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Awareness of COVID-19 and perception of work satisfaction among healthcare workers at Patan Hospital, Nepal

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Abstract

Introduction: Healthcare workers (HCWs) awareness of disease outbreak, and working efficiently in a changed environment is vital to fight pandemic. How an institution responds to the crisis depends on HCWs response. This study aims to find out awareness of COVID-19 and work satisfaction of HCWs at Patan Hospital (PH), Nepal.

Method: A cross-sectional questionnaires base descriptive study was conducted at PH, Patan Academy of Health Sciences, Nepal, in April 2020. The HCWs were grouped in to technical staff, doctors, and support staff. There were 20 questions each in the awareness of COVID-19 and work satisfaction domain. Ethical approval was obtained.

Result: Of all the staff, 223 various level staffs responded to the questionnaire. There were 80 (35.9%) technical staff, 77 (34.5%) doctors and 66 (29.6%) support staff in the study. In the technical staff group 1106 (69.2%) responses were in favour of having good awareness and 1337 (83.5%) responses were in favour of satisfaction. In the doctors' group 1233 (80.1%) responses were in favour of having good awareness and 1000 (65%) responses were in favour of satisfaction. In the support staff group 236 (17.7%) responses were in favour of having good awareness and 347 (26.2%) responses were in favour of satisfaction.

Conclusion: Our study showed that technical staff and doctors had higher levels of perception of work satisfaction and awareness for COVID-19.

Keyword: awareness, COVID-19, health care workers, perception, work satisfaction

Introduction

Healthcare workers (HCWs) - doctors, nurses laboratory staff and general services staffs - working normally and efficiently is integral to the effective pandemic response.¹ Individual beliefs, knowledge, and perceptions are integral in order to generate desired behavioral changes.^{2,3} Higher ability to conceptualize the disease plays a greater role for employees in curating accurate perception towards institutionalized response, which ultimately is the key for success of preventive measures.^{3,4} Ultimately, how an institution responds to the crisis, is dependent on every individual employee response.

Therefore, in order to bring together various levels of hospital staffs, it is important to take into account their knowledge in relation to the pandemic, and how satisfied they are with the broader institutional structure and response. This study aims to find out HCWs awareness of COVID-19 and their perception of work satisfaction in this changed pandemic environment

Method

A cross sectional descriptive study was conducted at Patan Hospital (PH), Patan Academy of Health Sciences (PAHS, Nepal, in April 2020. Questionnaires were used to assess the awareness about COVID-19 and perception of work satisfaction of the participants. There were 20 questions each in the awareness and perception of work satisfaction domain. For each question, a Likert scale (strongly disagree, disagree, agree and strongly agree) was used. Strongly agree and agree representing adequate awareness and satisfaction. For awareness of COVID-19, the Knowledge based questions were derived from the World Health Organization COVID-19 facts and myth busters.⁵ Perception of work satisfaction questions were made in reference

to local context. The questionnaire were translated to Nepali for the which was back translated to English and content reviewed by research team.

The HCWs were grouped as technical staffs (nurses, laboratory and radiology technicians), Doctors (faculty, residents and medical officers), and support staff (housekeeping, maintenance, outpatient department-OPD assistants, account assistants). Ethical approval was obtained from institutional review committee of PAHS. Questionnaire were distributed to various level staff in their department by the 4 researchers and the participants were asked to return it within 24 hours. Completed forms were collected from different departments by the same researcher who had left that form in the departments. Doctors were emailed the questionnaire for their response via Google form. All the responses were analyzed in Excel.

Result

Total 223 HCWs (out of Out of 350 forms distributed, response rate 63.7%) responded to the questionnaire we provided within our 24 hour time frame. There were 80 (35.9%) technical staff, 77 (34.5%) doctors and 66 (29.6%) support staff. In technical staff, out total 1600 responses (80 staff x 20 questions), 1106 (69.2%) were aware (strongly agree + agree) and 1337 (83.5%) were satisfied, Table 1.

