

An Empirical Study on knowledge and Attitude of Indian Population Towards COVID-19 Pandemic

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Abstract

Novel Corona Virus Disease originated from China has rapidly crossed the borders, and still infecting people throughout the world. With the proliferation in the number of infected people, the situation is getting worse and leading to increase in level of anxiety and stress. Anxiety is considered as a common response to any stressful situation. Apart from this, knowledge level should also be assessed in order to know the status of people regarding this pandemic. Therefore, this study attempted to assess the knowledge, attitude and perceived mental healthcare need in Indian population towards the COVID-19 pandemic. This study is exploratory and descriptive in nature and the data was collected from Individuals, doctor, Nurses and other staff members. This study reveals that almost 90% people are aware about COVID-19 pandemic.

Introduction

Wuhan city in China which is one of the largest city in the country was engulfed by a pneumonia outbreak in December 2019. It was caused due to Novel Corona virus which spread to other countries of the world in the coming time. Its impacts were severe and still ongoing. Chinese scientists was able to pin-point a Covid-19 strain from the patients' group in Wuhan. They were helped by an early investigation of the new cases and obtaining clinical and epidemiologic data about those cases.

The first case was reported in December 2019. Five patients were hospitalized from 18th Dec 2019 to 29th Dec 2019 because of Acute Respiratory Disease Syndrome. Out of these 5 patients, one died in the hospital. The number of cases rose to 41 by 2nd January 2020 out of which less than 50% had other diseases like diabetes, blood pressure, or heart disease. Total cases reported in 25 provinces of China by 25.01.2020 were 571. As of 25th January, there were 1975 confirmed belongings of Covid-19 infection in main land China and 56 deaths due to that infection. However, a report on 24th Jan 2020 concluded that the cumulative count of covid-19

infection in China was 5502. As of January 30, 2020, 7730 cases contain be long-established in China and previous cases must occurred report from several countries.

Coronavirus, first discovered in 1960, are a large family of viruses. However, not all coronavirus-es cause illness in humans. Rarely, animal coronaviruses evolved into human coronavirus that subsequently infects individuals and then they spread between people.

There are 5 known strains of Human Coronaviruses. Common Human Coronaviruses:

1. Alpha coronaviruses: HCoV-229E, HCoV-NL63
2. Beta coronaviruses: HCoV-OC43, HCoV-HKU1
3. SARS-CoV-
4. MERS-CoV
5. SARS-CoV-2

Transmission

Respiratory epidemics be able in the direction of spread during droplet of different sizes: after the droplet scraps

be $>5\text{-}10\mu\text{m}$ in diameter referred towards like respiratory droplets, and while next are $<5\mu\text{m}$ in diameter, are linked to as droplet nucleus. COVID-19 virus is mostly spread among public through contact of the other infected body and carried by the wind spread be not in print.

Droplet transference can occur as a human being is in in close up get in touch with (within 1 m) someone who have symptom of coughing before sneezing as well as so, on threat of contain oral cavity and nose or conjunctiva revealed towards potentially infective respiratory droplet. Transmission may possibly occur during fomites into the direct environment about the infected human being. Consequently, spread of the COVID-19 virus preserve happen in instant contact among contaminated persons with direct contact among cover environment otherwise by things use happening the contaminated human being stethoscope or else thermometer also other medical devices. In the air transmission be divide as of droplet transmission the same as it towards the appearance of microorganisms inside droplet nuclei, which be usually measured towards be particle $<5\mu\text{m}$ in caliber, be able to stay inside the air for extended period of moment, with survive transmitted towards others above range larger than 1m.

In the air spread might be present possible inside definite conditions also setting during which method otherwise maintain treatment to i.e., endotracheal intubation, bronchoscopy, open suctioning, direction of nebulized conduct, hand operate airing by intubation, turn-off the patient to the recumbent situation, separating the long-suffering as of the respirator, non-persistent helpful-force ventilation, tracheostomy, also cardiopulmonary revival. Around be a number of evidence COVID-19 infection guide towards intestinal infectivity with survive there inside faeces. There have no information of faecal-oral spread of the COVID-19 illness near time.

