

Knowledge, attitudes, and practices (KAP) toward COVID-19 appropriate behaviours among general public- A cross-sectional study

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Abstract

Background: The Corona virus disease 2019 (COVID-19) affecting all spheres of human endeavours, impact of the corona virus disease 2019 (COVID-19) on common people is unclear which necessitated. To achieve an ultimate success against the ongoing encounter against covid-19 in India, we need proper behaviour and commitment from general public, without their participation it will not be possible to control the COVID-19 pandemic. **Aim and Objectives:** Accessing knowledge, attitude and practices of COVID-19 appropriate behaviours among general public (age above 18 years) of Mahabubnagar district, Telangana state, India. **Materials and Methods:** This study was a Cross sectional study, conducted between September – October 2021. Total 447 responses were obtained from the online-based survey using convenience sampling technique to assess knowledge, attitudes and practices of covid-19 appropriate behaviours among the general public (age above 18 years) of Mahabubnagar district. The descriptive statistics were calculated and data was analysed by using SPSS software with version 23. **Results:** From the 447 study participants, 85.6% majority of the respondents were in age group 18-30years. Among respondents 60.4% were female and 39.6% males, 51.5% were urban and 48.5% rural. Association between knowledge and age was statistically significant. Association between knowledge and age was statistically significant. Level of attitudes and age was not statistically significant. Association between practices of covid-19 appropriate behaviours and age are not statistically significant at 5% level of significance. **Conclusion:** This research revealed that knowledge scores of general populations about covid-19 is adequate with their demographic variables. The researcher found that only around 50% of participants were following the practices of preventive precautionary behaviours and attitudes of COVID -19 appropriate behaviours towards covid-19. There was KAP-GAP between knowledge & Practice.

Key word: COVID-19, SPSS, Pandemic, General public, Knowledge, Attitude and Practices (KAP).

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Introduction

Severe Acute Respiratory Syndrome Corona Virus (SARS –Cov-2), which causes corona virus disease (Covid-19), was first identified in December 2019 in Wuhan city, China and later spread to many provinces of China. Covid-19 disease has shown vast presentation from mild to severe illness. Older people and those with underlying chronic medical conditions like cardiovascular disease, diabetes, chronic respiratory disease or cancer are more likely to develop serious illness. As of May 8th 2020, the World Health Organization (WHO) had documented 3,759,967 positive Covid-19 cases, and the death toll attributed to Covid-19 had reached 259,474 worldwide. World Health Organization declared Covid-19 a public health emergency of international concern[4].

The Novel corona virus that causes COVID-19 can be transmitted directly through human-to-human contact or directly with contaminated objects. Symptoms include fever, dry cough, vomiting, diarrhea, nausea, and fatigue that may result in severe problems such as difficulty in breathing and chest pain. The virus can also be transmitted asymptotically.

The world health organization included Covid-19 as an international concern to public health on 30th January 2020[7].

In India, first SARS Cov-2 positive case was reported in the Kerala on January 30th 2020. Subsequently, the numbers of cases drastically rose. As of May 8th 2020, Maharashtra, Delhi and Gujarat states were reported to be hot spots for Covid-19 with 17, 974, 5,980 and 7,012 confirmed cases, respectively to date, 16,540 patients have recorded and 1,886 deaths have been reported in India[2]. The pandemic spread to various states and union territories including the state Telangana. The First case of COVID-19 pandemic in Telangana state was reported on 2 January 2020, by state Government. The total number of cases were documented in Telangana state is 6,65,749 positive cases and the active cases by month of September is 4,620. Where as in district wise survey, in Mahabubnagar district total 1, 6,217 populations were affected with covid-19[4].

The most important strategy to prevent and slow down transmission is to educate general public about the disease process, mode of transmission, & preventive measures. Protect yourself and others from infection by maintaining social distance, wearing a properly fitted mask, and washing your hands frequently or using an alcohol-based sanitizer frequently. Get fully vaccinated when it's your turn & encourage others to follow the similar practice[1]. The Ministry of Health and Family Welfare of India has raised awareness about the recent outbreak and has taken all required necessary actions to control the spread of Covid-19.

