

## KNOWLEDGE, ATTITUDE AND PRACTICES ABOUT COVID 19 DISEASE AMONG FACTORY WORKERS: AN OBSERVATIONAL STUDY

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### ABSTRACT

Coronavirus disease is a new virulent disease caused by novel Corona virus. Its presentation varies from person to person. It can be prevented by preventing the spread through aerosols by wearing masks, social distancing etc. People's observance of the prevention measures is essential for controlling the spread of COVID-19, which is affected by their knowledge, attitude, and practices (KAP) towards COVID-19. The aim of this study was to assess knowledge, attitude, and practices towards COVID-19 in the factory workers of Jammu region. **Materials and Methods:** The present study was conducted among factory workers in Jammu region to see the knowledge attitude and practices pattern about COVID 19. **Results:** All the workers had knowledge about COVID 19 disease and its transmission from person to person. All the workers had knowledge about aerosol spread of disease. All the workers had an attitude that social gatherings should be avoided, 68.75% of the workers thought lockdown proved to be effective in preventing COVID. All the workers used to wear mask before leaving home. Only 83.75% of the workers practice social distancing. 87.5% of the workers come by public transport to workplace. All the workers used to frequently wash hands and all of them have been tested for COVID 19. **Conclusion:** majority of the workers had fair knowledge attitude and practices about COVID 19. More thrust should be put upon awareness in India regarding COVID 19 disease.

**KEYWORDS:** COVID 19, pandemic, knowledge, attitude, practices, factory workers, India.

### INTRODUCTION

Coronavirus or COVID 19 has evolved as a public health threat since December 2019 and is now declared as a pandemic by World Health Organisation.<sup>[1,2]</sup> It is an infectious disease caused by a virus known as corona virus. The first case was identified in Wuhan, China and then it spread like fire all over the world.<sup>[3]</sup> After detection of its first case the disease has spread all over the world in around 200 countries.<sup>[4]</sup> As per WHO, there has been deaths all over the world due to COVID 19 and in India, the number of deaths is.<sup>[5]</sup> In India, a confirmed case of COVID-19 was reported on 30<sup>th</sup> January 2020, who was a student traveled from Wuhan, China, and has successfully recovered from the infection on 14<sup>th</sup> February 2020.<sup>[6,7,8]</sup> There is person to person transmission through aerosols and measures like wearing mask, practising social distancing and frequent hand washing is a must. These measures are very tough for the people living in developing countries. Implementing frequent hand washing and social distancing is not possible for many of the people working in factories and other offices where enough space is not available. Many people have to travel in public transport to earn their livelihood, so situation is tough for even those.<sup>[9]</sup> There should be restriction on public gatherings, mass prayers,

weddings, funerals, parties, rallies as they can prove to be super spreaders.<sup>[10]</sup> The disease can present with a varied symptoms. It may present as asymptomatic, normal flu, cough, acute respiratory distress syndrome which may even need mechanical ventilation to septicemia, septic shock, multi organ failure, various auto immune presentations like carditis, pleuritis, transverse myelitis and even death.<sup>[11]</sup> Even if a patient turns out to be COVID 19 positive, if he doesnot require hospitalisation, he has to live in isolation at home and has to follow all the necessary precautions. Many people cannot afford this isolation because they either live in slums or small houses. Most of the people don't think it is their moral responsibility to tell their colleagues and other contacts about their disease as they may catch infection from them. For this there should be proper awareness amongst people about COVID 19. The present study was done to assess the knowledge, attitude and practices followed by people regarding COVID 19.

### MATERIALS AND METHODS

The present study was conducted among factory workers in Jammu region to see the knowledge attitude and practices pattern about COVID 19. The permission was taken from Institutional Ethics Committee, Govt.

Medical College, Jammu. Due permission was taken from the factory owner and a member from Directorate of Industries and Commerce was also included in the study. A pre validated questionnaire was made and was circulated among the workers. The questions were written in hindi as maximum could understand hindi. They were made to know about the aim of study and how to answer the questions. They were given a time of 45

minutes. The results were expressed in percentage and was tabulated. The tables were translated into English for easier understanding.

## RESULTS

A total of 80 factory workers were given questionnarie. They were given appropriate time to fill the same.

**Table 1: Showing knowledge about covid 19.**

Questions related to knowledge regarding COVID 19	YES (n %)	NO (n%)
Do you know about COVID 19 disease	80 (100)	0
Do you know COVID 19 spreads from person to person	80(100)	0
What do you think to be major source of infection of COVID 19		
Aerosols	80(100)	
Food	70(87.5)	
Water	16(20)	
Touching infected surfaces	63(78.75)	
Blood	15(18.75)	
Do you know social distancing prevents COVID19	70 (87.5)	10 (12.5)
Do you know mask prevents COVID 19	70 (87.5)	10 (12.5)
Do you know the disease can be asymptomatic	50 (62.5)	30 (37.5)
Do you know the symptoms of COVID 19	70 (87.5)	10(12.5)
Do you know about testing of COVID 19	80 (100)	0
Do you know about isolation to be followed by COVID positive patient	67 (83.75)	13(16.25)
Do you know about vaccine of COVID 19	80 (100)	0
Do you know about frequent hand washing for COVID 19	80 (100)	0

## Attitude Related Questions

Attitude related questions	Yes n (%)	NO n (%)
Do you think social gathering should be avoided	80 (100)	0
Do you think lockdown prevents COVID 19	55 (68.75)	25(31.25)
DO you think wearing mask should be made mandatory	80(100)	0
Do you think vaccine will come soon	80 (100)	0
Do you think vaccine will be effective in preventing COVID 19	46 (57.5)	34 (42.5)
Do you think COVID 19 can be deadly	61(76.25)	19(23.75)