Covid-19 in India

The initial cases of COVID-19 in India, be published on January 30, 2020. Because of June 10, 2020, it have approved a entire of 276,583 cases, 135206 improving and 7,745 death within the country. India have the biggest amount of verified belongings breach the 100,000 spot going on mid-May with 200,000 in beginning of June. India's state death rate at 2.80%, upon the global 6.13%, of June 3. Six big cities of all reported cases in the country – Delhi, Mumbai, Ahmedabad, Pune, Kolkata and Chennai.

Scheduled March 22, India acknowledged a 14 hour charitable community curfew on the Prime Minister Narendra Modi. It be accompanied in compulsory lockdown into COVID-19 hotspots with all larger city. Scheduled March 24, the PM well-organized a lockdown

in favour of 21 existence, disturbing the whole population of India. Scheduled April 14, the prime minister continued the countrywide lockdown till beginning of May which last two-week extension initial 3 and 17 May by a few recreations. Inception June the Indian command have happening unlock the nation in three unchain phase.

Michael Ryan, head supervisory leader of the WHO's health dilemma agenda remarked to India have more extra space to contract through the broken chain to its huge information within eradicate smallpox and polio. Former specialists include too advanced care on the financial outcome arise when a effect of virus and defensive limitations.

Initiative taken by Indian Government

The revolution has stated an pandemic in larger than a state and 9 union territory, anywhere prerequisites of the Pandemic Disease Act, 1897 contain be begged, important towards the closing of educational institutes and business-related establishment. The entire traveller visas contain be pending, because the common of the definite cases be mostly imported.

I. Phase 1 (January-February)

Protecting method was primary implemented in starting of the years. India had started thermal viewing of tourists visiting as of China going on January. Originally included at 7 airport, after a few times later it be consumed to 20 airport moving the ending of I the January. Through February, the thermal showing be long-lasting to tourists starting. The Indian Council of Medical Research (ICMR) revealed to airstrip viewing simply be not inadequate.

II. Phase 2 (March)

In March, the authority have drained up tactics to contract with pandemic into the country. This combined state with twenty ministry, together with House, Security, Railways, Industry, Majority Affairs, Aviation and Sightseeing, be knowledgeable of the repression plan. The Ministry of Customer Contact, Food and Community Distribution were changed to certify accessibility of fundamentals.

Lying on March 17, the Administration of India announced an optional, drawing towards every Indian state to obtain societal separation method when a anticipatory tactics used for functioning plough 31 March. A management dictate be advertised demanding every Central Armed Police Forces towards find keen on clash form; every non-crucial vacation be dropped.. Government put awake nationwide and state helpline information.

III. Phase 3 (April)

Over Indian city with lots of state ready wearing face masks compulsory. Scheduled 29 April, The Department of Home Associations declared guiding principle intended for the state to support the interstate transfer of the abandoned people. State contain be claimed to indicate nodal establishment and type contracts to accept with dispatch such individuals. State has to be invited to monitor the individuals, quarantine them, with towards act intermittent fitness check-up.

Journey and Entry Margins

Scheduled March 3, 2020, the Indian administration suspended issue of recent visas. Every visa was pending on March 13, apart from tactful with other bureaucrat visa, because fit as the visa-liberated tour designed for Abroad Citizen of India. Indians recurring from COVID pretentious country were expended towards be there quarantined used for 14 days. These dimensions be extended towards society as of Europe, Gulf country with Asian country together with Malaysia on 18 March.

The ground boundary with Myanmar established towards is limited on 9 March among an action of the state government of Mizoram as well as Manipur. On March 13, the management of India blocked tourists travel commencing every bordering country other than Pakistan itself be blocked on March. Tour and booking intended for Sri Kartarpur Sahib were too pending happening this period.

Screening

Scheduled on 13th March, the Minister of Health and family welfare, announce the mandatory showing of every global visitors received in India. He besides to because of at that moment, 587,000 persons have moved screen at airport, more individual million screens on boundaries by under community inspection.