The central and state governments also have taken several measures and formulated several war times' protocols[5]. An easy way to

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decrease SARS Cov-2 Infection rates is to avoid virus exposure. People from India should avoid travelling the countries highly affected with the virus, practice proper hygiene, avoid consuming food that is not home cooked, necessary preventive measures, such as wearing a mask, regular hand washing, social distances and avoiding direct contact with infected persons, should also be practiced[5].

India has taken necessary preventive measures to reduce viral transmission .ICMR, Aayush, WHO, MOH & FW provided many guidelines to use various conventional preventive and treatment strategies to increase immunity and to reduce the spreading of severity of the viral infection[2]. As we are aware, the Covid-19 pandemic has led to unprecedented and unanticipated challenges requiring collective action and support from all[2]. While all necessary measures to fight the spread of Novel corona virus (Covid-19) are being effectively led by the Government and health organizations, this is need of hour to reinforce the importance of preventive measures and practices in a sustained manner among general public periodically , to deal with the disease over the long run. This fight can be won only when everyone knows this goal & everyone plays their role in society.

The KAP theory is a health behaviour changes theory where in the change in human behaviour is divided in to three successive processes, namely Acquisition of right knowledge, generation of attitudes and adoption of behaviour Practices. According to KAP theory this is generally affected by their Knowledge, Attitude, and appropriate behavioural Practices concerning covid-19, public education is considered as one the most important measures that can help to control the disease, as has been the case regarding covid -19[6].

Therefore, this study aimed to assess the knowledge, Attitude, Practices of General public of Mahabubnagar District.

Materials and Methods

The present Cross Sectional study was conducted during September – October 2021, by SVS college of Nursing, Mahabubnagar with support of dept. of community medicine SVS Medical College, Mahabubnagar, TS. The study area was Mahabubnagar district, Telangana State, India. Institutional Ethics Committee clearance was obtained prior to start the study.

Population of more than 18 years age group who voluntarily participated in this survey were included in this study. By Convince sampling procedure 447 study participants was selected. A pre-tested questionnaire was used. The questionnaire consisted of information regarding knowledge; attitudes and practice of covid-19 appropriate behaviours. The data was collected systematically and entered scores accordingly in MS-Excel software. The descriptive statistics were calculated and the chi-square test statistics was used to find the association between the variables. The statistical significance was tested at $p < 0.05$. The statistical software SPSS version 23 was used for data analysis.

Results

Out of 447 participants, (Table No.1), 85.6% were in age group of 18-30 years. In regard to educational qualification majority were graduates 58.16%, followed by 9.2% with inter education. around 65% were having family size of 4-6 members. Among 30% participants got information regarding COVID -19 from local health care workers followed by social media in 23%. Around 16.6% participants had COVID -19 infections in recent pandemic. 46.6% people were vaccinated from first dose, and 36.9% were not vaccinated, 16.6% participants were vaccinated with second dose.

Table 1: Frequency and percentage distribution of general public (age above 18yrs) according to their selected demographic variables

