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KNOWLEDGE, ATTITUDES AND PRACTICES TOWARD FEVER AMONG OPD PATIENTS OF GENERAL MEDICINE DEPARTMENT OF IGIMS DURING POST LOCKDOWN PERIOD

General Medicine

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ABSTRACT

Coronavirus disease 2019 is highly infectious, and its main clinical symptoms include fever, dry cough, dyspnea, myalgia and fatigue; which in severe cases may progressed to acute respiratory distress syndrome, septic shock, metabolic acidosis, bleeding and coagulation disorder.
Aim: To evaluate the Knowledge, Attitudes and practice towards COVID-19
Method: 300 patients coming to OPD between august 2020 and October 2020 were selected.
Results: Among 300 patients there were180 males and 120 female patients. Overall there was highly significant association between gender, education, occupation and income among participants in terms of total knowledge score ($P < 0.05$) ; however the association were not significant among different age groups ($P > 0.05$). Most participants believed that COVID-19 can be successfully controlled in India, and COVID-19 had increased the level of stress in them. Majority also agreed that lockdown had slowed down the COVID-19 spread. Majority of participants regularly wear mask while going out or in public places, and also using hand washing and sanitizer regularly. However, majority had not downloaded the "Arogya Setu app"; nor they take bath and wash cloths after returning from outside.
Conclusion: Our findings suggest that although patients generally have an acceptable level of knowledge on COVID-19 and tend to be positive in their outlook on overcoming the pandemic, innovative awareness and preventive measures are urgently needed considering the high number of illiterate people in our study population who had lower KAP scores.

KEYWORDS

Coronavirus disease 2019(COVID-19), Lockdown, Pandemic, Social distancing, Knowledge, Attitude, Practices

INTRODUCTION

Coronavirus disease 2019 (COVID-19) is caused by novel coronavirus emerged in Wuhan, China in December 2019. The disease is highly infectious, and its main clinical symptoms include fever, dry cough, dyspnea, myalgia and fatigue. [1] In China , 18.5% of the patients with COVID-19 progressed to severe stage, which is characterized by acute respiratory distress syndrome, septic shock, metabolic acidosis, bleeding and coagulation disorder.[2]

Since then, it has spread over 200 countries and has been declared global pandemic by the World Health Organisation (WHO). Till June 2020, there were more than 8 million positive cases recorded with at least 400000 deaths globally. [3]

India reported its first COVID-19 case on 30 January 2020 and numbers began to rise in late March 2020.[4] Indian government took various measures to slow the spread of disease including stopping all international flights and implementing a nation-wide lockdown at an early stage of pandemic. India faces threat of a serious outbreak due to deep challenges in practicing social distancing and access to water and soap or sanitizer for hand hygiene, with densely populated urban areas and a highly mobile population in some states. [5]

On 24 March 2020, the Government of India ordered nationwide lockdown for 21 days(Phase 1), which was later extended to Phase 4, up to 18 May 2020, to a total of 68 days, triggering rapid migrations from the cities to rural areas in some parts of the country among rising fears of fast spread of infections. In India, where approximately 80% of the workforce is employed in the informal sector and about a third are employed as day-laborers, the lockdown policy may exacerbate existing health and economic inequalities. [6]

Implementing personal hygiene and public health behaviors such as handwashing and social distancing are necessary to curb the spread of coronavirus, but it will be challenging to practice these in many cities and rural areas in developing settings. [7]

Bao-Liang Zhong et al had done online study on Knowledge, attitude and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak by preparing questionnaire consist of 12 questions. The overall correct rate of the knowledge questionnaire was 90%, 97% has positive attitudes that China can win the battle against COVID-19. Nearly all the participants (98%) wore masks when going out in recent days. [8]

Arina Anis Azlan et al had also done an online study on public knowledge, attitude and practices towards COVID-19 in Malaysia where they found that overall correct rate of the knowledge questionnaire was 80.5%. Most participants held positive attitudes towards the successful control of COVID-19(83.1%), and 83.4% were avoiding crowd. [9]

Almost all the Knowledge, attitude and practices (KAP) study was done online. We are doing this study on patients coming to our hospital, interview personally with patients while taking full safety precautions.

AIMS AND OBJECTIVES:

1- To evaluate the Knowledge about COVID-19 in patients.
2- To see the attitudes towards COVID-19 in patients
3- To look for how they practice for prevention towards COVID-19.

MATERIAL AND METHODS:

This observational, prospective, non-interventional study includes general patients, who were willing to be enrolled from OPD of department of General Medicine, Indira Gandhi Institute of Medical sciences, Patna, Bihar, between August 2020 and October 2020 after approval from ethics committee. 300 patients coming to OPD were selected.