In the doctor group 1233 (80.1%) responses were in favour of having good awareness and 1000 (65%) responses were in favour of satisfaction, Table 2.

In the support staff group 236 (17.7%) responses were in favour of having good awareness and 347 (26.2%) responses were in favour of satisfaction Table 3

Table 1. Perception on satisfaction and awareness on COVID among technical staff (80) and their responses (total 80x20=1600)

		Responses (N)*	%
Part 1 (Perception on satisfaction)			
Satisfied	Strongly Agree	294	18.3
	Agree	812	50.7
Unsatisfied	Disagree	398	24.8
	Strongly Disagree	96	6.0
Part 2 (Perception on Awareness)			
Aware	Strongly Agree	698	43.6
	Agree	639	39.9
Not aware	Disagree	177	11.0
	Strongly Disagree	86	5.3

*N=total number of responses from 80 technical staff x 20 responses each = 1600

Table 2. Perception on satisfaction and awareness on COVID among doctors (77) and their responses (total 77x20=1540)

		Responses (N)*	%
Part 1 (Perception on satisfaction)			
Satisfied	Strongly Agree	232	15.1
	Agree	768	49.9
Unsatisfied	Disagree	376	24.4
	Strongly Disagree	164	10.6
Part 2 (Awareness on COVID)			
Satisfied	Strongly Agree	452	29.4
	Agree	781	50.7
Unsatisfied	Disagree	201	13.1
	Strongly Disagree	106	6.9

*n=total number of responses from 77 doctors

Table 3. Perception on satisfaction and awareness on COVID in support staff (66) and their responses (66x20=1320)

		Responses (N)*	%
Part 1 (Perception on satisfaction)			
Satisfied	Strongly Agree	44	3.3
	Agree	303	22.9
Unsatisfied	Disagree	700	53.0
	Strongly Disagree	273	20.6
Part 2 (Awareness on COVID)			
Satisfied	Strongly Agree	83	6.2
	Agree	153	11.5
Unsatisfied	Disagree	455	34.4
	Strongly Disagree	629	47.6

*n=total number of responses from 66 support staffs

Discussion

Our study highlights that overall the HCWs are aware of COVID-19 and satisfied of their work. However, the support staff group had low levels of perception of work satisfaction as compared to the technical staff and doctors. A study done in Saudi Arabia during the Middle

East Respiratory Syndrome (MERS) outbreak in 2014 showed that the HCWs had good knowledge about the disease, its transmission, symptoms and complications but there was negative attitude towards their active participation in infection control program.⁶ The better perception of work satisfaction in our study could be due to

various activities for information sharing provided by the institute after the outbreak.

A study done in India showed that overall correct answers from study participants was 71.2% with highest correct responses was from medical undergraduate students (74.10%) and lowest from non-clinical/administrative staff (53.64%).⁷ A cross-sectional study regarding knowledge and attitudes towards MERS-coronavirus (MERS-CoV) conducted on HCWs in primary healthcare centers and hospitals in Saudi Arabia showed a majority were aware of MERS-CoV and had sufficient knowledge regarding the same. Physicians and nurses had significantly better knowledge compared to others.⁸ The support staff's decreased awareness regarding the disease could be due to their lack of work satisfaction as shown by the data. They may have felt that they are less protected by the hospital by not providing them with proper PPE.

A study done during 2009 H1N1 Pandemic in Japan had different results from ours showing that clinical technical/ support staff had higher motivation to work (Multivariate OR: 1.7; CI 1.2-2.5) than clinical staff without any significant difference in hesitation.⁹ In a study done in China in 2020 during the pandemic, the level of some knowledge and attitude was seen lower than that expected for the position level towards the virus.¹⁰ Similar findings are seen in our study but the number of participants is low and needs more extensive study.