Closedown and curfews

Beyond the demo, many state over the nation started closing down institutions, school, college, and public department such since malls, gym, movies halls with previous community spaces to enclose the stretch.

Lockdown

During protest march, the Indian Government declares a full lockdown in 80 districts in 20 state as well as 9 Union territory of nation anywhere established belongings was recorded. 80 city together with Delhi, Mumbai, Bengaluru, Chennai, Chandigarh and Kolkata be place beneath lockdown. Any state preserved their boundaries excepting inter-state group.

On 24th March, Honourable Prime Minister Narendra Modi announces an absolute daylight hour's countrywide lockdown to prevent the coronavirus.

After the deliberation through CMs and administrator of state and UTs lying on 11 April, Prime Minister announce lockdown addition till May 3 and his deal with to country on I April 14, with recreations into area through below extend from April 20 .

On May, the management of India continued countrywide lockdown with two weeks until May 17. On May 17, lockdown till comprehensive 31 May in every state.

On May 30, the ministry declared to the partial lockdown would exist moreover extensive turn over 30 June in repression zones, initial from June 8, in previous zone. It be term the same because "Unlock 1" with be fixed towards "have an economic focus."

Review of Literature

Previous studies really helped in gathering data on COVID 19. It is named coronavirus due to its outer layer of envelope proteins appears like crown and it comes under the ambit of RNA viruses (Burrell et al., 2017). They are infective to mammals and birds and can cause mild to severe upper respiratory infections and communicable to a larger human group (Roy et al., 2020). COVID 19 is novel coronavirus which has created havoc in the mind of individuals because no vaccination is available for it. One of the studies suggests that anxiety, depression and stress are very common psychological reactions of COVID-19 pandemic reported by people (Rajkumar, 2020). Addendum to this, anxiety, fear of losing loved ones & death, social distancing, unemployment and homelessness are the stressors that maybe a cause of serious mental illnesses such as depression and anxiety. So, the role of psychiatrists in diagnosing bad short-term effects and preventing the long-term effects on mental health is really valuable (Kavoor, 2020). A long-time isolation from social groups may consequently lead to stress, anxiety, frustration, boredom, depression, and even suicidal idea or attempts (Gunawan et. al, 2020). As due to pandemic, government of India ceased each and every activity announcing lockdown. This decision had a huge a huge impact on each and everything whether it is and individual, group, society, organisation, economy and international relations. Another study on Symptoms of psychological distress and disorder due to social isolation and quarantine reveals general psychological symptoms, emotional disturbance, depression, stress, low mood, irritability, insomnia, post-traumatic stress symptoms, anger, emotional exhaustion stand out as having high prevalence (Brooks et . al, (2020). Different countries are following different protocols to deal with this pandemic and government should focus on health

infrastructure, more vigilance on social gatherings, Availability of essential commodity, domestic violence, Counselling to reduce panic, Salary deduction and termination in private sectors (Kundu & Bhowmik, 2020). COVID 19 has massive impact on environment also but positive. The cost of the epidemic contain effectively improved the environment to a great extent to must certainly set optimistic crash on global typical weather change (Chakraborty & Matey, 2020). Some researchers are very optimistic about lockdown situation and suggested that measures taken by government should not be taken negatively but instead suggested to take advantage of this situation by self-improvement and making themselves more productive. In response to the problems created by this pandemic, various public health strategies are issued in public interest such as isolation of infected or at-risk persons, reduction of social contact, and simple hygiene like frequent hand wash to reduce the risk of infection (Hiremath et. al, 2020). Corona Worriers are playing a great role during this whole situation by keeping their life at risk. From time to time they guide and counsel people to deal with such kind of situation. Taking mental health into consideration psychiatrist plays an important role in handling with people suffering from anxiety. Few areas of possible intervention by the psychiatrists as per (Banerjee, 2020): Educating about the Common adverse psychological consequences, Encouraging health-promoting behaviours, integrating the available health-care, Facilitate problem-solving, Empowerment of the patients, their families and health-care providers, and Self-care of the health-care providers. Despite of various guidelines issued and welfare measures taken by government (Wolf et. al, 2020) reported to have less awareness about COVID 19 in most vulnerable communities due to low health literacy. With the proliferation in situational awareness in such a public health crisis using formal information sources could apparently increase the adoption of protective health measures and in turn contain the spread of infectious diseases (Qazi et. al, 2020). Almost all the studies reveals that there is significant impact on mental health due to isolation in COVID19 Pandemic. But very few studies reveal about knowledge status of people about Covid-19 in Indian context. Therefore, there is need to study the Knowledge, attitude and perception of Indians towards this pandemic.

