ISSN- O: 2458 - 868X, ISSN–P: 2458 – 8687
National Library of Medicine - ID: 101731606

International Journal of Medical Science and Innovative Research (IJMSIR)
IJMSIR : A Medical Publication Hub
Available Online at: www.ijmsir.com
Volume – 8, Issue – 1, February – 2023 , Page No. : 140 – 149

To assess the knowledge, attitude and expressed practices regarding covid-19 appropriate behaviour among the patients and attendants of selected opd, Neigrihms

[1]Ms. Kalpana Newar, Tutor, College of Nursing, NEIGRIHMS, Shillong, Meghalaya.
[2]Ms. Purabi Devi, Tutor, College of Nursing, NEIGRIHMS, Shillong, Meghalaya.
[3]Ms. Aibi Danggen, B.Sc. Nursing Student, College of Nursing, NEIGRIHMS, Shillong, Meghalaya.
[4]Ms. Gampi Nyokir, B.Sc. Nursing Student, College of Nursing, NEIGRIHMS, Shillong, Meghalaya.
[5]Ms. Inamma Bailung, B.Sc. Nursing Student, College of Nursing, NEIGRIHMS, Shillong, Meghalaya.
[6]Ms. Kibabitdor Kharlor, B.Sc. Nursing Student, College of Nursing, NEIGRIHMS, Shillong, Meghalaya.
[7]Ms. Mansha, B.Sc. Nursing Student, College of Nursing, NEIGRIHMS, Shillong, Meghalaya.
[8]Ms. Megha Thomas, B.Sc. Nursing Student, College of Nursing, NEIGRIHMS, Shillong, Meghalaya.
[9]Ms. Sumi Patra, B.Sc. Nursing Student, College of Nursing, NEIGRIHMS, Shillong, Meghalaya.

Corresponding Author: Ms. Sumi Patra, B.Sc. Nursing Student, College of Nursing, NEIGRIHMS, Shillong, Meghalaya.

Citation this Article: Ms. Kalpana Newar, Ms. Purabi Devi, Ms. Aibi Danggen, Ms. Gampi Nyokir, Ms. Inamma Bailung, Ms. Kibabitdor Kharlor, Ms. Mansha, Ms. Megha Thomas, Ms. Sumi Patra, "To assess the knowledge, attitude and expressed practices regarding covid-19 appropriate behaviour among the patients and attendants of selected opd, Neigrihms", IJMSIR- February - 2023, Vol – 8, Issue - 1, P. No. 140 – 149.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Abstract

Introduction: The novel corona virus also known as severe respiratory syndrome corona virus-2 (SARS-COV-2) causes a severe respiratory illness in human. It spreads from person to person through close contact, contaminated surface, and via droplets by infected person. The first case was detected on 31st December 2019 in Wuhan, China. It was declared as a worldwide pandemic by the WHO. The first case of corona virus infection in India was reported on 30th January 2020, in Kasragod town in the state of Kerala.

Methodology: A non-experimental cross-sectional study was adopted to assess the knowledge, attitude and expressed practices regarding covid-19 appropriate behaviors among the patients and attendants of selected OPDs, NEIGRIHMS. Data was collected using self-administered questionnaires and 3-point Likert to measure the attitude.

Result: The study reveals that participants have good knowledge regarding COVID 19 appropriate behaviour. Also, majority of the participants have favorable attitude and good practice.

Conclusion: From the study it was found that majority of the participants have good knowledge and positive attitude towards COVID-appropriate behavior. It was also found that majority of the participant have good practice regarding COVID -19 appropriate behavior. The respondents having higher educational status had better knowledge, attitude and expressed practices regarding COVID 19 appropriate behavior.

Keywords: COVID 19, severe respiratory syndrome, Droplets, Pandemic

Introduction

The novel corona-virus also known as severe acute respiratory syndrome corona virus -2 (SARS-CoV-2) is a family of virus that causes a severe respiratory disease. It is highly contagious and it spreads through close contact, contaminated surface, and via droplets.

