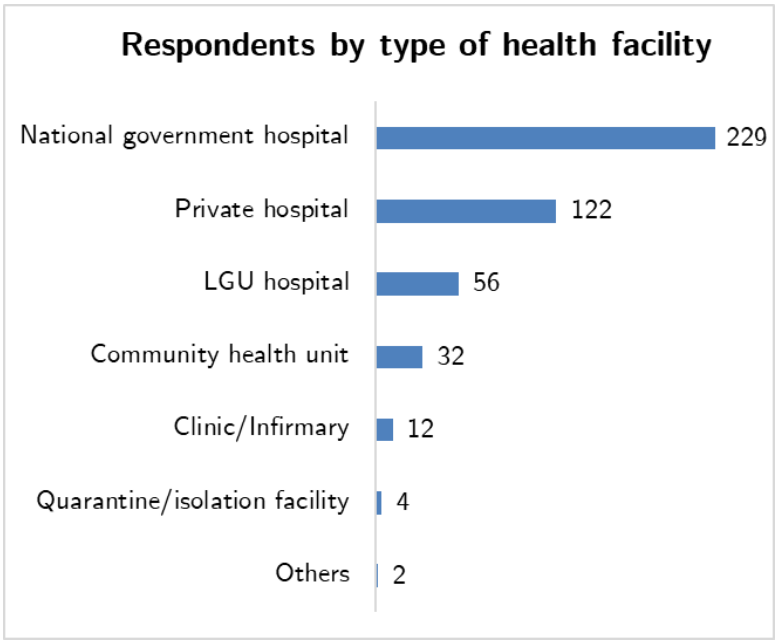
[5] World Health Organization COVID-19 Strategy Update, 14 April 2020. Available from https://www.who.int/docs/default-source/coronaviruse/covid-strategy-update-14april2020.pdf?sfvrsn=29da3ba0_6

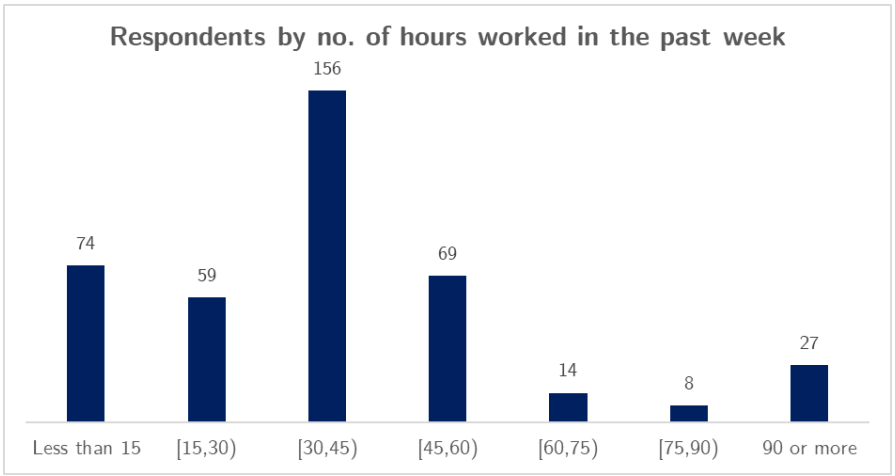
| Region of health facility | | |
|---|---|---|
| VII – Central Visayas | 21 | 4.6% |
| VIII – Eastern Visayas | 2 | 0.4% |
| X – Zamboanga Region | 3 | 0.7% |
| XI – Davao Region | 58 | 12.7% |
| XII – SOCCSKSARGEN | 15 | 3.3% |
| XIII – Caraga | 5 | 1.1% |

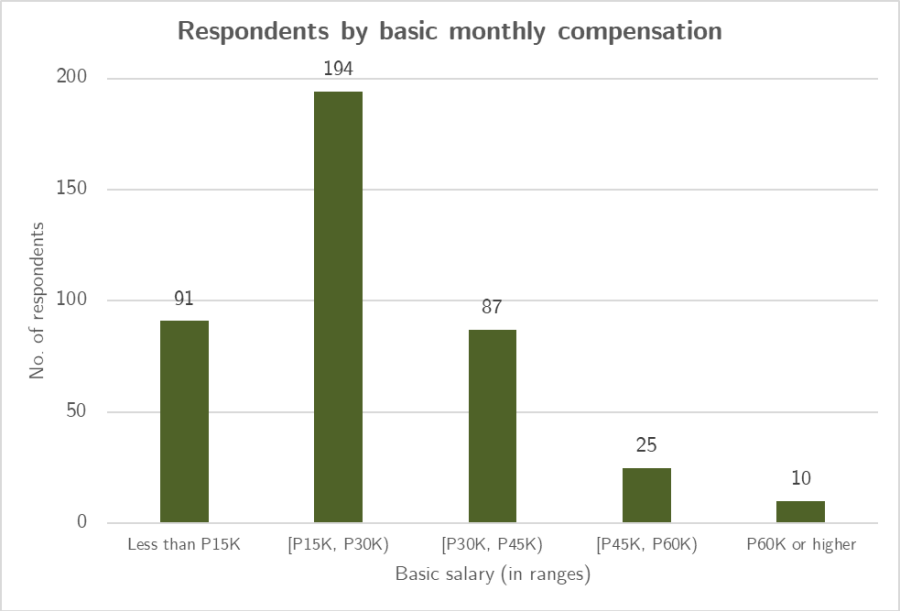
| Occupation | | |
|---|---|---|
| | n | % |
| Nurse | 305 | 66.9% |
| Doctor | 26 | 5.7% |
| Nurse assistant | 25 | 5.5% |
| Medical technologist | 23 | 5.0% |
| Therapist | 19 | 4.2% |
| Midwife | 16 | 3.5% |
| Administration | 14 | 3.1% |
| Radiation technologist | 13 | 2.9% |
| Others | 15 | 3.3% |




