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Original Research

Awareness and Seriousness of General Population regarding COVID-19

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ABSTRACT:
COVID-19 pandemic has impacted many communities worldwide. In the present study knowledge about COVID-19 as well as seriousness, fear and people's attitude towards COVID-19 was assessed among the general population during the pandemic. The data was generated during COVID-19 lockdown in the country through a survey distributed via an online questionnaire, assessing socio-demographic information, knowledge, awareness, gathering a total 260 responses. A combination of purposive and snowball technique helped to select the respondents via whatsapp, Facebook and instragram. The survey data was analyzed using descriptive statistics. The entire data was stored in a Microsoft excel worksheet and the questionnaire was attached as a supplementary file.
Keywords: COVID-19, Lockdown, Precautions, General population

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INTRODUCTION

CORONA VIRUS DISEASE (COVID-19) was first identified in December 2019 in Wuhan, China. This disease has spread globally now and has become an ongoing life threatening pandemic disease.[1-4] The WHO (World Health Organization) declared the corona virus outbreak 2019-2020 as a public health emergency of international concern (PHEIC) on 30 January 2020 and a pandemic on 11 March 2020.[1,5]

It is a contagious disease causing severe acute respiratory syndrome (SARS CoV-2), which presents with symptoms like fever, cough, shortness of breath, muscle pain, sputum production, sore throat, diarrhea, abdominal pain, loss of smell, and in severe conditions leading to viral pneumonia and multi-organ failure.[3,4,6,7] The lungs are the most affected organs in this disease as the virus enters via the enzyme called angiotensin converting enzyme 2 (ACE2) which is mostly profuse in the type II alveolar cells of the lungs.[8]

The SARS-CoV-2 belongs to the wide-ranging family of virus, corona virus containing positive-sense single stranded RNA, and genetically close to bat corona virus.[9] Family of these viruses is known for developing human sickness including common cold to more severe diseases such as Sever Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS).[10] Persons infected with the virus need 2 to 14 days of incubation period to develop symptoms and 97.5% of patients express symptoms within 11.5 days.[11] SARS-CoV-2 virus is predominantly spread between persons via respirational droplets from coughs and sneezes.[12] Studies demonstrated that this virus is live on copper for 4 to 18 hours, on cardboard for 24 to 55 hours, on plastics for 72 to 100 hours, stainless steels for 72 to 90 hours and in aerosol for three hours although the detection rates varies between surface materials types.[13] Airborne characterizes of COVID-19 virus are not expressed yet.

India reported its first COVID-19 case on January 30, 2020 and numbers began to rise in late March 2020, ("Johns Hopkins Corona virus Resource Center", 2020) at a low rate, which may be attributed to several government policies including stopping all international

flights and implementing a nation-wide lockdown at an early stage of the pandemic. By early April 2020, country officials had identified several areas as hotspots of COVID-19 infections in the country. India faces threat of a serious outbreak due to deep challenges in practicing social distancing and access to water and soap for hand washing, with densely populated urban areas and a highly mobile population in some states. The country announced an initial 3-week lockdown period on March 24, now extended until May 3, triggering rapid migrations from the cities to rural areas in some parts of the country among rising fears of fast spread of infections. The extension of the initial lockdown period poses further mental challenges to the already distressed population and to ensuring strict compliance with social distancing guidelines. Currently, there is no known vaccine to protect against human Corona virus. However, there are habits that people can adopt to help reduce the risk of infection.

The objective of this study is to assess the awareness and seriousness of COVID-19 disease and knowledge related to infection control practices among general population.

MATERIAL AND METHOD

The present study was conducted using a questionnaire [Table 1] based survey on the awareness, seriousness, knowledge, mental health related to COVID-19 infection. This survey was conducted, contained 26 questions with multiple choice questions which was disseminated via social media and electronic mail. In this survey 260 responses were rendered. All the individuals who answered the survey were informed about the confidentiality of their response. The evaluation of this survey was done electronically by the common survey software conducting site available on internet.

