

Assessment of Knowledge regarding COVID-19 among the Supporting Staffs in Rahman Hospitals, Guwahati, Assam, India

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Abstract: ***Background of the study:** Pandemic had great influence in shaping human society and politics throughout the world. The World Health Organization (WHO) stated the Chinese outbreak of Novel corona virus as a public health emergency on January 30 and named COVID- 19 on February 11, 2020. The disease rapidly spread over 111 countries and infected more than 118,000 people, including 4291 deaths, so the WHO declared COVID-19 as a global pandemic on March 11, 2020. The virus spreads from one person to another by droplets or by direct contact, and it could take up to 14 days (commonly live days) since the infection by the virus to develop symptoms. Thus, the researcher felt the need to assess the knowledge about facts and prevailing myths regarding COVID-19. **Objectives of the study:** 1. To assess the level of knowledge regarding COVID-19 among the supporting staff. 2. To find out the association between the knowledge scores regarding covid-19 among the supporting staffs with selected demographic variables. **Assumption of the study:** The study assumes that there may be lack of knowledge regarding COVID-19 among the supporting staff. **Materials and methods:** Non-experimental, descriptive design was adopted for the study. In the study 50 supporting staff working in Rahman hospitals, Guwahati, Assam were selected by using purposive sampling technique. The tools used for the study were demographic variables and structured knowledge questionnaire. The analysis was done by using both descriptive and inferential statistics in terms of frequency distribution, percentage and chi-square. **Results:** The results show that out of a total of 50 supporting staff 35 (70%) have adequate knowledge. 9(18%) have moderately adequate knowledge and 6 (12%) have inadequate knowledge regarding covid-19. It also revealed that there is no significant association between knowledge of the supporting staffs regarding covid-19 with demographic variables such as age, sex, education, residence etc.*

Keywords: Assessment, Knowledge, COVID-19, Supporting Staff.

1. Introduction

Pandemic had great influence in shaping human society and politics throughout the world, Throughout the course of history, disease outbreaks have ravaged humanity, sometimes changing the course of history and, at times, signaling the end of entire civilization.

The World Health Organization (WHO) stated the Chinese outbreak of Novel corona virus as a public health emergency on January 30 and named COVID- 19 on February 11, 2020. The disease rapidly spread over 114 countries and infected more than 118,000 people, including 4291 deaths, so the WHO declared COVID-19 as a global pandemic on March 11, 2020. He went to the hospital for a cough. For a positive history of travel from the COVID-19 epicenter, and he was investigated for COVID-19. A throat swab was taken and sent to Hong Kong for real-time reverse transcription-polymerase chain reaction (RT-PCR) and tested positive for COVID-19. The disease is highly contagious and characterized by fever, cough, dyspnea, fatigue, myalgia, and anosmia. On chest computed tomographic (CT) scan, bilateral lung infiltration with ground glass appearance is evident.

In India, a confirmed case of COVID-19 was reported on 30th January 2020, who was a student traveled from Wuhan, China, and has successfully recovered from the infection on 14th February 2020. On 27th April 2020, the Ministry of Health and Family Welfare confirmed a total of 28,380 confirmed cases, 6,362 cured/ discharge cases, and 886 death cases in the country from 32 states/union territories.

The infection rate of COVID-19 in India is reported to be 1.7%. significantly lower than the worst affected countries, as the report on 29 March 2020. After a 14- hour voluntary public curfew named as Janta Curfew, India immediately announced the implementation of a nation-wide complete lockdown for 21 days (i.e. up to 14th April 2020). Which only allowed essential services to operate over the entire 130 million population of India the battle against COVID-19 is still unending in India

While the world is searching for solutions to overcome this pandemic, it is important for us to have correct knowledge regarding facts and dispel prevailing myths about this pandemic. When headlines start carrying the word "pandemic", people start becoming fearful, and fear is linked with misinformation and rumors, leading to myths in the population at large and among certain groups e.g., eating garlic helps prevent infection from novel corona virus. The fact is that garlic is a healthy food that may have some antimicrobial properties. However, there is no evidence from the current outbreak that eating garlic prevents new corona virus infection. Spraying alcohol or chlorine all over the body kills the new corona virus is another myth that is prevalent. The fact is that spraying alcohol or chlorine all over the body will not kill viruses that have already entered the body. According to World Health Organization (WHO), there are elevated rates of myths, due to quarantine and lockdown in affected areas. The numbers of COVID-19 cases continue to climb every day across the world, including in India. Thus, the researcher felt the need to assess the knowledge about facts and prevailing myths regarding COVID-19.