Objectives

- 1) To study the awareness with cooperation level of the people about the COVID-19.
- 2) To study the awareness of social distancing and community screening of COVID-19.

- 3) To assess the attitude and knowledge of rapid response team of COVID-19.

Research Methodology

Research Design:-Present study is the exploratory and descriptive in nature.

Sample Size: - 100 respondent, which includes peoples, doctors, nurse and other staff members work for the COVID-19.

Sample Area: - Data will be taken by district Sonapat of Haryana.

Data Collection:-For making analysis and interpretation of data, both primary and secondary methods have been used for collection of data:-

1. Primary Data – Conducted online survey from all over Haryana to the questionnaire by Google forms.
2. Secondary Data –Secondary Data collect during:- Web Sites, Journal and Newspapers

Data Analysis

1. Awareness and Cooperation Level

Table 1:- Age Group of respondents

Age	Responses
0-17	8
18-35	53
36-58	34
59-70	7
71 and above	4
Total	100

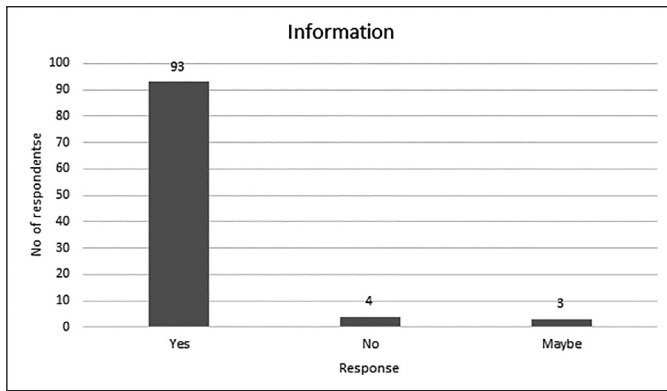
Above Table No.1 represents that maximum number of respondents are from the age group of 18-35 and 36-58 years that is 87% and the least respondent are 4% from the age group of 71 and above.

Table 2:- Gender

Gender	Responses
Male	36
Female	64
Total	100

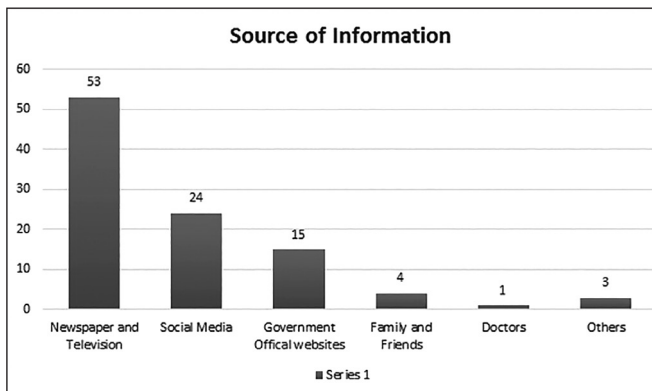
Above Table no. 2 showing maximum respondents are female and their ratio is 64% where only 36% are male.

Table 3:- Have sufficient information about COVID 19.



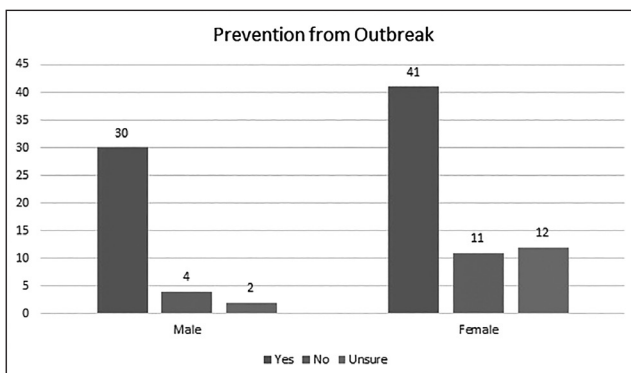
As per Table no. 3 maximum number of respondents have almost every information about COVID-19. Rest are aware but not sure about whether they have sufficient information or not.