TABLE 1: Survey questionnaire

S. No.	Questions	Options
	Demographic Profile	
1.	Age Group	a) Below 18 years b) 18-25 years c) 25-55 years d) Above 55 years
2.	Gender	a) Male b) Female c) Transgender d) Prefer not to say
3.	Geographic location (State you belong to)	
4.	Education level (Qualification)	a) < Secondary school education b) Senior secondary school education c) Graduation d) Post graduation e) Higher
5.	Occupation category	a) Public Sector b) Private Sector c) Student d) Self Employed e) Unemployed
	Knowledge Regarding COVID-19	
6.	Virus causing COVID-19 infection is called	a) Severe Acute Respiratory Syndrome corona virus (SARS)

		b) Severe Acute Respiratory Syndrome corona virus-2 (SARS Cov-2) c) 2019-nCov d) Both B and C e) Both A and C
7.	When did you come to know about COVID-19?	a) December 2019 b) January 2020 c) February 2020 d) March 2020
8.	Is COVID-19 virus an "air-borne" disease?	a) Yes b) No c) I don't know
9.	Do you think COVID-19 can spread infection through animals?	a) Yes b) No c) Maybe d) I don't know
10.	How does COVID-19 transmits?	a) Droplet spread/ when a person sneezes or coughs. b) Constant touching of face, eye or mouth in public place. c) Close contact with COVID-19 infected person d) All of the above
11.	Clinical symptoms of COVID-19 includes: Fever, Dry Cough, breathlessness, fatigue, etc	a) True b) False c) I don't know
12.	Person with COVID-19 cannot spread the virus if symptom like fever is absent.	a) True b) False c) I don't know d) May be
13.	Is it necessary for children and old age people to take extra precaution for COVID-19?	a) Yes b) No c) I don't know
	Awareness Regarding COVID-19	
14.	Source of information regarding COVID-19.	a) Newspaper b) Media/TV c) Social Media

		d) Friends and family
15.	Have you come across the COVID-19 person?	a) Yes b) No c) May be
16.	Do you agree with the idea of "lockdown" to prevent the spread of COVID-19?	a) Yes b) No c) May be
17.	Do you think isolation and quarantine are an important steps to prevent the spread of COVID-19?	a) Yes b) No c) May be
18.	Isolation and treatment of people who are infected by COVID-19 virus are effective way to reduce the spread of virus?	a) Strongly disagree b) Disagree c) Neutral d) Agree e) Strongly agree
19.	Do you think COVID-19 can be successfully controlled?	a) Yes b) No c) May be
20.	Do you think your Government is doing enough to prevent the outbreak of COVID-19?	a) Yes b) No c) May be
21.	Is there a vaccine or drug for the treatment of COVID-19?	a) Yes b) No c) May be
	Attitude towards COVID-19	
22.	Do you take precautions for COVID-19?	a) Yes b) No
23.	Do you follow the rule of social distancing?	a) Yes b) No
24.	In recent days, have you been out to crowded places?	a) Yes b) No c) Sometimes
25.	What kind of precautions do you take while leaving out from home?	a) Mask

		b) Alcohol based sanitizer c) Gloves d) All of these
26.	Which of the following measures you take while coming back to home after work/any place?	a) Wash your hands immediately. b) Take bath and change your clothes. c) Maintain distance with other family members. d) Isolate, wash and clean your grocery's items
27.	How stressed out are you in this lockdown period?	a) Fear and worried about health b) Changes in sleeping and eating habits c) Worsening of mental health d) Financial issues e) None of these.

Any ideas or suggestions to help fight against COVID-19

RESULTS

The survey generated 260 responses in which 51% were graduated, 43.2% were post graduated, 3.1% were qualified upto senior secondary, 1.9% completed upto higher education and 0.8% was below secondary (Fig 3). Others results are shown below.