| Characteristics | Parameters | Frequency | Percentage |
|--|----------------------------|-----------|------------|
| Age in years | 18-30years | 383 | 85.6 |
| | 31-43years | 43 | 9.6 |
| | 44-56years | 16 | 3.6 |
| | Above 57years | 5 | 1.1 |
| Gender | Female | 270 | 60.4 |
| | Male | 177 | 39.6 |
| Community/Area | Rural | 217 | 48.5 |
| | Urban | 230 | 51.5 |
| Educational Qualification | Inter | 82 | 9.2 |
| | Degree | 260 | 58.16 |
| | Post graduate | 70 | 7.8 |
| | Others | 32 | 3.6 |
| Occupation | Government | 64 | 14.4 |
| | Private | 137 | 30.6 |
| | Unemployed | 246 | 55.0 |
| Income | 5000-10,000 per month | 204 | 45.6 |
| | 10,000-15,000 per month | 42 | 9.4 |
| | 15,000-20,000 per month | 78 | 17.4 |
| | 20,000 and above per month | 123 | 27.5 |
| Number of family members | less than 4 members | 99 | 22.2 |
| | 4-6 members | 291 | 65.1 |
| | Above 5 members | 57 | 12.8 |
| Source of information regarding Covid -19 | Health workers | 58 | 30.4 |
| | Social media | 97 | 23.7 |
| | News papers | 91 | 26.4 |
| | Others | 87 | 19.5 |
| Do you have chronic illness | No | 403 | 90.2 |
| | Yes | 44 | 9.8 |
| Do you know someone affected with Covid – 19 | No | 137 | 30.6 |
| | Yes | 302 | 67.6 |
| Do you know someone died with Covid -19 | No | 174 | 38.9 |
| | Yes | 273 | 61.1 |
| Have you been infected with Covid -19 | No | 373 | 83.4 |
| | Yes | 74 | 16.6 |

| | | | |
|-------------------------------------|----------------|-----|------|
| Vaccination | First dose | 208 | 46.6 |
| | Second dose | 74 | 16.6 |
| | Not vaccinated | 165 | 36.9 |
| Any information regarding Covid -19 | No | 114 | 24.5 |
| | Yes | 333 | 74.5 |

The majority 85% participants were having adequate knowledge regarding virus, communicability, mode of transmission, mild, moderate, severe symptoms & preventive measures regarding covid-19.(Fig. 1)

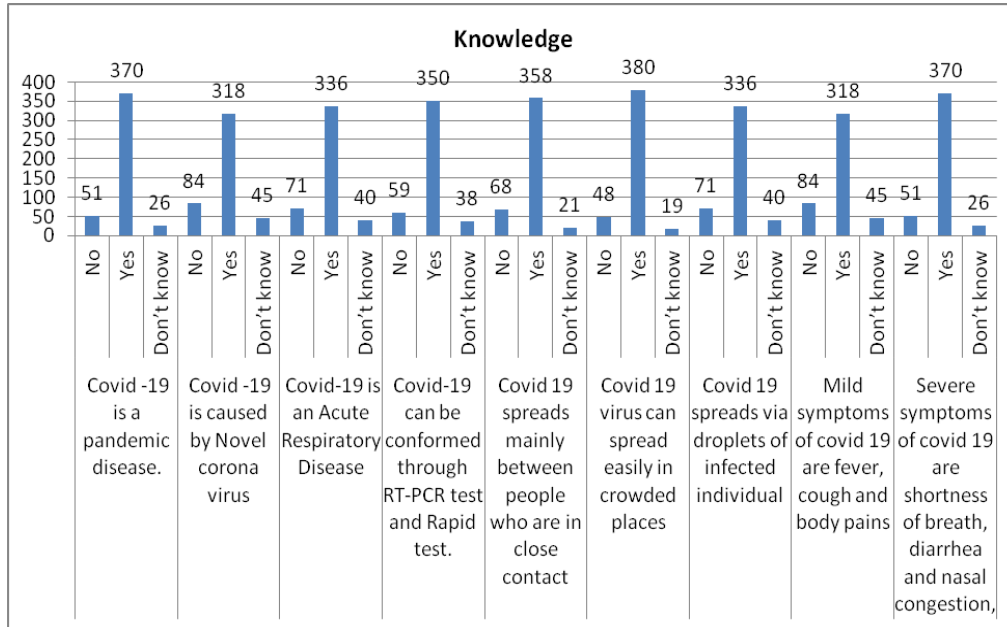


Fig.1 : Distribution of Knowledge in the general public

The findings related to attitude regarding COVID -19 appropriate behaviour (Fig. 2) reveals majority participants were having positive attitude towards avoiding mass gatherings, following hand washing etc.