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2. Literature Review

According to Polit and Hungler (1999), literature review refers to extensive, exhaustive and systematic explanation of publication relevant to research project relevant literature refers to those sources that are highly important in providing in depth knowledge needed to study a selected problem.

The relevant literature reviewed has been organized and presented under the following section.

Sudhakar D (2020), conducted a study to assess the knowledge regarding COVID 19Transmission management and prevention among BSc nursing students at Thiruvalluvar. Tamil Nadu. This study helps to know the knowledge level of Nursing students regarding transmission, management and prevention of Covid-19. The research approach used was Non- experimental qualitative Research design and Research design is Descriptive survey design, the study was conducted at Indira College of Nursing. Tiruvallur, Tamil Nadu, the total sample size was 30 and the Sample technique used is Convenient sampling technique. Out of 30 samples 7(23.4%) showed good knowledge, 18(60%) had average knowledge and 5 (16.6%) fair knowledge regarding COVID-19

Singh A. Singh S (2020) conducted a descriptive study to assess the knowledge about facts and prevailing myths regarding COVID-19 in general public. The objective of the study is to assess the facts and the prevailing myths regarding COVID-19. The survey was conducted on 117 residents of Ghaziabad using descriptive design, to assess the facts about COVID-19 as well as prevailing myths regarding COVID-19. A structured questionnaire was used to conduct the survey. Data was analyzed using descriptive statistics. Out of 117 respondents, 82 were males and 35 were females. Out of 117 subjects, 71.65% had correct knowledge of COVID-19, and 28.35% did not have the correct knowledge regarding the disease. Myths were not prevalent among the study subjects. The study concluded that most people had correct knowledge about the facts of COVID-19. Myths were not prevalent.

Mehrotra S. Jambunathan P.Jindal M, Gupta A. Kapoor K (2020), conducted a cross- sectional survey to assess the knowledge regarding Coronavirus disease(COVID-19) among health care professionals. The objective of the study was to assess their level of knowledge towards the ongoing and evolving pandemic. 17 - item questionnaire for health care professionals (HCPs) was administered to assess their level of knowledge towards this ongoing and evolving pandemic. It was disseminated through the Web and mobile-based social networks. The questions were sourced and created from various standard national and international guidelines available at the time of writing. A total of 827 medical personnel participated in the study. Among them, 65.5% scored between 60% and 79%, indicating a moderate level of knowledge. There was no statistically significant difference in the scores of doctors, nursing officers and dental surgeons. Participants had good knowledge regarding clinical symptoms, mode of transmission and preventive measures, But the study identified some gaps in knowledge in the implementation of management protocols, handling of

dead bodies and biomedical waste management of COVID-19 cases.

3. Methodology

The objective is to assess the knowledge regarding COVID-19 among the supporting Staff and to assess the association between the knowledge scores regarding COVID-19 among the supporting staff with selected demographic variables.

The research approach adopted for the Study was Quantitative research approach with Quantitative descriptive research design. The study was conducted in Rahman Hospitals Pvt Limited, Guwahati for a period of one week. A total of 50 supporting staff were selected by using non-probability purposive sampling technique. The Data was collected by using sample characteristics, structured knowledge questionnaire regarding knowledge of COVID-19.

Tools were developed after literature review and validation by experts. Formal permission was taken from concerned Authorities of Rahman Hospitals Pvt limited for the data collection. The objectives of the study were explained to the 30-supporting staff. The questionnaire was distributed personally. Directions were written on the front page of the questionnaire and instructions were explained to each sample about how to respond to the items given in the tool. After completion, the questionnaires were returned to the investigator.

Plans for data analysis: (I) Descriptive Statistics – Demographic Data and knowledge of the supporting staff on COVID-19 were analyzed in terms of frequency and percentage. **(II) Inferential Statistics** – Chi Square was used to determine the association between the knowledge of the supporting staff on COVID-19 with selected Demographic Variables.

4. Results and Discussion

Section I: Assessment of Demographic variables of the supporting staff.