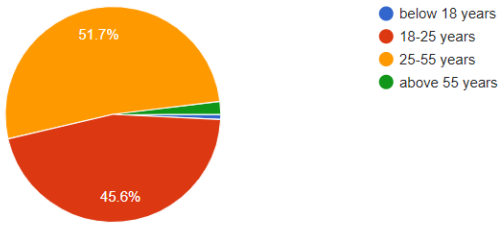

Figure: 1 Age Group

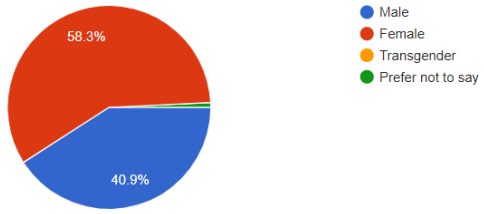

Figure 2: Gender

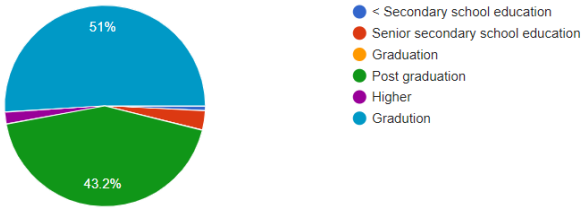

Figure 3: Education level

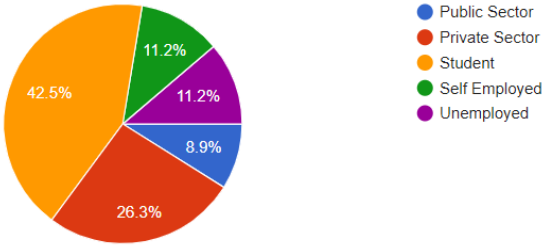

Figure 4: Occupation category

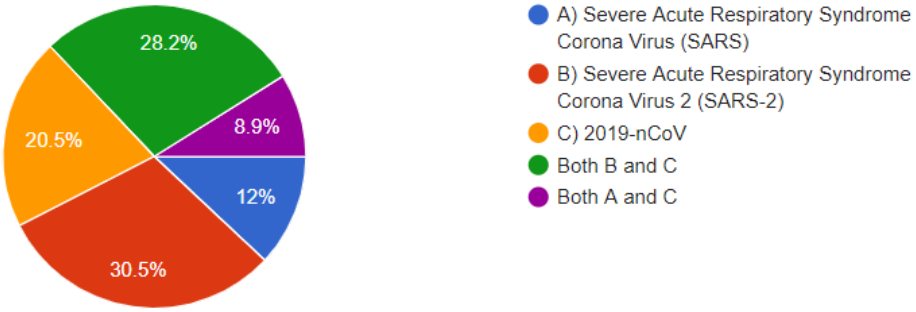

Figure 5: Virus causing COVID-19 infection is called

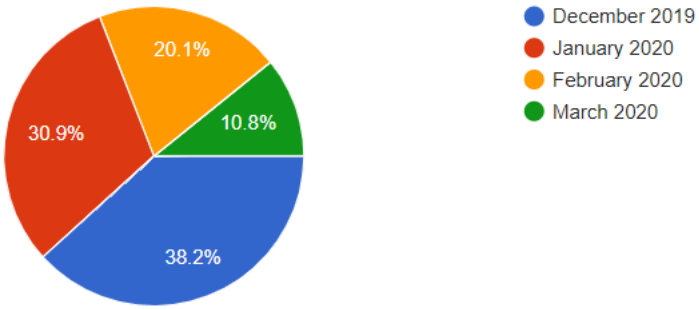

Figure 6: When did you come to know about COVID-19?

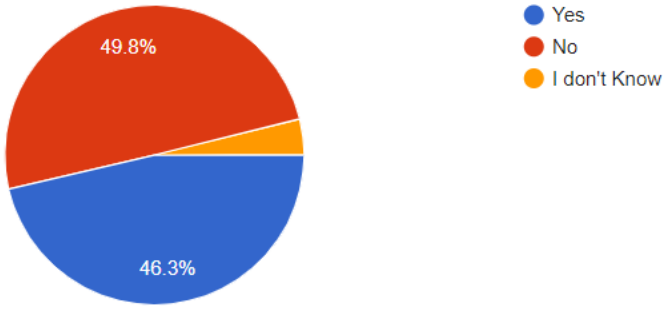

Figure 7: Is COVID-19 virus an "air-borne" disease?

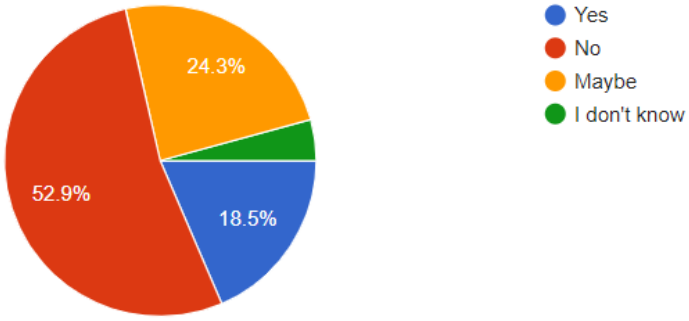

Figure 8: Do you think COVID-19 can spread infection through animals?

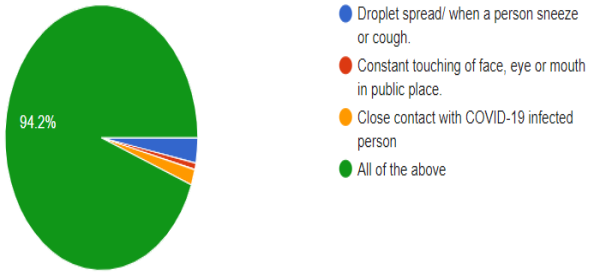

Figure 9: How does COVID-19 transmits?

