

Knowledge, beliefs and practices about COVID-19 infection and vaccination in healthcare personnel at non-acute care facilities



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BACKGROUND

- The COVID-19 pandemic has disproportionately affected long-term care facilities (LCTFs) and non-acute clinical care settings.
- Healthcare personnel (HCP) are vulnerable to COVID-19 exposure and face challenges related to availability of PPE, burnout, and increased workload.
- Changes in diagnostics, quarantine protocols, treatment, and vaccine availability have created additional challenges for HCP.
- Most studies related to HCP have focused on acute care settings. There is a need to better understand the impact of the pandemic on HCP in non-acute care settings.

OBJECTIVE

Assess the experience, knowledge, beliefs, and perceptions of risk related to COVID-19, infection prevention practices, and COVID-19 vaccination among HCP employed in non-acute care settings.

METHODS

- Between April and May 2021, an anonymous survey was distributed to HCP at three non-acute care facilities in St. Louis, MO.
- The survey included questions about demographics, experience working in healthcare, frequency of contact with COVID-19 patients, COVID-19 history, and COVID-19 exposures.
- Respondents were asked to respond to a series of statements about COVID-19 beliefs and knowledge, SARS-CoV-2 vaccination, COVID-19 policies and practices at their facility, behaviors, and fears.
- Descriptive statistics were performed for group comparisons using Chi-square or Fisher’s exact tests.
- The study protocol was approved by the Washington University Human Research Protection Office.

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RESULTS

- There were 156 respondents; the majority (78%) were female and the largest age cohort was 26-35 years (28%).
- A variety of job roles were represented, with the largest proportions being nurse assistants (16%), nurses (15%), administration (15%), and therapists (12%).
- A third (34%) of respondents reported 15+ years of experience working in healthcare.
- 15% of HCP reported having contact with COVID-19 patients most days of the week while at work; another 22% reported contact at least a few days of the week.
- 88% of HCP had received at least one test for COVID-19, and 21% reported having had a prior positive COVID-19 test.
- A strong majority reported knowing how to protect themselves from COVID-19 while at work (96%) and while in public (96%).
- 82% agreed that wearing a face mask helped protect them from COVID-19, although 59% reported that wearing a mask made communication more difficult.

| Belief Statement | Less contact with COVID patients N = 87 (%) | | | More contact with COVID patients N = 58 (%) | | |
|--|--|-----------|-----------|--|-----------|-----------|
| | Agree | Neutral | Disagree | Agree | Neutral | Disagree |
| COVID-19 is a serious problem in our community | 68 (78.2) | 10 (11.5) | 7 (8.0) | 47 (81.0) | 7 (12.1) | 2 (3.4) |
| COVID-19 is a serious problem at my facility | 25 (28.7) | 22 (25.3) | 38 (43.7) | 19 (32.8) | 20 (34.5) | 18 (31.0) |
| I know how to protect myself from COVID-19 while I am at work | 84 (96.6) | 1 (1.1) | 1 (1.1) | 56 (96.6) | 0 | 2 (3.4) |
| I know how to protect myself from COVID-19 while I am out in public | 83 (95.4) | 2 (2.3) | 1 (1.1) | 56 (96.6) | 0 | 2 (3.4) |
| People can have COVID-19 without having any symptoms | 77 (88.5) | 8 (9.2) | 1 (1.1) | 55 (94.8) | 2 (3.4) | 1 (1.7) |
| COVID-19 spreads easily from person to person | 74 (85.1) | 10 (11.5) | 1 (1.1) | 48 (82.8) | 7 (12.1) | 2 (3.4) |
| Wearing a face mask helps protect me from getting COVID-19 | 70 (80.5) | 12 (13.8) | 3 (3.4) | 49 (84.5) | 1 (1.7) | 8 (13.8) |
| Wearing a mask is bad for my health | 9 (10.3) | 13 (14.9) | 64 (73.6) | 11 (19.0) | 9 (15.5) | 37 (63.8) |
| Wearing a mask and/or face shield makes it hard to communicate with others | 50 (57.5) | 20 (23.0) | 15 (17.2) | 36 (62.1) | 10 (17.2) | 10 (17.2) |

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RESULTS

- Most HCP reported adequate training on how to recognize symptoms of COVID-19 (78%) and how to use PPE (81%).
- Although most HCP (90%) reported good availability of PPE at the time of the survey, 28% reported having had to re-use PPE due to previous supply shortages.
- Only 56% of HCP reported that their facility made it easy for them to stay home when they were sick and only 25% reported that staff had been provided with adequate mental health support during the COVID-19 pandemic.
- Many HCP (56%) reported having taken on extra responsibilities at work during COVID-19; 53% reported that their job had become more stressful and 14% had considered quitting their job because of COVID-19.
- The majority of HCP (78%) reported having received at least one dose of a COVID-19 vaccine; HCP who had more contact with COVID-19 patients were slightly more likely to have been vaccinated than HCP who had less contact with COVID-19 patients (83% vs. 75%).
- Among unvaccinated HCP, the top reasons given for not having been vaccinated were concern about side effects (53%) and concern about inadequate testing (50%).

LIMITATIONS

- This was an anonymous survey and HCP were not randomly selected to complete the survey.
- Answers were self-reported and not subsequently verified to confirm accuracy.

CONCLUSIONS

- While most HCP working in non-acute care facilities reported adequate training and knowledge of COVID-19, many also reported significant stress related to COVID-19 pandemic and increased responsibilities in the workplace.
- Areas for improvement include: making it easier for HCP to stay home when they are sick, providing better mental health support; and providing education for HCP who have concerns about COVID-19 vaccination.