Employment status of respondents
Regular
Casual/Contractual/Job Order
Volunteer
Others
4
8
108
337


Respondents by type of health facility
National government hospital
229
Private hospital
122
LGU hospital
56
Community health unit
32
Clinic/Infirmary
12
Quarantine/isolation facility
4
Others
2


Respondents by no. of hours worked in the past week
74
59
156
69
14
8
27
Less than 15
[15,30)
[30,45)
[45,60)
[60,75)
[75,90)
90 or more




We now try to see whether there are existing correlations between these sets of characteristics. Performing a test of independence, we have sufficient evidence to conclude that respondents working outside NCR tend to have longer working hours than their counterparts in Metro Manila ($\chi 2 = 28.17$, df=6, $p<0.01$), possibly because there are less health workers as a proportion of the population outside Metro Manila.

| **Number of hours worked in the past week * If health facility is in NCR Crosstabulation** | | | | |
|---|---|---|---|---|
| % within If health facility is in NCR | | | | |
| | | If health facility is in NCR | | Total |
| | | .00 | 1.00 | |
| Number of hours worked in the past week | Less than 15 | 20.1% | 17.6% | 19.3% |
| | [15,30) | 8.2% | 24.2% | 13.6% |
| | [30,45) | 37.2% | 36.6% | 37.0% |
| | [45,60) | 19.4% | 13.1% | 17.3% |
| | [60,75) | 5.3% | 0.7% | 3.7% |
| | [75,90) | 2.0% | 2.0% | 2.0% |
| | 90 or more | 7.9% | 5.9% | 7.2% |
| Total | | 100.0% | 100.0% | 100.0% |

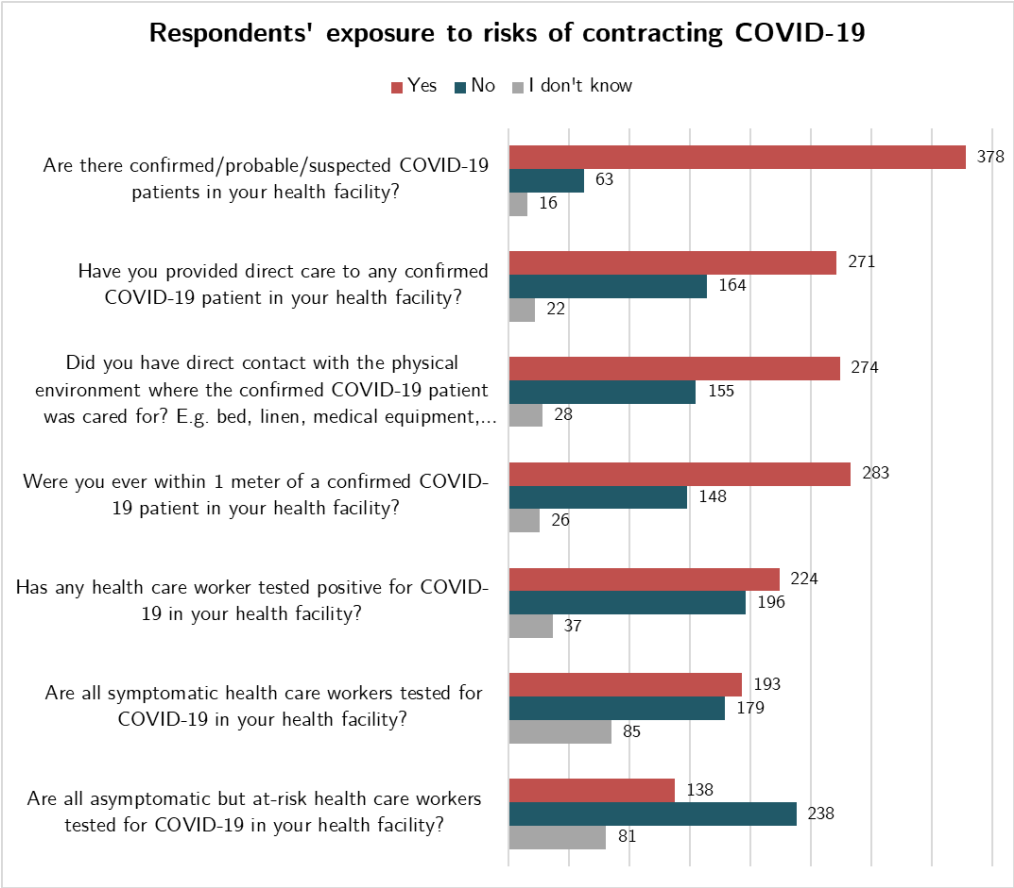
Meanwhile, excluding 'volunteers' and 'others' due to low sample size, there is sufficient evidence to conclude that there are more contractual workers from health facilities outside NCR ($\chi 2 = 21.052$, df=1, $p<0.01$).