INCLUSION CRITERIA:

1- Male and female patients
2- Age $\geq$ 18 years
3- Patients willing to give informed consent for study.

EXCLUSION CRITERIA:

1- Age $\leq$ 18 years
2- Unwilling or unable to comply with protocol

Every enrolled patient will be given a proforma to be filled in 10-20 minutes, assisted by our research team in OPD.

RESULTS

Table-1: Demographic

Characteristics	Number (n)	%
Gender		
Male	180	60 %
Female	120	40%
Age		
<30 years	62	20.6%
30 - <45 years	85	28.3%
45 - <60 years	95	31.6%
60 - <75 years	48	16%
≥75 years	10	3.3%
Education		
Illiterate	51	17%
Undergraduate	144	48%
Graduate	80	26.6%
Postgraduate	25	8.3%
Occupation		
Students	26	8.6%
Government employees	59	19.6%
Private job	42	14%
Self Employed	23	7.6%
Housewife	86	28.6%
Farmer	26	8.6%
Laborer	4	1.3%
Unemployed	34	11.3%
Income		
Low	162	54%
Medium	134	44.6%
High	4	1.3%

Among 300 participants 180 were male which is 60%; 120 were female which is 40%. Most number of participants were of age groups 45 to <60, which was 95(31.6%); second highest among participants group were 30 to <45 years groups, which was 85(28.6%). Less than 30 years age groups were 62 participants which was 20.6%. 48 (16%) participants were of age groups 60 to <75years and least number of participants were of >75 years age groups which were 10(3.3%).

Most of the participants were literate. 51(17%) of participants were illiterate. 86(28.6%) of the participants were housewife, 59(19.6%) were government employees, 42(14%) were doing private job, 26(8.6%) were farmer, 26(8.6%) were students, 23(7.6%) were self employed and 4(1.3%) were laborer. 34(11.3%) were unemployed.

162(54%) participants were of low income group, 134(44.6%) were of medium income group. Only 4(1.3%) participants were of high income group.

Table-2: Knowledge about covid 19 among participants

Questions	True n (%)	False n (%)	Don't Know n (%)
1-The main clinical symptoms of COVID-19 are fever, dry cough, fatigue and myalgia	274(91.3)	12(4)	14(4.6)
2-COVID-19 virus spread via coughing, sneezing and hand shaking with infected individual	270(90)	10(3.3)	20(6.6)
3-Person with COVID-19 cannot infect the virus to other when fever is not present	235(78.3)	23(7.6)	42(14)
4-Early symptomatic and supportive treatment can help most patients in recovery	263(87.6)	3(1)	34(11.3)
5-Usually elderly, co-morbid patients are more likely to develop severe disease	262(87.3)	4(1.3)	34(11.3)
6-Isolation and treatment of people who are infected with COVID-19 are effective ways to reduce the spread of the virus	263(87.6)	5(1.6)	32(10.7)
7-Wearing mask can prevent the infection by COVID-19	284(94.6)	3(1)	13(4.3)
8-Avoiding going to crowded place is an effective way of prevention	280(93.3)	4(1.3)	16(5.3)
9-Hand washing with soap and water for 20 seconds will kill the virus	274(91.3)	3(1)	23(7.6)
10-Person who have contact with someone infected with the COVID-19 virus should be immediately isolated in a proper place and observed for 14 days	253(84.3)	6(2)	41(13.6)

Majority of participants had correctly answered the knowledge questions except question number 3, where question **" Person with COVID-19 cannot infect the virus to other when fever is not present"** was wrongly answered as true by 235(78.3%) of participants. Only 23(7.6%) participants had answered correctly question number 3.

Table-3: The Difference Among Participants In Terms Of Total Knowledge Score

Variables	n	Total Knowledge Score Mean(SD)	P-value
Gender			< 0.001
Male	180	8.50 (1.57)	
Female	120	7.63 (2.53)	
Age			0.618
<30 years	62	8.45 (1.78)	
30 - <45 years	85	8.11 (2.12) 8.12	
45 - <60 years	95	(2.12)	
60 - <75 years	48	7.82 (2.26)	
≥75 years	10	8.40 (1.07)	
Education			< 0.001
Illiterate	51	6.88 (3.08)	
Undergraduate	144	8.21 (1.89)	
Graduate	80	8.72 (0.98)	
Postgraduate	25	8.52 (1.87)	
Occupation			< 0.001
Students	26	9.00 (0.56)	
Government employees	59	8.71 (1.21)	
Private job	42	8.90 (0.57)	
Self Employed	23	8.34 (1.84) 7.72	
Housewife	86	(2.38)	
Farmer	26	7.84 (2.12)	
Laborer	4	5.50 (4.35)	
Unemployed	34	7.11 (2.88)	
Income			< 0.001
Low	162	7.62 (2.49)	
Medium	134	8.76 (1.08)	
High	4	9.24 (0.95)	

Data was analyzed on PSPP version 1.4.1, free software foundation, USA. t- test and ANOVA test were used. One way ANOVA test was used to find significance between groups and within groups. Overall there was highly significant association between gender, education, occupation and income among participants in terms of total knowledge score ($P < 0.05$) ; however the association were not significant among different age groups ($P > 0.05$).