Table 4:- Main Source of Information regarding of COVID-19.



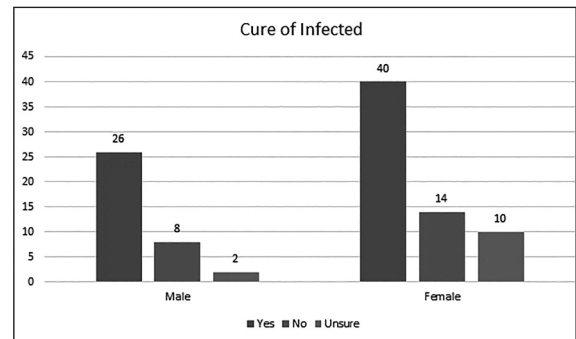
Analysis of above Table No.4 clearly shows that print media is the main source of information regarding Covid-19 that is 53% because Newspapers and televisions gives more reliable information about Covid-19 than any other source.

Table 5:- Health Department is doing enough to prevent the outbreak from spreading



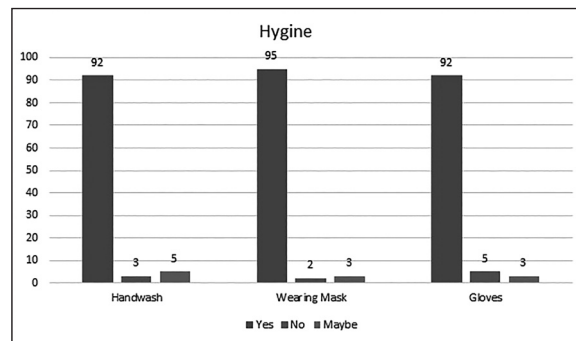
From the analysis above Table No.5 shows that maximum 71% respondent think that the health department doing better to prevent the outbreak of Covid-19. 71%(30% and 41%) male and female are agree and 15% they think health department is not provide proper treatment and medicine.

Table 6:- Health department is doing enough to cure Infected



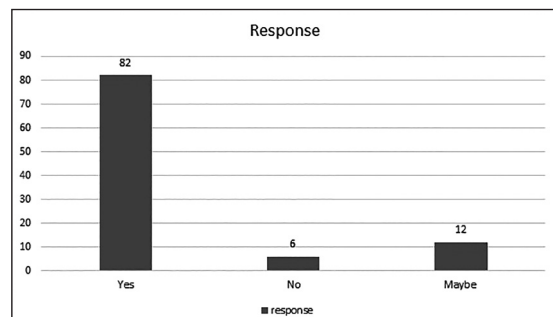
From the above Table no. 6 it has been seen that maximum 66% people believe that government is doing well to cure infected one.

Table 7:- Hygiene is important in preventing the spread of the Covid-19.



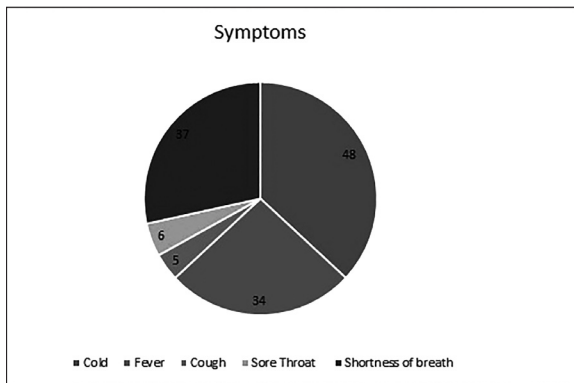
From the above table no. 7 it has been seen that maximum number of respondents believe that hand wash, Wearing mask and Gloves are really helpful in preventing the spread of COVID 19.