## Practice Related Questions

Practice related questions	YES n (%)	NO n(%)
Do you wear mask before leaving home	80 (100)	0
Do you practise social distancing	67 (83.75)	13(16.25)
Do you come by public transport	70(87.5)	10(12.5)
Do you frequently wash hands	80(100)	0
Do you practice gargling with saline water or warm water	74(92.5)	6(7.5)
Have you been tested for COVID 19 ever	80(100)	0
Have you been tested positive for COVID 19	3 (3.75)	77(96.25)
Do you change clothes everyday after going home	80(100)	0
Do you take any medicine for prevention of COVID 19. If yes, can you name	26(32.5)	54(67.5)

All the workers had knowledge about COVID 19 disease and its transmission from person to person. All the workers had knowledge about aerosol spread of disease. 87.5% of the workers had an idea that COVID 19 spreads through food, 20% said that it also spreads through water. 78.75% had told that it spreads by touching infected surfaces, 18.75% said that it spreads through blood. 87.5% of the workers had knowledge

about symptoms of COVID 19 and prevention of COVID 19 by mask, frequent hand washing and social distancing. Only 62.5% of the workers had an idea that COVID 19 can be asymptomatic. All the workers had knowledge about testing of COVID 19 and its vaccine. (Table 1) All the workers had an attitude that social gatherings should be avoided, 68.75% of the workers thought lockdown proved to be effective in preventing

COVID. All the workers had an attitude that wearing mask should be made mandatory and the vaccine for COVID 19 will come soon but only 57.5% thought that vaccine will be effective in preventing COVID 19. 76.25% of the workers thought that COVID 19 can be deadly. (Table 2) All the workers used to wear mask before leaving home. Only 83.75% of the workers practice social distancing. 87.5% of the workers come by public transport to workplace. All the workers used to frequently wash hands and all of them have been tested for COVID 19. Only 3.75% of the workers have been tested positive for COVID 19 and none of them required hospitalisation. All the workers change clothes after going home as they think clothes can be the source of infection for family as they come by public transport. 32.5% of the workers take medicine for prophylaxis. (Table 3)

## DISCUSSION

Many studies have been done to assess the knowledge, attitude and practices among health care workers and patients but no study could be seen during the review regarding knowledge, attitude and practices among factory workers. Knowing about the high mortality and morbidity not only in India but across whole world due to corona virus prove to be a major threat in terms of health, quality of life and economy.<sup>[12,13]</sup> All the workers had knowledge about COVID 19 disease and its transmission from person to person. The results are similar to various studies where participants had good knowledge about the disease. All the workers had knowledge about aerosol spread of disease. 87.5% of the workers had an idea that COVID 19 spreads through food, 20% said that it also spreads through water. 78.75% had told that it spreads by touching infected surfaces, 18.75% said that it spreads through blood. This is a wrong information the workers have about mode of transmission of the disease. 87.5% of the workers had knowledge about symptoms of COVID 19 and prevention of COVID 19 by mask, frequent hand washing and social distancing. Only 62.5% of the workers had an idea that COVID 19 can be asymptomatic. The findings are consistent with the findings of Shukla *et al.*<sup>[4]</sup> All the workers had knowledge about testing of COVID 19 and its vaccine. All the workers had an attitude that social gatherings should be avoided, as they thought that mass gatherings can be super spreaders because even one positive patient can give rise of hundreds of positive patients through aerosol transmission especially in closed spaces.<sup>[14,15]</sup> 68.75% of the workers thought lockdown proved to be effective in preventing COVID. All the workers had an attitude that wearing mask should be made mandatory and the vaccine for COVID 19 will come soon but only 57.5% thought that vaccine will be effective in preventing COVID 19. Knowledge about social distancing, mask wearing and frequent hand washing among most of the workers is because of social media, televisions, radio etc. 76.25% of the workers thought that COVID 19 can be deadly. All the workers used to

wear mask before leaving home. Only 83.75% of the workers practice social distancing. 87.5% of the workers come by public transport to workplace. All the workers used to frequently wash hands and all of them have been tested for COVID 19. This may be due to mandatory screening before joining their workplace. Another significant finding noted that around 92.75% workers practice gargling with salt water to prevent infection with the Coronavirus which is in concordance with the study done by Tomar *et al.*<sup>[16]</sup> According to WHO gargling warm or saltwater and consuming citrus fruits will not kill the novel-corona virus.<sup>[17]</sup> Only 3.75% of the workers have been tested positive for COVID 19 and none of them required hospitalisation. All the workers change clothes after going home as they think clothes can be the source of infection for family as they come by public transport. 32.5% of the workers take medicine for prophylaxis. Medicine was in the form of Vitamin C, zinc, Vitamin D. All of them are immunity boosters and may prove to be beneficial.

## CONCLUSION

COVID 19 is a deadly disease with a varied manifestation. Much is not known about the disease, its complications and treatment. Studies are being carried out to find proper treatment as only symptomatic treatment is being given presently. Much is not known about the disease and the necessary precautions to be followed. There should be seminars, camps, CMEs, discussions on mass media regarding the disease so that the common public becomes aware of the various aspects of disease. Small camps should be arranged in offices and factories so that the people working there becomes aware of the norms to be followed.

**Conflict of interest:** Nil.

**Limitations:** Number of questions asked were very less. Number of workers included in the study were less.

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