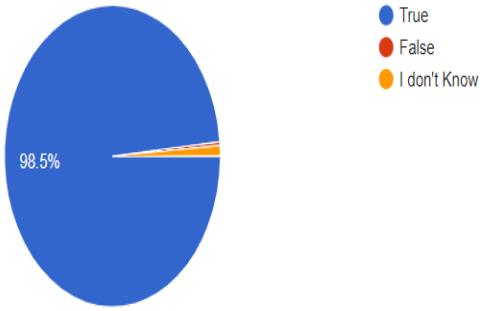

Figure 10: Clinical symptoms of COVID-19 includes: Fever, Dry Cough, breathlessness, fatigue, etc

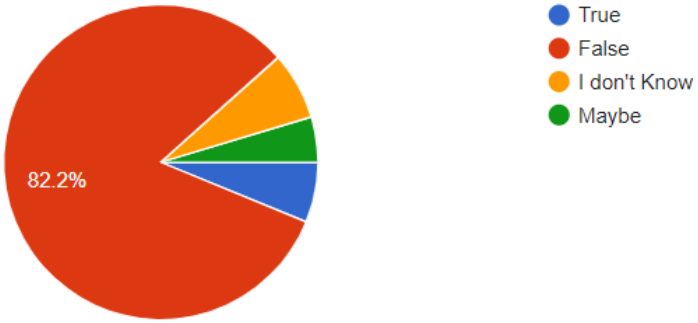

Figure 11: Person with COVID-19 cannot spread the virus if a symptom like fever is absent.

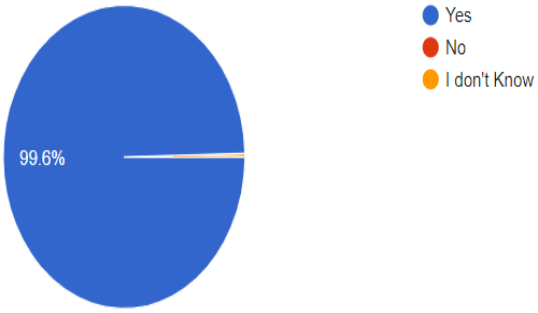

Figure 12: Is it necessary for children and old age people to take extra precaution for COVID-19?

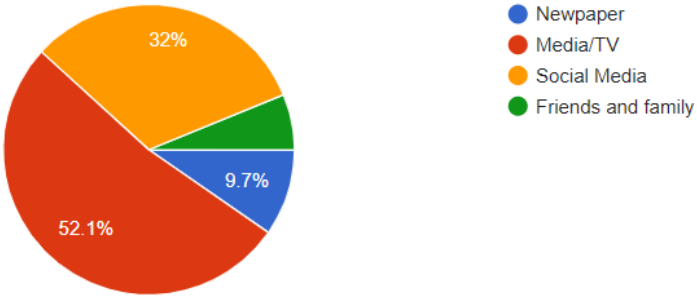

Figure 13: Source of information regarding COVID-19.

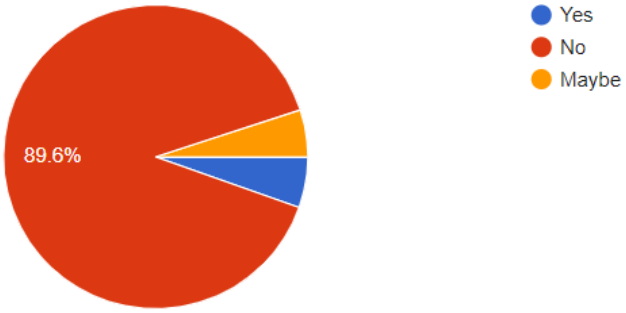

Figure 14: Have you come across any COVID-19 infected person

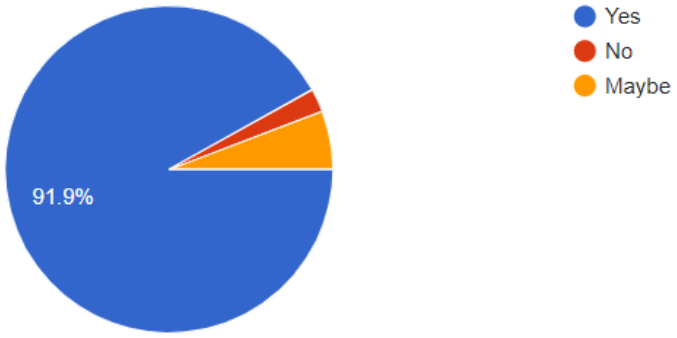

Figure 15: Do you agree with the idea of Lockdown to prevent the spread of COVID-19?