Table 8:- COVID-19 be cured with antibiotics



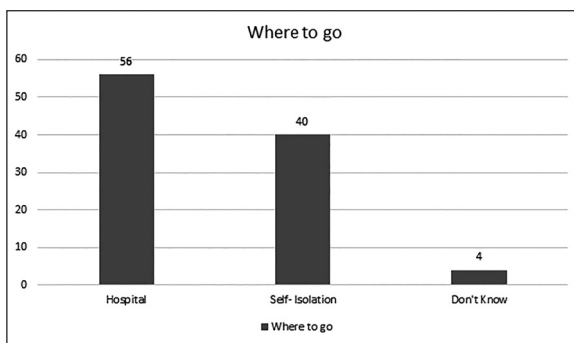
Since, No medicine available to cure COVID 19. Almost 82% people believe that antibiotics will be helpful in treating COVID-19.

Table 9:- Main symptoms of the Virus



Since many initiatives taken by government to spread awareness regarding COVID19. So, lot of people know what are the symptoms common and severe.

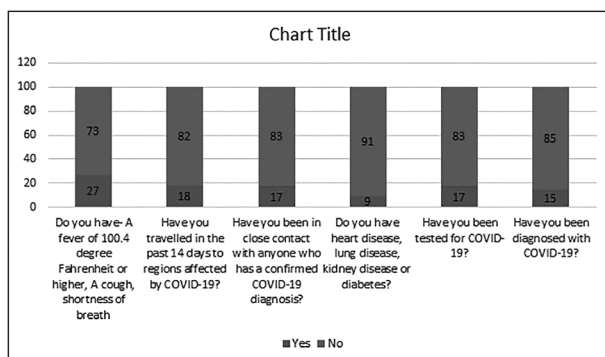
Table 10:- Where to go if you start developing symptoms



From the above table it can be seen that many people prefer to visit hospital but preference given by respondents to self-isolation can't be ignored.

2. Social Distancing and Screening

Table 11:-

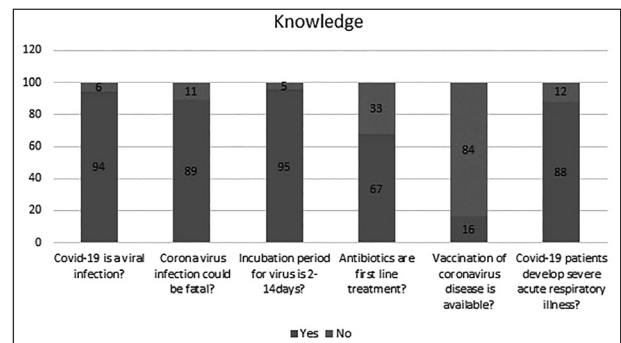


From the above table No.11 of screening it can be seen that 27% people encounter fever more than 100.4 Fahrenheit. 18% people travelled in COVID affected region. 17% respondents confirmed that they have been in close contact with someone diagnosed with COVID 19. 9% respondents have heart, lungs, kidney disease and diabetes. 17% tested for COVID19 and 15% diagnosed.

3. Knowledge

Table 12:-

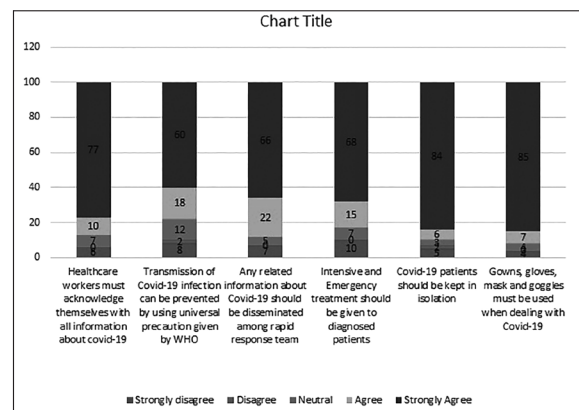
Statements	Yes	No
Covid-19 is a viral infection?	94	6
Corona virus infection could be fatal?	89	11
Incubation period for this virus is 2-14days?	95	5
Antibiotics are first line treatment?	67	33
Vaccination of coronavirus disease is available?	16	84
Covid-19 patients develop severe acute respiratory illness?	88	12



From the above table no. 12 it has been observed that maximum number of respondents are having correct knowledge on COVID 19.