The virus is released via respiratory droplets into the air when an infected person cough, sneeze talks or breathe near you. The first case was detected on 31st December 2019 in Wuhan, China. It was declared as a worldwide pandemic by the WHO. The first known case in India was reported on 30th January 2020, in Kasaragod town in the state of Kerala and as of 30th February 2020, the WHO reported 11.1M confirmed cases; 10.8M recoveries and 157K deaths within the country.

It is an emerging infectious disease that poses a significant threat to public health. With the assessment of Knowledge ,Attitude and Practice surveys, among people, is helpful to prepare prevention, control, and mitigation measures during epidemics. Maintaining personal hygiene and public health behaviours are very important to control the spread of corona virus, like hand washing , social distancing and proper use of mask .

Need of the study

COVID-19 is highly contagious virus therefore the Government of India have enforced a set of rules in order to control the spread of infection also known as Covid-19 appropriate behavior such as use of face masks, washing hands with soap and water, social distancing etc. Which was made compulsory in every public places.

A cross sectional study in India on public awareness to control the spread of Covid-19 among 21,406 adult participants by extensive survey method revealed that the level of public awareness is inadequate in India and there is a need to extend the knowledge among individuals. The Government has taken enterprise like "Karnataka Epidemic Disease Act, 2020" which was brought into effect on 24th March 2020 upon which a person is fined for violating CAB, awareness through mass media, personal check-up through apps etc**.**

It was very important to assess people's level of adherence to CAB in order to plan and implement effective risk communi cation programs at state and local level. Therefore, this study was conducted to assess the knowledge attitude and express practices regarding Covid-19 appropriate behaviors.

Aims and objectives

Primary objectives

- To assess the knowledge and expressed practices regarding COVID-19 appropriate behaviour among the patients and attendants attending NEIGRIHMS, OPD.
- To assess the attitude of people towards COVID – 19 appropriate behaviour.

Secondary objectives

- To assess the association of knowledge, attitude and expressed practices with demographic variables (age ,sex ,education ,occupation).

Hypothesis: Not applicable

Methodology

The study was conducted after the review from the Board of NEIGRIHMS Scientific Advisory Committee (NSAC) and then permission was obtained from the Institute Ethics Committee (IEC) NEIGRIHMS.

We adopted a Non-Experimental Cross-Sectional Study Design to assess knowledge, attitude and expressed practices regarding COVID-19 appropriate behavior among the patients and attendants of selected OPD, NEIGRIHMS.

The survey was conducted using semi-Structured questions to measure the level of knowledge and express practice and three Point Likert Scale to measure the attitude of the participants. A total of 236 adults partici pated in the study voluntarily who met the inclusion criteria.

Research approach

Non-Experimental Cross-Sectional Study.

Research Variables

Independent variable

Socio-demographic variables: Age, Gender, Educational status, Occupation.

Outcome variables

Knowledge, attitude and expressed practices towards COVID appropriate behaviors.

Confounding and interacting variables

Not applicable.

Setting: Neuro logy, ENT, Ophthal mology, and on cology.

Population

Patients and attendants attending NEIGRIHMS OPD of Neurology, ENT, Ophthalmology, and Oncology.

Sample

Inclusion criteria

- Patients and attendants who can read and write.
- Above 18 years of age.

Exclusion criteria

- Patients and attendants who are not willing to participate.
- Patients and attendants who cannot read and write.

Sampling technique

Purposive Non- probability sampling.

Tools for data collection

The tools used for the study consists of the following

- Section i: Demographic variables.
- Section ii: Section consists of semi structured knowledge-based questionnaires to assess knowledge.
- Section iii: Semi-Structured questionnaires to assess expressed practice among the patients and attendants towards COVID-19 appropriate behaviors.
- Section iv: Three-point Likert Scale to assess attitude.