| **Employment status * If health facility is in NCR Crosstabulation** | | | | |
|---|---|---|---|---|
| % within If health facility is in NCR | | | | |
| | | If health facility is in NCR | | Total |
| | | .00 | 1.00 | |
| Employment status | Regular | 69.0% | 88.7% | 75.7% |
| | Casual/Contractual/Job Order | 31.0% | 11.3% | 24.3% |
| Total | | 100.0% | 100.0% | 100.0% |

On the other hand, there is no evidence on the basis of given data that health workers outside NCR are paid less than their counterparts in Metro Manila. There is also no sufficient evidence that the employment status of the workers varies by the type of health facility.

## II. RISKS AT THE WORKPLACE

Majority of respondents are exposed to multiple risks of contracting COVID-19 in their workplaces (see figure below). In fact, 394 out of 457 or 86% of respondents are reportedly exposed to at least a single risk factor. However, **only 42.2% of respondents reported that all *symptomatic* health care workers in their facility are tested for COVID-19 and only 30.2% report that *asymptomatic but at-risk* health care workers are tested.**




We test whether there exists a significant relationship between the type of health facility (national government hospital, LGU hospital, and private hospital) and the respondents' reported exposure to risks ("yes" or "no"). **In general, we find consistent evidence that workers from national government hospitals are much more exposed to the risks considered in this study compared to their counterparts from local government hospitals and private hospitals.** This may be attributed to the myriad of existing problems being faced by national government hospitals, which, due to their physical capacity, are now also burdened by the influx of probable/suspected/confirmed COVID patients.

Note that the designated COVID-19 hospitals are mostly public and that prior to the pandemic, these hospitals were already underfunded, and their resources strained. On the positive side, more respondents from national government hospitals report that symptomatic health care workers are

tested for COVID-19 in their health facilities although majority still report that asymptomatic but at-risk health workers are not tested.

**Column frequency distribution of risk exposure to COVID-19 vs. type of health facility**

| Variable | | n | NG Hospital | LGU Hospital | Private Hospital |
|---|---|---|---|---|---|
| Are there confirmed/probable/suspected COVID-19 patients in your health facility? | Yes | 351 | 96.9% | 87.3% | 75.4% |
| | No | 42 | 3.1% | 12.7% | 24.6% |
| Have you provided direct care to any confirmed COVID-19 patient in your health facility? | Yes | 251 | 67.0% | 76.9% | 55.6% |
| | No | 136 | 33.0% | 23.1% | 44.4% |
| Did you have direct contact with the physical environment where the confirmed COVID-19 patient was cared for? | Yes | 261 | 71.2% | 80.4% | 58.3% |
| | No | 120 | 28.8% | 19.6% | 41.7% |
| Were you ever within 1 meter of a confirmed COVID-19 patient in your health facility? | Yes | 265 | 71.0% | 79.2% | 61.1% |
| | No | 118 | 29.0% | 20.8% | 38.9% |
| Has any health care worker tested positive for COVID-19 in your health facility? | Yes | 222 | 70.6% | 52.9% | 40.7% |
| | No | 151 | 29.4% | 47.1% | 59.3% |
| Are all symptomatic health care workers tested for COVID-19 in your health facility? | Yes | 185 | 64.5% | 40.5% | 48.0% |
| | No | 143 | 35.5% | 59.5% | 52.0% |
| Are all asymptomatic but at-risk health care workers tested for COVID-19 in your health facility? | Yes | 351 | 47.1% | 46.9% | 25.5% |
| | No | 42 | 52.9% | 53.1% | 74.5% |

Indeed, **we also find evidence that the exposure to COVID risks is greater among health workers in Metro Manila**—the epicenter of the pandemic in the country—compared to their counterparts outside NCR.

**Column frequency distribution of risk exposure to COVID-19 vs. if working within or outside NCR**

| Variable | | n | Working outside NCR | Working within NCR |
|---|---|---|---|---|
| Are there confirmed/probable/suspected COVID-19 patients in your health facility? | Yes | 378 | 85.9% | 95.1% |
| | No | 63 | 14.1% | 4.9% |
| Have you provided direct care to any confirmed COVID-19 patient in your health facility? | Yes | 271 | 64.6% | 65.3% |
| | No | 164 | 35.4% | 34.7% |
| Did you have direct contact with the physical environment where the confirmed COVID-19 patient was cared for? | Yes | 274 | 66.4% | 72.1% |
| | No | 155 | 33.6% | 22.9% |
| Were you ever within 1 meter of a confirmed COVID-19 patient in your health facility? | Yes | 283 | 66.4% | 73.9% |
| | No | 148 | 33.6% | 26.1% |
| Has any health care worker tested positive for COVID-19 in your health facility? | Yes | 224 | 40.1% | 91.5% |
| | No | 196 | 59.9% | 8.5% |
| | Yes | 193 | 52.8% | 63.6% |

| Variable | | n | Working outside NCR | Working within NCR |
|---|---|---|---|---|
| Are all symptomatic health care workers tested for COVID-19 in your health facility? | No | 179 | 47.2% | 36.4% |
| Are all asymptomatic but at-risk health care workers tested for COVID-19 in your health facility? | Yes | 138 | 37.8% | 44.6% |
| | No | 238 | 62.2% | 55.4% |