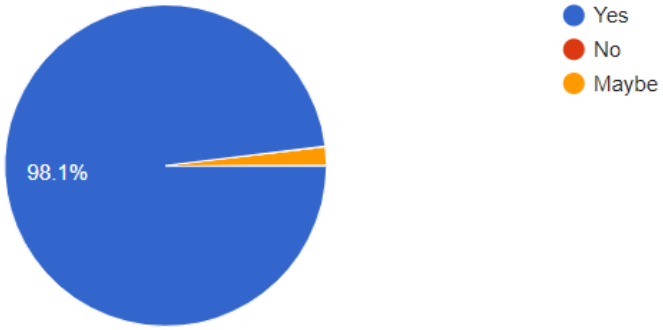

Figure 16: Do you think isolation and quarantine are an important steps to prevent the spread of COVID-19?

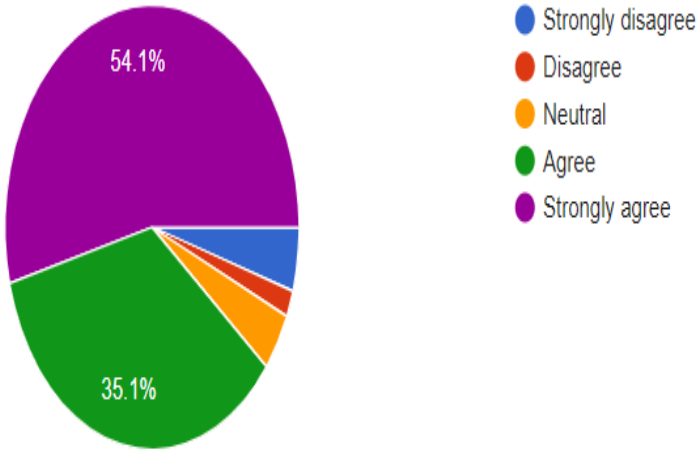

Figure 17: Isolation and treatment of people who are infected by COVID-19 virus are effective way to reduce the spread of virus?

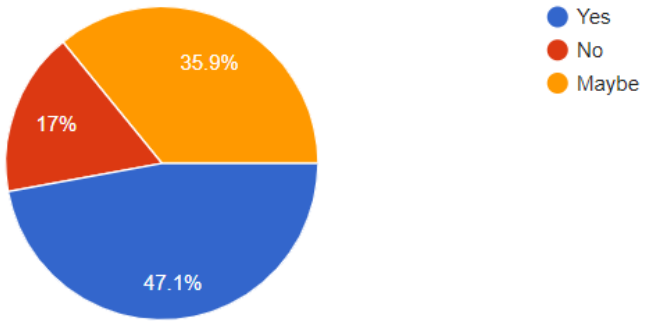

Figure 18: Do you think COVID-19 can be successfully controlled?

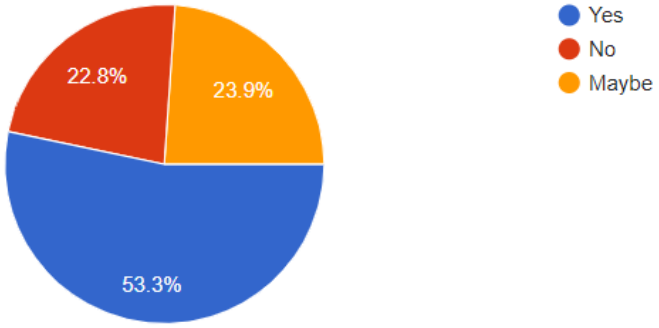

Figure 19: Do you think your Government is doing enough to prevent the outbreak of COVID-19?

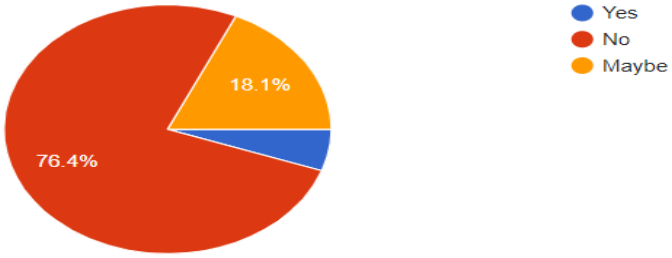

Figure 20: Is there a vaccine or drug for the treatment of COVID-19?