Table-4: Attitude Towards Covid 19

Questions	Agree n(%)	Disagree n(%)	Don't Know n(%)
1-Do you agree that COVID-19 will be successfully controlled finally?	219(73)	27(9)	54(18)
2-Do you have confidence that India can win the battle against the COVID-19 virus?	222(74)	33(11)	45(15)
3-Do you agree that COVID-19 had increased the level of stress in you?	194(64.6)	79(26.3)	27(9)
4- Do you agree that lockdown has slow down the COVID-19 spread?	233(77.6)	30(10)	37(12.3)

Majority of participants were agreed that COVID-19 will be successfully controlled finally. Majority also had confidence that India can win the battle against the COVID-19. 194(64.6%) of participants agreed that COVID-19 had increased the level of stress in themselves. Most of participants 233(77.6%) agreed that lockdown had slowed down the COVID-19 spread.

Table-5: Practices Towards Covid-19

Questions	Yes n(%)	No n(%)
1-Do you regularly wear mask while going out or in public place?	292(97.3)	8(2.6)

2-Do you use hand washing or sanitizer frequently?	285(95)	15(5)
3-Do you have downloaded the "Arogya setu" app?	111(37	189(63)
4- Do you take bath and wash clothes after returning from outside?	18(6)	282(94)

292(97.3%) of participants said that they regularly wear mask while going out or in public places.285(95%) also used hand washing or sanitizer frequently. However, majority of participants, 189(63%) had not downloaded the "Arogya setu" app. Majority of participants, 282(94%) also do not take bath and washed clothes after returning from outside.

DISCUSSION

We believe that this is the first study to evaluate the KAP study regarding fever (Covid-19) through personal face to face interview in OPD. To the best of our knowledge almost all the KAP study done on COVID-19 so far were online.

In our study 180 male participants had total knowledge score mean (SD) was 8.5(1.57) ; and 120 female participants total knowledge score mean (SD) value was 7.63(2.53). It show male had better knowledge about covid-19, which is highly significant ($P < 0.001$).

Illiterate person also had low total knowledge mean (SD) score 6.88(3.08) in comparison to literate participants, which was also highly significant ($P < 0.001$).

Laborer, unemployed, housewife and farmer total knowledge score were low in comparison to students, government employees, private job and self employed participants; which was also highly significant ($P < 0.001$).

Low income participants had total knowledge score mean (SD) was 7.62(2.49) in comparison to medium income group knowledge score mean (SD) 8.76(1.08) and high income group knowledge score mean (SD) 9.25(0.95); which was also highly significant($P < 0.001$).

However in our study there were no significant association was found in total knowledge score between different age groups ($P > 0.05$).

Most of participants had good knowledge of COVID-19 symptoms, transmission, risk factors, management, prevention and isolation. Most participants believed that COVOD-19 can be successfully controlled in India. 194(64.6%) participants agreed that COVID-19 had increases the level of stress in them. Majority also agreed that lockdown had slowed down the COVID-19 spread. High level of positive attitudes was also reported in China[8] and Malaysia[9], which may reflect the swift action of their local and national government.

292(97.3%) participants regularly wear mask while going out or in public places. Majority 285(95%) also using hand washing and sanitizer regularly. However, majority 189(63%) had not downloaded the "Arogya Setu app"; nor they 282(94%) take bath and wash cloths after returning from outside. Christy et al, reported that only 18% of the study population had downloaded the "Arogya Setu app" in their study. [10]

CONCLUSION

To conclude, our findings suggest that although patients generally have an acceptable level of knowledge on COVID-19 and tend to be positive in their outlook on overcoming the pandemic, innovative awareness and preventive measures are urgently needed considering the high number of illiterate people in our study population who had lower KAP scores. Furthermore, based on the significant positive association among knowledge, attitude, and practice in our study, health education programs, particularly targeting lower knowledge individuals regarding COVID-19, are essential for encouraging positive attitude and maintain safe practices.

Hopefully, by increasing knowledge via public health policy-makers, and the cooperation of the Indian authorities and the general population, optimistic control and elimination of the disease can be anticipated in near future.

Conflict Of Interest – None

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