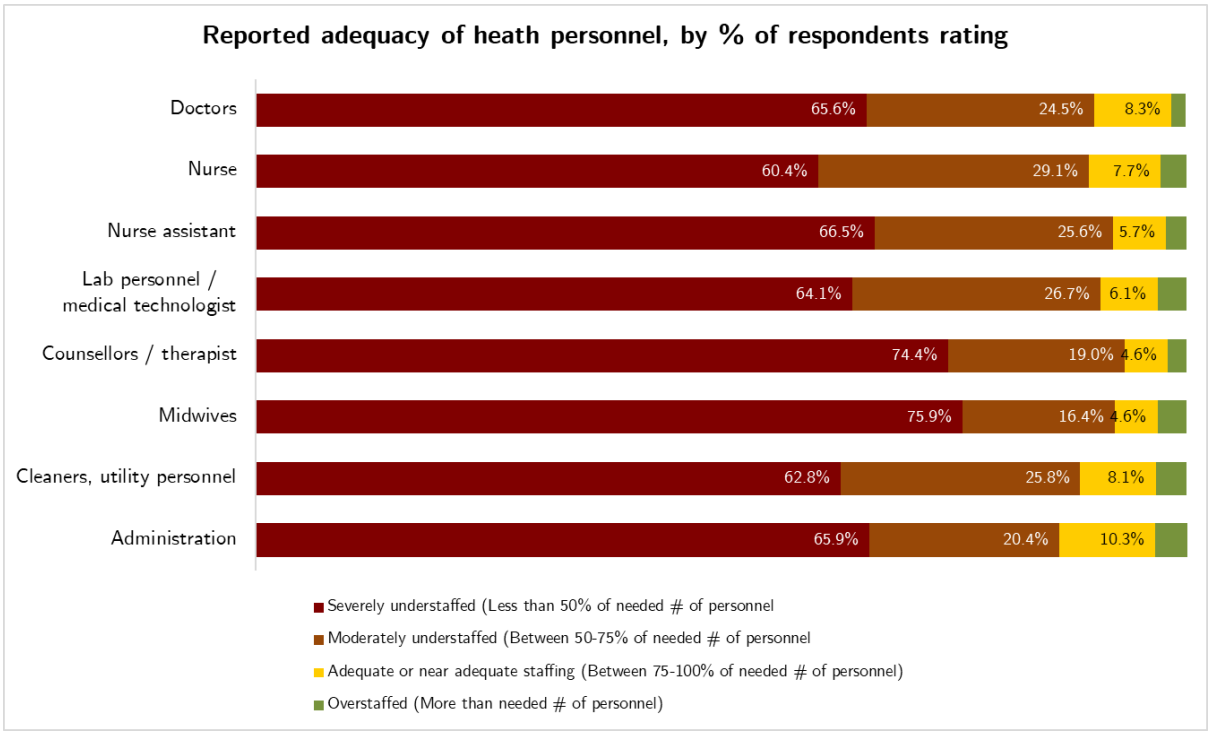
Finally, there is no evidence that a relationship exists between the worker's employment status and their exposure to COVID risks.

**III. STAFFING AND SUPPLIES**

The high exposure risk of health workers in the country is made worse by the severe understaffing and severe lack of infection, prevention and control (IPC) supplies and personal protective equipment (PPE) in health facilities.