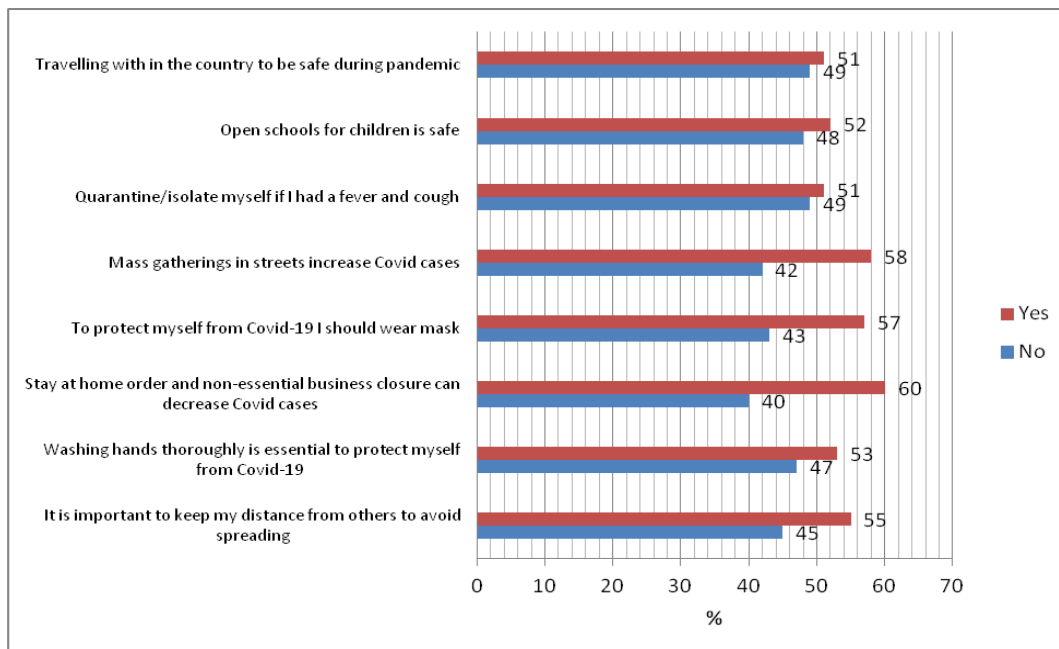


Fig. 2: Distribution of Attitude in the general public

It was also observed that around 50% participants only were accepted that they are practicing covid-19 appropriate behaviour & following preventive measures and remaining participants were not following guidelines. (Graph -3).