Until the end of April, 2020, no healthcare worker (HCW) has been infected with COVID-19 in Nepal as per Government of Nepal, Ministry of Home Affairs, National Disaster Risk Reduction and Management Authority (NDRRMA). The frontline HCWs are continuously facing this challenge with a substantial amount of cross-infection reported from around the world, however their awareness about COVID-19 and perception to work satisfaction are not studied. Most HCWs are under constant pressure at work due to dissatisfaction with

the safety precautions whereas some may not be motivated enough to work under constant pressure of getting the disease themselves. This study is conducted to highlight their perception of work satisfaction as well as their awareness about COVID-19.

Conclusion

Our study among HCWs in response to the changed working environment of COVID-19, showed that support staff had low levels of perception of satisfaction as compared to the technical staff and doctors. The shows institute need to adopt measures to increase the beliefs and awareness regarding the disease among all level of HCWs.

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Conflict of Interest

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Author Contribution

In SA's concept, all author equally contributed in all aspects of manuscript preparation, SA is the guarantor of this work.

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Supplement

Questionnaire

A. Perception on Satisfaction Survey

Key:

- a) Strongly Agree b) Agree c) Disagree
d) Strongly disagree

1. You are happy with the present salary paid to you.
2. You are satisfied that your salary is not deducted despite hospital income has gone down.
3. It does not matter to you even the extra incentive announced by the government is not given to you.
4. Money only should not be the primary concern during Pandemic.
5. Early activation of Disaster mode in hospital gives you time for preparedness.
6. You are happy with the distribution of workloads amongst departments.
7. You are content with the response of the HICS (hospital incident command system)
8. You feel yourself safe to work as per plan laid by the hospital.
9. The new working schedule is the best option at present.
10. Transportation facilities made available by hospital is satisfactory for you.
11. Decision for Gradual upgradation of PPEs for staffs as COVID cases increases is satisfactory.
12. Decision of PPE that you are getting is sufficient at present.
13. You will feel safe to work with PPEs provided.
14. Hospital should stockpile PPEs and distribute them as COVID cases increase in the community.
15. It's your duty to serve patients with whatever PPEs is made available to you.

16. You will not feel disappointed if your leave request is cancelled at this time.
17. You feel proud for working in a hospital during this pandemic.
18. It gives you honor to say you belong to Patan Hospital.
19. Lock down measure has made it easier to deal with work load.
20. Forced leave is the solution during pandemic to prevent overcrowding.

B. Awareness on COVID survey

Key:

- a) Strongly Agree b) Agree c) Disagree
- d) Strongly disagree

1. Exposing yourself to the sun or to temperatures higher than 25C degrees does not prevent the coronavirus disease (COVID-19)
2. You can recover from the coronavirus disease (COVID-19).
3. Being able to hold your breath for 10 seconds or more without coughing or feeling discomfort does not mean you are free from the coronavirus disease (COVID-19).
4. Drinking alcohol does not protect you against COVID-19.
5. COVID-19 virus can also be transmitted in areas with hot and humid climates
6. The new coronavirus cannot be transmitted through mosquito bites.
7. Hand dryers are not effective in killing the new coronavirus.
8. An ultraviolet disinfection lamp can kill the new coronavirus.
9. Spraying alcohol or chlorine all over your body can not kill the new coronavirus.
10. Vaccines against pneumonia does not protect you against Corona Virus
11. Regularly rinsing your nose with saline does not help prevent infection with the new coronavirus
12. Eating garlic cannot help prevent infection with the new coronavirus.
13. Younger people are as susceptible as older people to be infected by the new coronavirus.
14. Antibiotics are not effective in preventing and treating the new coronavirus
15. COVID-19 is not an airborne disease.
16. Majority of patients affected by Corona Virus do not require critical care.
17. Dry Cough is a common symptom of the Corona Virus.
18. Hygiene etiquette such as hand washing with soap, using mask in public prevents you from COVID-19
19. Fever should be the important presenting complain for COVID-19
20. Social distancing, quarantine and Lockdown are effective measures to contain COVID-19