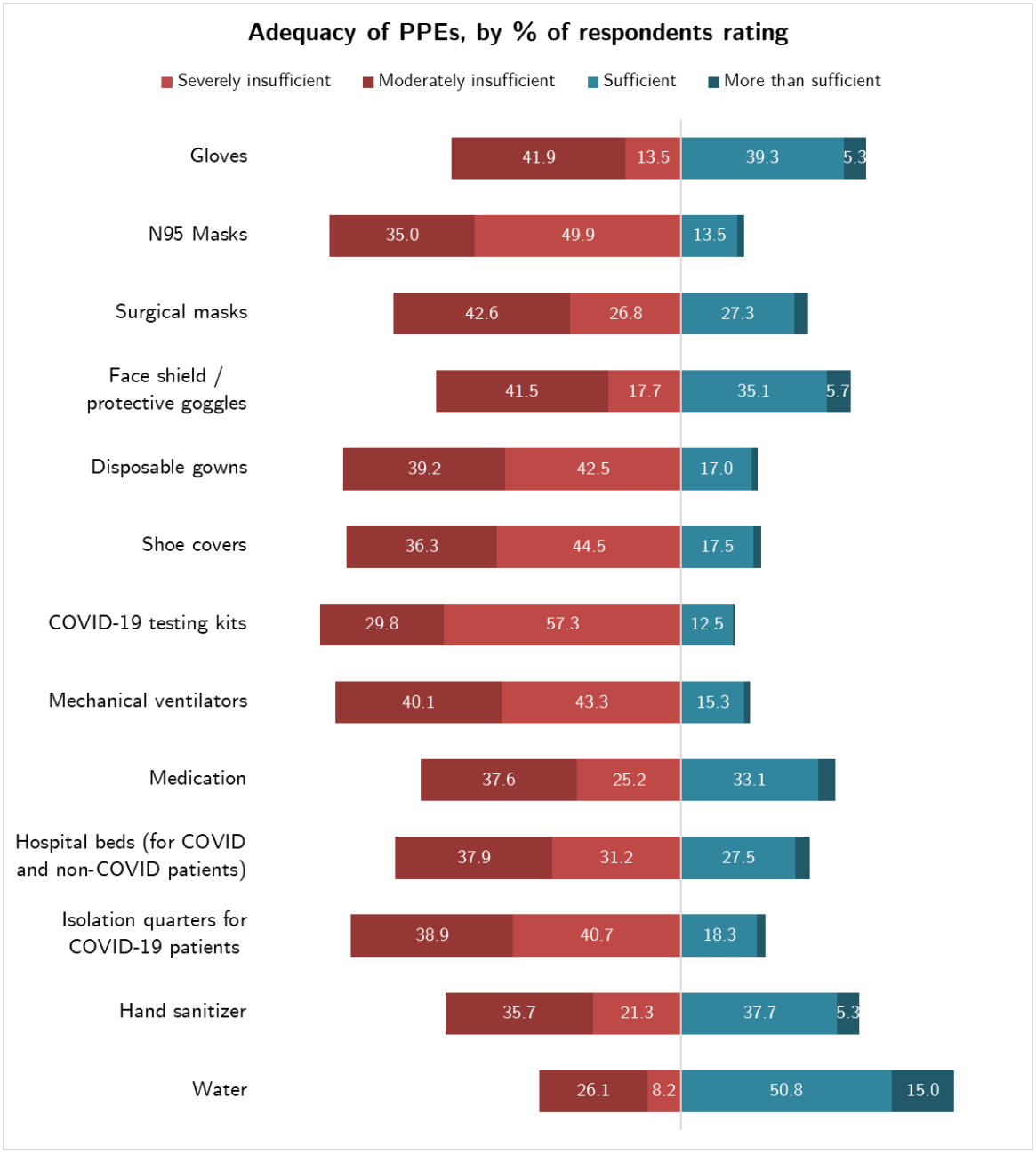
The graphs below show that **more than half of the respondents noted that their health facilities do not meet even half of what they perceive as the adequate number of health personnel and the sufficient number of PPEs. Around two-thirds of respondents believe there is severe lack of doctors, nurses and nurse assistants as well as administration and utility personnel in their health facilities. An even bigger proportion of respondents indicate that there is severe lack of counsellors/therapists as well as midwives. Across all types of medical frontliners, less than 10% of respondents believe there is adequate or near adequate number of personnel.**

Aside from counsellors/therapist and midwives, which are the top two occupations with inadequate personnel, we see no indication by way of conducting chi-square tests that the inadequacy of health personnel significantly varies by the type of health facility or whether the facility is located outside NCR.



Similarly, **across all types of IPC supplies and PPEs needed for handling COVID-19 patients, respondents reported severe or moderate shortage of supplies in their facilities, especially for N95 masks, COVID-19 testing kits, mechanical ventilators and isolation quarters. Only water seems to be adequate in supply according to a majority of respondents.**

The results of chi-square tests indicate that the sufficiency of N95 masks and face shield/protective goggles vary according to type of health facility, but not with whether or not situated in NCR. **In general, the shortage is more felt by workers in national government hospitals. On the other hand, there is evidence that LGU hospitals disproportionately face shortage of water, medication, and mechanical ventilators.** Finally, the insufficiency of isolation quarters for COVID-19 is more an issue among government hospitals than their private counterparts.