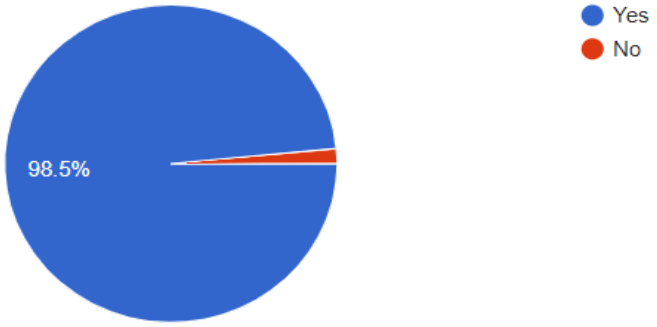

Figure 21: Do you take precautions for COVID-19?

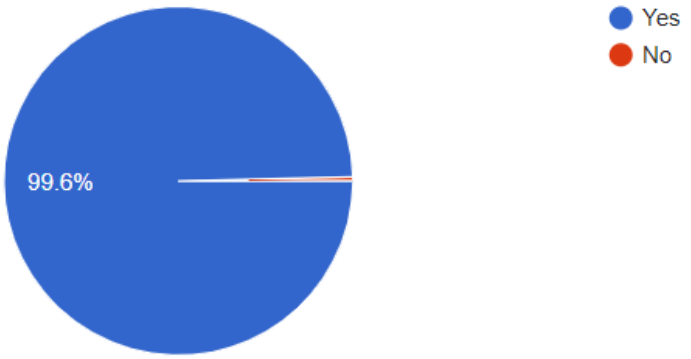

Figure 22: Do you follow the rule of social distancing?

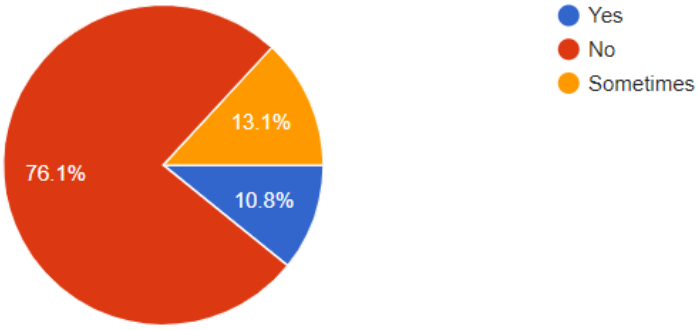

Figure 23: In recent days, have you been out to crowded places?

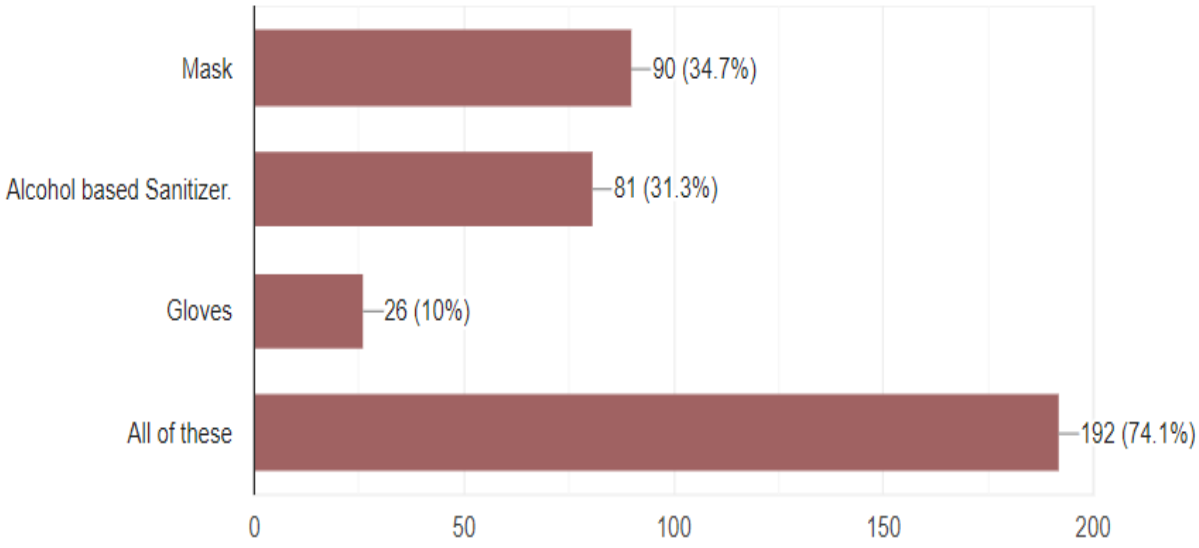

Figure 24: What kind of precautions do you take while leaving out from home.