The sample of the study consists of 50 supporting staff, working in Rahman hospital Pvt Limited, Guwahati, Assam. The technique used for selecting the supporting staff was non-probability purposive sampling technique. In this section, the data collected were analyzed by using Descriptive Statistics and presented in terms of frequency and percentage distribution.

Table 1: Distribution of frequency and percentage of age of supporting staff, n=50

S. No	Demographic Variables	Frequency	Percentage
1	Age (In Years)		
	a) 15-25	12	24
	b) 26-33	26	52
	c) Above 34	12	24
2	Sex		
	a) Male	16	32
	b) Female	34	68
3	Education		
	a) Middle school	17	34

	b) High School	21	42
	c) Undergraduate	12	24
	Smoking Habit		
4	a) Yes	24	48
	b) No	26	52
	Residence		
5	a) Urban	30	60
	b) Rural	20	40
	Previous Knowledge on COVID-19		
6	a) Yes	48	96
	b) No	2	4

The Data in Table 1 shows that the frequency and percentage distribution of the supporting staffs regarding the knowledge of COVID-19 by the age (in years) of supporting staff's sex of supporting staffs, education of supporting staffs, smoking habits of supporting staffs, residence of supporting staffs and previous knowledge of COVID-19 among the supporting staffs. With regards to the age of Majority of the supporting staffs, 52% were in the age group 26-33 years. With regards to the sex, most of the supporting staffs, 68% are female. With regards to the education, Majority of the supporting staffs, 42% complete their education till high school. With regards to smoking habits, most of the supporting staff, 52%, did not have smoking habits. With regards to the residence, Majority of the supporting staffs, 60% stay in urban area. With regards to the previous knowledge of COVID-19, maximum of the supporting staffs, 96% had previous knowledge on COVID-19.

Section 2: Assessment of knowledge regarding COVID-19 among the supporting staff.

The knowledge regarding COVID-19, among the supporting staff, was assessed by using a structured knowledge questionnaire. Based on the score obtained, the supporting staff were arbitrarily categorized as having inadequate, moderately adequate and adequate knowledge.

Table 2: Frequency and percentage distribution of knowledge score of the supporting staff regarding COVID-19, n=50

S. No.	Knowledge	Score range	Frequency (f)	Percentage (%)
1.	Inadequate	0-6	6	12
2.	Moderately adequate	07-12	9	18
3.	Adequate	13-19	35	70

Table 3: Association between knowledge regarding COVID-19 among the supporting staff with selected Demographic Variables, n=50

S. No.	Demographic variables	Level of knowledge			Chi Square	df	Table Value	Inference
		Adequate	Moderately Adequate	Inadequate				
1.	AGE (In years) • 15-25 • 26-33 • Above 34	3 3 0	3 4 2	4 22 9	6.87	4	9.49	NS
2.	SEX • Male • Female	3 2	1 8	14 22	4.13	2	5.99	NS
3.	Education • Middle School • High School • Undergraduate	2 1 3	4 3 2	12 16 7	3.49	4	9.49	NS

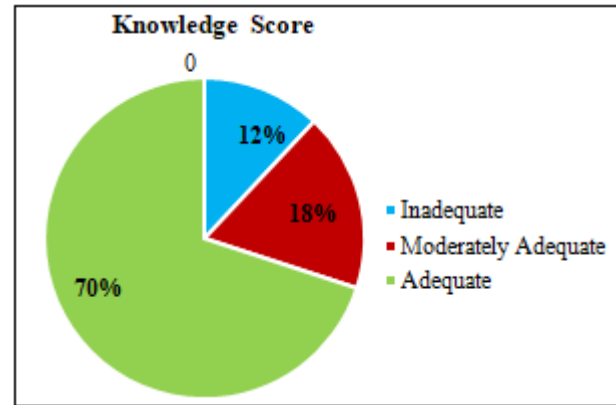


Figure: Frequency and percentage distribution of knowledge scores of the supporting staff regarding COVID-19

The data in Table 2 and the above figure shows that the knowledge of the 35 (i.e., 70%) supporting staff out of 50 are found to have adequate knowledge.

The present study is supported by the study of Jindal AK. Anu, Niju, Ginu (2020) conducted a survey study to assess the knowledge regarding COVID-19 among the general public. A survey study to assess the knowledge regarding COVID-19 among general public was planned to assess the knowledge regarding COVID 19 among general public and to find the area of concern where lacking knowledge regarding COVID-19 among general public. In view of the nature of the study, the investigator has adopted the non-experimental research approach. The tool was prepared by the investigators and circulated to participants purposely through Google forms. The survey form was opened for two days only and after that the form was disabled for responses. The data reveals that 68% of the general public had average knowledge regarding COVID 19 and 27% had good knowledge and only 05% had poor knowledge.