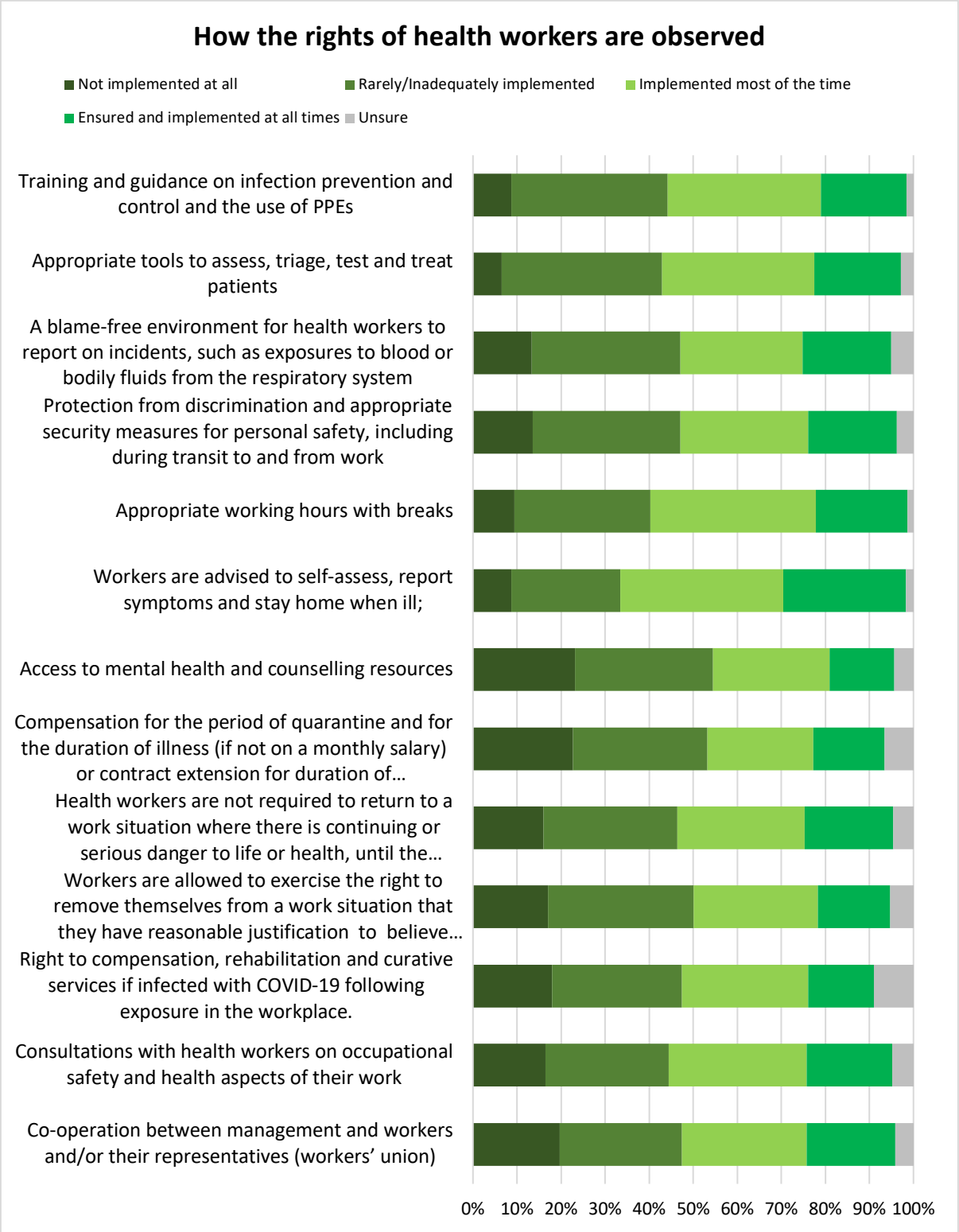


## IV. RIGHTS OF HEALTH WORKERS

The survey asked respondents to what extent the rights and safeguards listed by the WHO as essential to the wellbeing of health care workers at the frontline of fighting the COVID-19 pandemic are implemented in their workplace. **Close to half of health workers said that most of their rights are rarely/inadequately or not at all implemented. For most of the rights and safeguards listed, just a little over half of respondents indicate that they are implemented most or all of the time.**

A majority of respondents said that in most cases or at all times, they are provided with adequate training and guidance on infection prevention and control and the use of PPEs (54.3%); are equipped with appropriate tools to assess, triage, test, and treat patients (54.3%); have appropriate working hours with breaks (58.4%); are advised to self-assess, report symptoms and stay home when ill (64.8%); and are consulted on occupational safety and health aspects of their work (50.8%).

That the responses to these are not an overwhelming majority is alarming, and for the rest of the given rights, the number of those who said that the rights are rarely/inadequately or not at all implemented outweighs the number of those who reported otherwise. It is also notable that there is a relatively high number of respondents saying they are “unsure” whether their workplaces observe their right to compensation, rehabilitation and curative services if infected with COVID-19 (9%).




We again test whether the workers' perception of their rights being observed vary according to the type of health facility and whether they are located within or outside NCR.

**In terms of the type of health facility, we have evidence that several of the resource- and management-related rights of health workers from LGU hospitals are implemented less than that of workers from national government hospitals and private hospitals**, namely the right to have

training and guidance on the infection prevention and control and the use of PPEs; the provision of appropriate tools to assess, triage, test and treat patients; advisory to self-assess, report symptoms and stay home when ill; access to mental health and counselling resources, and consultations with health workers on occupational safety and health aspects of their work. LGU hospitals also share with national government hospitals the problem on the lack of cooperation between management and workers and/or their representatives (workers' union).