4. Attitude

Table 13:-



Almost all respondents strongly agree on the statement related to attitude of healthcare staff.

Conclusion

1. To measure the participation awareness and cooperation level of the people about Covid-19, questions set on the age, gender, heard about the corona virus, Main source of information, Health department is doing enough to cure infected, Hand hygiene, wearing a mask and gloves, it cured with antibiotics, main symptoms of corona virus and where to go if you start developing symptoms.
2. A total of 100 participant have completed the survey, In terms of age group 53% belongs to the age group 18 to 35, and 34% respondents belongs to the age group 36 to 58. The age group above 71 are least respondents.
3. While in terms of gender, 64% of the respondent were female and 36% were male. The 93% respondents reported that they have sufficient information about COVID-19. Moreover, Newspaper and television are the main source of information.
4. More than half of the respondents were 71% think that health department is doing enough to prevent the spread of Corona Virus.
5. 61% respondents are agree and think that health department is doing enough to cure infected. 92% respondents are agree to hand over hygiene is significant in prevent the spread of corona virus.
6. 95% respondent are aware of wearing a mask help prevent the spread of corona virus and 92% respondent are agree to wearing gloves help prevent the virus.
7. 82% respondents are believed that antibiotics are the best medicine to cure with corona virus.
8. Covid-19 may cause a range of symptoms, as almost all the respondents know that cold 48%, fever 34%, shortness of breath 37%, sore throat 6% and cough 5%. While 96% respondents are know where to go if symptoms are developed.
9. In screening 73% respondent have not any type of symptoms during screening. 82% respondent are not travelled in the past 14days. 83% respondent are not come to close contact with anyone who has confirmed Covid-19, While 91% respondents are not affected by any disease. 83% respondent are have not tested, while 85% respondent are not diagnosed with Covid-19.
10. Knowledge and attitude – To assess the attitude and knowledge of rapid response team of Covid-19, 94% respondent are thought that Corona Virus is a viral infection and they have proper knowledge of

Covid-19. While 89% respondent are thought that the corona virus could be fatal. 95% respondent are thought that incubation period for this virus is 2-14 days. In our study, 67% respondent are thought that antibiotics are must as first line of treatment. The majority of the respondent 84% are agreed that vaccination of corona virus is available and 88% respondent are agreed that Covid-19 patient develop severe acute respiratory illness.

11. In attitude, over 77% of the respondent were in favour of them all information about Covid-19. 60% respondent are agree that conduction of COVID-19 illness be able to exist prohibited by means of worldwide precaution specified by WHO.
12. 66% respondent are agreed that they linked information regarding Covid-19 should be disseminated among rapid response team, 68% respondent are agreed that intensive care and emergency treatment should be given to diagnosed patients. 84% respondents are agreed that Covid-19 patients should be kept at Isolation place and 85% respondents agreed that gowns, gloves, Facemask and goggles must be used when dealing with Covid-19 patients.

Suggestions

1. Clean hand through soap, alcohol-based sanitizer.
2. Cover up nose, oral cavity at the same time as sneezing or coughing through mask or tissue and disposed it directly followed by wash hand and sanitize hands.
3. Perform not touch features, oral cavity, eyes through hand following moving anything on community place.
4. Continue social distancing and keep away from roaming under the street and meeting information on the street and crowd in groups. This is the greatest way to stop the spread of Covid-19.
5. It is suggested that people stay at home as much as possible, going out only for critical needs like groceries and medicine.
6. Consume well, use at residence and keep good immunity level to battle alongside Corona virus.
7. Track the guiding principle recommended by nation head and WHO.
8. Consumption of Warm water, garlic, ginger, turmeric powder, Tulsi leaves, Giloy Juice on daily basis will make our immunity strong.
9. Doctors and Government should advertise more about use of yoga and Ayurveda for prevention of corona.

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