Section 3: Association between knowledge regarding COVID-19 among the supporting staff with selected Demographic Variables.

This section presents the association between the levels of knowledge regarding COVID-19 among the supporting staff with selected demographic variables and chi square test were computed.

4.	Smoking Habits • Yes • No	4 2	4 5	18 17	0.002	2	5.99	NS
5.	Residence • Urban • Rural	13 16	17 69	2 70	0.46	2	5.99	NS
6.	Previous Knowledge on COVID-19 • Legislator • Profession	7 0	8 0	32 3	1.08	2	5.99	NS

S* = Significant, NS = Not Significant at $P < 0.05$

Table 3 shows that there is no significant association between knowledge of the supporting staff with selected demographic variables such as Age. Sex. Education, Smoking habits, Residence, Previous knowledge on COVID-19.

The present study is supported by the study of Hadi JAI S. Al-Noaemi Md C. Rajab SM. Daghiri HA, Yami SMA, Rashah ASA, et al(2020) conducted an assessment of health care workers knowledge about Covid-19 A multicenter cross-sectional study was conducted on HCWs working at public hospitals and Primary Healthcare (PHC) centers in the Najran region, KSA to evaluate the stall's knowledge toward COVID-19 The questionnaire consisted of two parts, the first part included the demographic data, and the second part involved questions related to the COVID-19. 451 HCWs participated in this study and the median overall knowledge score was 67%. Most HCWs properly identified symptoms (82.9%), mode of transmission (78.5%), the incubation period (96.4%), the way of preventing the infection (91.5%), the COVID-19 is not same as MERS-CoV (74.3%) and availability of a vaccine against the COVID-19 (82%). However. HCWs were less likely to identify the source of COVID-19 when it was discovered in China (22.5%), the mortality rate (44.6%), and the presence of treatment (32.1%). Overall knowledge score was statistically significantly associated with profession ($P = 0.034$), educational level ($P = 0.033$), and availability of infection control in the workplace ($P = 0.006$). The findings of this study demonstrated an intermediate level of knowledge of HCWs about COVID-19. Intervention programs are urgently needed to raise the knowledge of HCWs about this global public health issue.

5. Conclusion

The present study was conducted to assess the level of Knowledge among the supporting staff regarding COVID-19. The finding of the study revealed that, out of 50 supporting staff, 35(70%) had Adequate knowledge Level Score. So it was concluded that the majority of the supporting staff had adequate knowledge of COVID-19.

6. Nursing Implication

The present study enabled the supporting staff to know about the COVID-19. The study also helped the supporting staff to identify the early sign and symptoms and preventive measures of COVID-19. The finding of the study has implications for nursing education, nursing practice, nursing administration and nursing research.

6.1 Nursing Education

The material regarding COVID-19 has got scholarly information especially the statement and results will be a useful insight to be included in the nursing curriculum.

The methodology also gives guidelines to reach people for collecting information, so this framed methodology can be helpful to the nursing educator and to nursing students to do any type of research.

6.2 Nursing practice

- The major change that has occurred in the profession is expansion in the role of nurse. One of the major roles the nurses play is creating awareness regarding various health related facts.
- Nursing personnel should provide special information to the supporting staff regarding COVID-19 and is a very important role of nurses while taking care of patients with COVID-19.

6.3 Nursing administration

- To perform the nursing administration in a right and effective way, the need of producing effective materials are highly essential
- To fulfill the needs of such administration, the guidelines may be derived from this research document.

6.4 Nursing research

Research has the character of dependency. To do this study, knowledge is accumulated from much research. Likewise, the methodology adopted in thesis will help the future researching community to bring scholarly truth. This material and adopted methodologies will be a useful guide to the researcher to find the right information from the target groups to shape up the truth.

6.5 Limitation

The limitation of the present study was:

The study was conducted using a purposive sampling technique, which restricted the generalization that could be made.

Sample size is limited to only one hospital; hence generalization was limited.

The study was limited to the subject who were willing to participate and present at the time of study.

Time consuming.

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