Meanwhile, **rights-related issues on compensation for the period of quarantine and for the duration of illness, as well as compensation, rehabilitation and curative services if infected with COVID-19 following exposure in the workplace, are disproportionately faced by workers in private hospitals compared to workers in public hospitals.**

In terms of whether the facility is located in or outside NCR, we have sufficient evidence to say that several rights of health workers outside are observed less than that of their counterparts in NCR, particularly the right to training and guidance on infection prevention and control and the use of PPEs; the right to be provided with appropriate tools to assess, triage, test and treat patients; the right to be advised to self-assess, report symptoms and stay home when ill; the right to access to mental health and counselling resources; and the right to cooperation between management and workers and/or their representatives (workers' union).

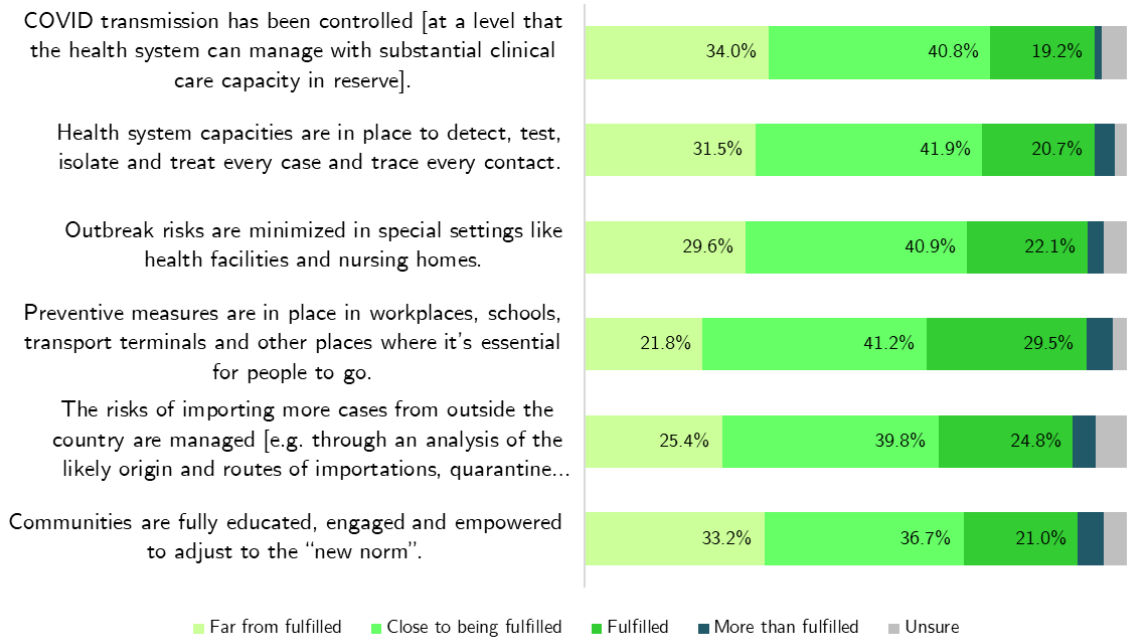
## V. PERCEPTION ON CURRENT GOVERNMENT RESPONSE TO THE PANDEMIC

**The survey asked health workers to rate to what extent the government has fulfilled the six criteria suggested by the WHO as prerequisites for lifting lockdown or quarantine measures. The clear majority of respondents believe that the government has not yet fulfilled any of the six criteria as of end April.**

It is also noteworthy that the respondents – all health care workers at the frontlines of fighting COVID-19 – rated the government response as poorest in the medical-related criteria (the first three criteria). On the other hand, the respondents perceive most progress has been achieved in terms of putting in place "preventive measures in workplaces, schools, transport terminals and other places where it's essential for people to go", possibly because they interpret this as referring to the quarantine (ECQ and GCQ) measures already being enforced since the middle of March.

## Perception on the government response to the pandemic

(Responses to the question "To what extent do you think the Philippine government's COVID-19 response has fulfilled these six criteria as of April 27?)



**APPENDIX. Bivariate Analysis**

Only sets of crosstabulations with significant relationships are presented here.

**Chi-square test of independence: exposure to risk vs. type of health facility**

| Variable | χ2 (df=2) | p-value |
|---|---|---|
| Are there confirmed/probable/suspected COVID-19 patients in your health facility? | 36.651* | <.0001 |
| Have you provided direct care to any confirmed COVID-19 patient in your health facility? | 8.191* | .017 |
| Did you have direct contact with the physical environment where the confirmed COVID-19 patient was cared for? E.g. bed, linen, medical equipment, bathroom etc. | 9.637* | .008 |
| Were you ever within 1 meter of a confirmed COVID-19 patient in your health facility? | 6.338* | .042 |
| Has any health care worker tested positive for COVID-19 in your health facility? | 27.551* | <.0001 |
| Are all symptomatic health care workers tested for COVID-19 in your health facility? | 12.183* | .002 |
| Are all asymptomatic but at-risk health care workers tested for COVID-19 in your health facility? | 13.971* | .001 |

*all significant at 0.05 level of significance; "I don't know" responses are set as missing in this analysis.