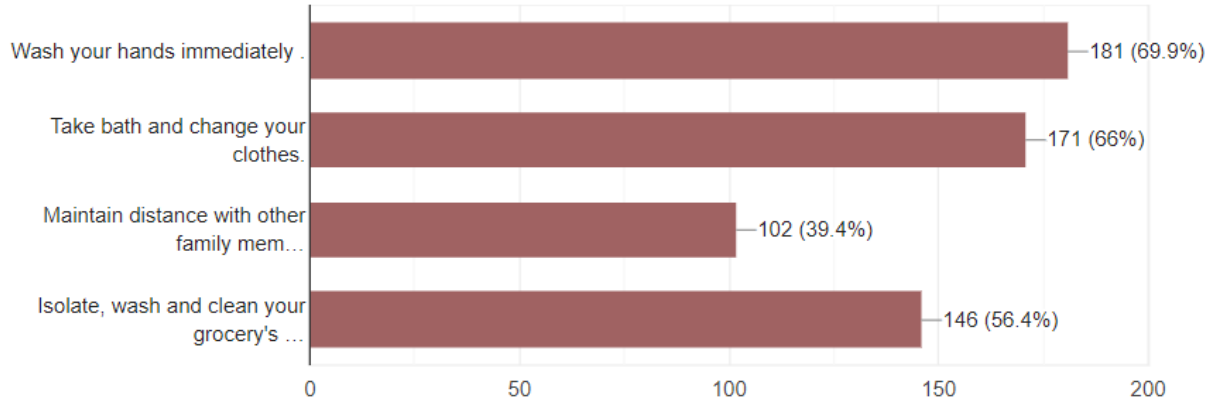

Figure 25: Which of the following measures you take while coming back to home after work/any place?

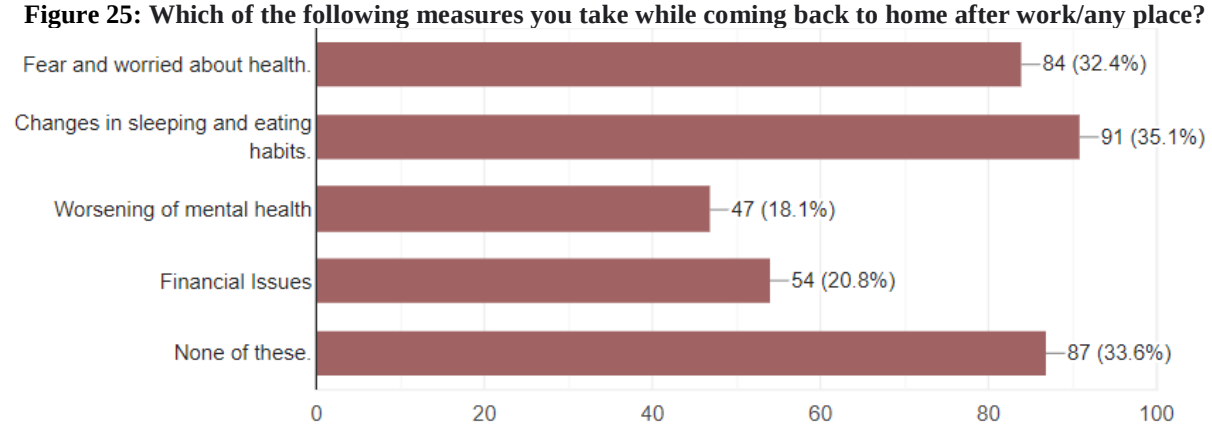

Figure 26: How stressed out are you in this lockdown period?