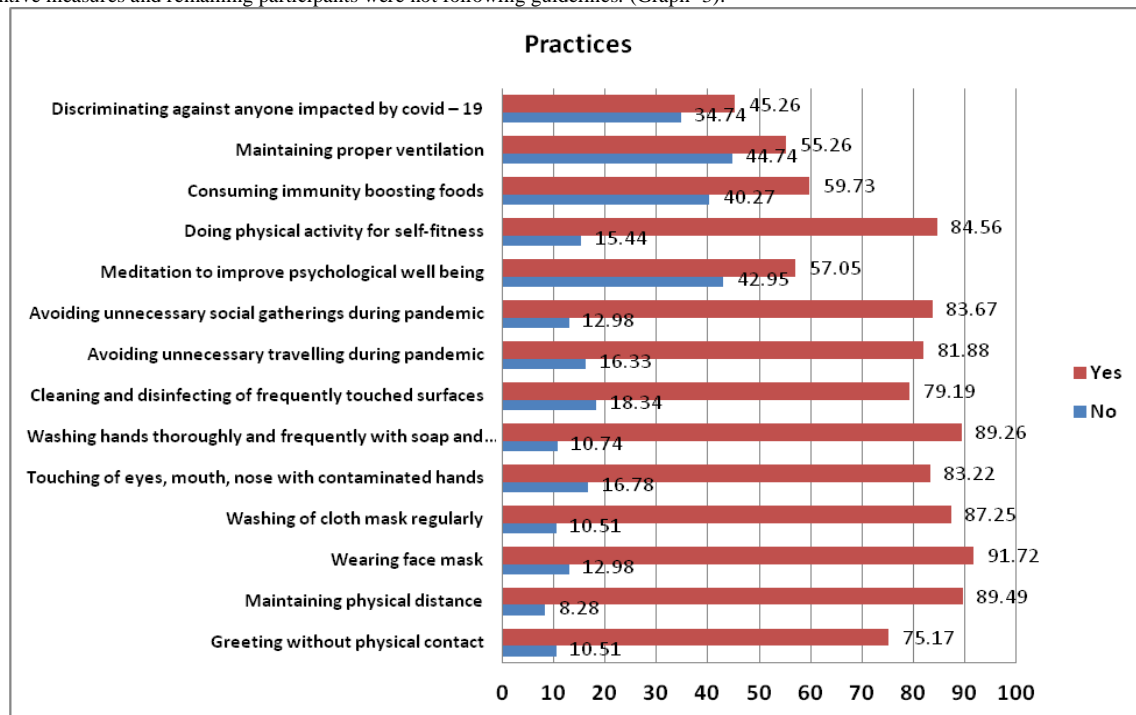


Fig. 3: Distribution of Practices in the general public

Association between knowledge and age was statistically significant. Level of attitudes and age was not statistically significant. Association between practices of covid-19 appropriate behaviours and age are not statistically significant at 5% level of significance.

Discussion

Knowledge regarding any public health issue, can play a crucial role in enhancing the practice of public preventive behaviour, as our findings also showed that knowledge was associated with attitudes and preventive behaviours. Evidence shows that effective preventive behavior depends on one's Knowledge, Attitude and other socio-demographic characteristics. Most importantly arrays of floating rumors, myths, and misperceptions regarding the spread, treatment and nature of the virus can substantially affect people's knowledge, Attitude, practices adherence to standard Covid-19 protective measures[8].

The present study is an attempt to explore the information knowledge scores of general public's (age above 18years) residing in Mahabubnagar district about knowledge, attitudes and practices of covid-19 appropriate behaviours out of 447 subject's majority were 85.0% having adequate knowledge regarding covid-19 and 10.7% were having knowledge, similar findings were observed from the Amin N. Olaimat[9].

The findings related to attitude regarding COVID -19 appropriate behaviour reveals majority participants were having positive attitude towards avoiding mass gatherings, following hand washing etc, quite similar findings from the Devina Adella Halim et.al[10]. By the above findings it shows that youngsters (18-30 years) were not following attitudes of covid-19 appropriate behaviours.

Majority of the population were little positive regarding attitude of covid-19 appropriate behaviours. Practices of covid-19 appropriate behaviours among general public .out of 447 participants 52.3% practice appropriate behaviour during coughing and sneezing by covering mouth with flexed elbow or tissue paper. The researcher found that only than 50% of participants were following the practices of preventive precautionary behaviours and attitudes of COVID -19 appropriate behaviours towards covid-19 among youngsters, that shows KAP-GAP, where population is having knowledge but not

practicing it. Quite similar findings were observed in one research done by Mohammed K et. Al[11]. Researchers also found few limitation of this study like less sample size, only online survey where in depth interview could not done etc.

Based on the findings, similar studies can be conducted on a larger sample for wider information among general public who residing in different states of India.

Conclusions

During such global pandemic, the public needs to practice precautionary behaviours at all times to control & prevent it. This study explores that knowledge is very important predictor of attitudes and behaviours, contributing to advancing intervention strategies to promote and sustain the precautionary behaviours of general public in the context of the COVID-19 pandemic. The knowledge & attitude regarding covid-19 appropriate behaviours shows that knowledge scores of General public is adequate but KAP-GAP observed where population is having knowledge but not practicing it because only more than 50% of participants were following the practices of preventive precautionary behaviours and attitudes of COVID -19 appropriate behaviours towards covid-19 among study participants . The population should have attitude to practice the knowledge than only this battle can be won

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