**Chi-square test of independence: exposure to risk vs. if working in or outside NCR[1]**

| Variable | χ2 (df=1) | p-value |
|---|---|---|
| Are there confirmed/probable/suspected COVID-19 patients in your health facility? | 14.346* | <.0001 |
| Have you provided direct care to any confirmed COVID-19 patient in your health facility? | 0.341 | .559 |
| Did you have direct contact with the physical environment where the confirmed COVID-19 patient was cared for? E.g. bed, linen, medical equipment, bathroom etc. | 3.980* | .046 |
| Were you ever within 1 meter of a confirmed COVID-19 patient in your health facility? | 4.718* | .030 |
| Has any health care worker tested positive for COVID-19 in your health facility? | 112.970* | <.0001 |
| Are all symptomatic health care workers tested for COVID-19 in your health facility? | 7.673* | 0.006 |
| Are all asymptomatic but at-risk health care workers tested for COVID-19 in your health facility? | 3.810 | 0.51 |

*significant at 0.05 level of significance; [1] "I don't know" responses are set as missing in this analysis.

**Chi-square test of independence:**
**Reported sufficiency of IPC and PPE supplies vs. type of health facility**

| Variable | χ2 (df=6) | p-value |
|---|---|---|
| Gloves | 4.805 | .569 |
| N95 Masks* | 18.624 | .005 |
| Surgical masks | 5.594 | .470 |
| Face shield / protective goggles* | 14.109 | .028 |
| Disposable gowns | 4.939 | .552 |
| Shoe covers | 9.837 | .132 |
| COVID-19 testing kits | 7.174 | .305 |
| Mechanical ventilators* | 21.093 | .002 |
| Medication* | 12.877 | .045 |
| Hospital beds (for COVID and non-COVID patients) | 7.791 | .254 |
| Isolation quarters for COVID-19 patients* | 13.310 | .038 |
| Hand sanitizer | 9.233 | .161 |
| Cleaning supplies* | 19.262 | .004 |

*significant at 0.05 level of significance

**Chi-square test of independence:**
**Implementation of the rights of health workers vs. type of health facility**

| Variable | χ2 (df=6) | p-value |
|---|---|---|
| Training and guidance on infection prevention and control and the use of PPEs * | 19.515 | .003 |
| Appropriate tools to assess, triage, test and treat patients * | 13.117 | .041 |
| A blame-free environment for health workers to report on incidents, such as exposures to blood or bodily fluids from the respiratory system | 9.545 | .145 |
| Protection from discrimination and appropriate security measures for personal safety, including during transit to and from work | 3.614 | .729 |
| Appropriate working hours with breaks | 5.387 | .495 |
| Workers are advised to self-assess, report symptoms and stay home when ill * | 8.559 | .200 |
| Access to mental health and counselling resources * | 17.383 | .008 |
| Compensation for the period of quarantine and for the duration of illness (if not on a monthly salary) or contract extension for duration of quarantine/illness * | 25.949 | .000 |
| Health workers are not required to return to a work situation where there is continuing or serious danger to life or health, until the employer has taken the necessary remedial actions | 6.227 | .398 |
| Workers are allowed to exercise the right to remove themselves from a work situation that they have reasonable justification to believe presents an imminent and serious danger to their life or health. | 5.846 | .441 |
| Right to compensation, rehabilitation and curative services if infected with COVID-19 following exposure in the workplace. * | 15.156 | .019 |
| Consultations with health workers on occupational safety and health aspects of their work* | 15.837 | .015 |
| Co-operation between management and workers and/or their representatives (workers' union) * | 11.629 | .071 |

*significant at 0.05 level of significance

**Chi-square test of independence:**
**Implementation of the rights of health workers vs. if working in or outside NCR**

| Variable | χ2 (df=3) | p-value |
|---|---|---|
| Training and guidance on infection prevention and control and the use of PPEs* | 14.621 | .002 |
| Appropriate tools to assess, triage, test and treat patients* | 10.743 | .013 |
| A blame-free environment for health workers to report on incidents, such as exposures to blood or bodily fluids from the respiratory system* | 11.473 | .009 |
| Protection from discrimination and appropriate security measures for personal safety, including during transit to and from work | 5.296 | .151 |
| Appropriate working hours with breaks | 4.844 | .184 |
| Workers are advised to self-assess, report symptoms and stay home when ill* | 11.796 | .008 |
| Access to mental health and counselling resources* | 8.025 | .045 |
| Compensation for the period of quarantine and for the duration of illness (if not on a monthly salary) or contract extension for duration of quarantine/illness; | 0.178 | .981 |
| Health workers are not required to return to a work situation where there is continuing or serious danger to life or health, until the employer has taken the necessary remedial actions | 7.454 | .059 |
| Workers are allowed to exercise the right to remove themselves from a work situation that they have reasonable justification to believe presents an imminent and serious danger to their life or health. | 6.088 | .107 |
| Right to compensation, rehabilitation and curative services if infected with COVID-19 following exposure in the workplace. | 2.319 | .509 |
| Consultations with health workers on occupational safety and health aspects of their work | 2.937 | .401 |
| Co-operation between management and workers and/or their representatives (workers' union) * | 9.350 | .025 |

*significant at 0.05 level of significance