DISCUSSION

The survey study was conducted to evaluate the awareness, knowledge and attitude among general population of India about COVID-19, precautions and effects on their life. Regarding knowledge 30.5% responded that virus causing COVID-19 infection is called SARS-2, 20.5% responded 2019-nCOV, while 28.2% responded both of these (SARS-2 and 2019-nCOV), 12% responded as SARS and 8.9% responded both (SARS and 2019-nCOV) (Fig 5). 38.2% of population was aware about the disease in December 2019, 30.9% in January 2020, 20.1% in February 2020 and 10.8% in March 2020 (Fig 6). 49.8% of population disagreed that COVID-19 virus is an air borne disease, 46.3% agreed that it is an air borne disease and 3.9% did not knew (Fig 7). 52.9% of population did not accept that COVID-19 infection is spread through animals, 24.3% were not sure, 18.5% agreed that infection can be spread though animals and 4.2% did not know (Fig 8). 0.8% responded that infection is transmitted by constant touching of face, eye or mouth in public, 1.9% responded to close contact with COVID-19 infected person, 3.1% responded to droplet spread/ when a person sneeze or cough and 94.2% responded to all of these (Fig 9). 98.5% agreed the clinical symptoms of COVID-19 are fever, dry cough, breathlessness and fatigue, 0.4% did not agreed and 1.2% did not know (Fig 10). 82.2% did not agreed to the statement that a person with COVID infection cannot spread if fever like symptoms is absent, 6.9% did not know, 6.2% agreed to this and 4.6% were not sure (Fig 11). 99.6% population responded that children and old age group people should take extra precaution and 0.4% did not know (Fig 12).

As per the awareness, 52.1% population got informed through media/TV, 32% through social media, 9.7% through newspaper and 6.2% from family and friends (Fig 13). 89.6% population did not come across any COVID-19 infected person whereas 5.4% did come across COVID-19 infected person and 5% were not sure (Fig 14). 91.9% population agreed with the idea of lockdown to prevent spread of COVID-19, 5.8% were not sure and 2.3% population disagreed (Fig 15). 98.1% population agreed to isolation and quarantine to prevent the spread of COVID-19 and 1.9% was not sure (Fig 16). 54.1% population strongly agreed that isolation and treatment of people who are infected by COVID-19 are effective way to reduce the spread, while 35.1% agreed, 4.6% population disagreed, 4.2% were neutral and 1.9%

disagreed (Fig 17). 47.1% population agreed that COVID-19 can be successfully controlled where as 17% disagreed and 35.9% were not sure (Fig 18). 53.3% population agreed that government is doing a great job to prevent the outbreak of COVID-19 while 22.8% disagreed and 23.9% were not sure (Fig 19). 76.4% population strongly believe that still there is no vaccine for the cure of COVID-19, whereas 5.4% believed there is vaccine and 18.1% were not sure (Fig 20).

As per the attitude of population towards the COVID-19 infection 98.5% were taking precautions and 1.5% did not (Fig 21). 99.6% of population was strictly following the rule of social distancing and 0.4% did not (Fig 22). 76.1% of population have not been to any crowded places, whereas 10.8% did visited crowded places and 13.1% population were out sometimes (Fig 23). 34.7% population used mask as precaution while leaving home, 31.3% used alcohol based sanitizer while leaving home, 10% used gloves and 74.1% used all of these while leaving home as precautions (Fig 24). 69.9% of population washes their hands immediately after coming back to home from work place, 66% takes bath and change their clothes, 56.4% isolate, wash and clean their grocery items and 39.4% maintain distance with their family members (Fig 25). It was also observed that people were stressed out in various ways such that 35.1% population changed their sleeping and eating habits, 32.4% population had fear about their health, 20.8% population had financial issues, 18.1% population had worsening of mental health and 33.6% of population were not in stress (Fig 26).

The disease COVID-19 spreads through respiratory droplets and the persons who are contact with the infected person. Social distancing and maintaining hygiene with alcohol-based sanitizers is the best way to prevent the spread of this virus as the person remains asymptomatic from the exposure till the first symptom is shown that is for around 2-14 days which is the incubation period of the virus [7]. Virus mainly affects the person with lower immunity, older people, children, people with systemic conditions like diabetes and pregnant women [14]. At present there is no vaccine to cure the virus and the government had made strict lockdown rule over country to stop spreading of this virus. Persons who were going out take certain precautions like wear mask, gloves, wash their hands and used sanitizers. And it was observed that this pandemic, effects person's mental health and people are also facing financial problems due to lockdown.

CONCLUSION

Within the limitations of this study it is clear that, by following these little steps, the prevention of spread can successfully be reduced and controlled:

1. Wash hands with soap, alcohol-based sanitizers.
2. Cover nose, mouth while sneezing or coughing with mask or tissue and dispose it immediately followed by washing hands and sanitizing hands.
3. Do not touch face, nose, mouth, eyes with hands after touching any object on public place.
4. Maintain social distancing and avoid roaming on the streets and gathering in groups. This is the best way to prevent the spread of the virus.
5. Eat healthy, exercise at home and maintain good immunity levels to fight against the virus.
6. Follow the guidelines suggested by the country heads.

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