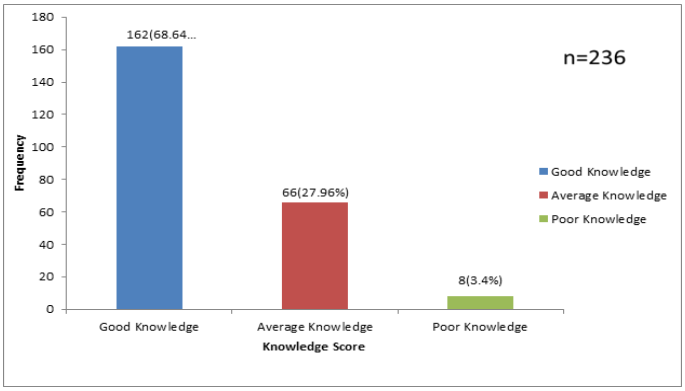
Results

Table 1: Table represents the distribution of the partici pants according to socio demographic variable. n = 236

Variables	Frequency (f)	Percentage (%)
Age in years		
19-28	102	43.22%
29-38	67	28.39%
39-48	34	14.41%
49 and above	33	13.98%
Gender		
Male	124	52.54%
Female	112	47.46%
Education		
Primary school level	12	5.08%
Secondary school level	31	13.14%
Higher secondary level	69	29.24%
Graduation level and above	124	52.54%
Occupation	46	19.49%
Government Employee		
Private Employee	53	22.46%
Others	137	58.05%

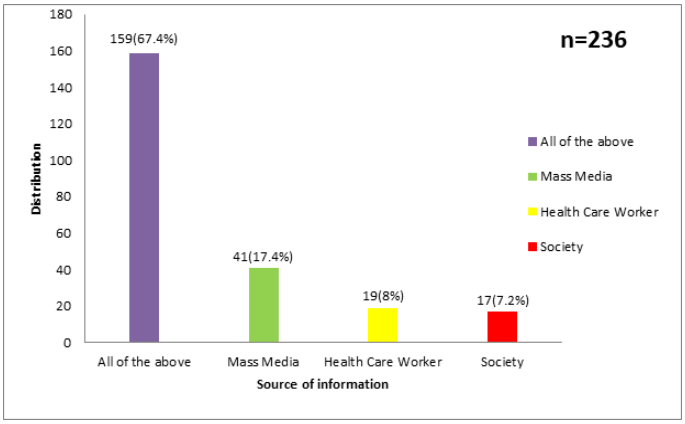
Table 1: shows that majority of the participants belongs to the age group of 19-28 years 102 (43.22%). Majority of the participants are male 124 (52.54%). Majority of the participants are of graduation level and above qualifications 124 (52.54%). Majority of the other jobs then government and private 137 (58.05%).

Fig 1: Bar diagram showing the distribution of participants according to their level of knowledge score regarding COVID 19 appropriate behaviours.



The data represented in figure 1 reveals that out of 236 participants majority of them 162(68.64%) had Good Knowledge, 66(27.96%) had Average Knowledge and 8(3.4%) had poor Knowledge regarding COVID-19 appropriate behavior.

Fig 2: Bar diagram showing the distribution of the source of information of participants regarding COVID-19 appropriate behaviours.



The data represented in figure 2 shows that among 236 participants, 159(67.4%) heard about COVID 19 from health care worker, 41(17.4%) from mass media, 19(8%) from health care worker and 17(7.2%) from society.

Table 2: A table representing knowledge score regarding COVID 19 appropriate behaviors with the demographic variables. n =236

Variables	Good Knowledge	Average Knowledge	Poor Knowledge
Age (in years)			
19-28	73	28	2
29-38	47	16	3
39-48	18	14	2
49 and above	23	9	1
Gender			
Male	78	38	6
Female	81	31	2
Educational status			
Primary School level	0	11	3
Secondary School level	10	18	2
Higher Secondary level	50	19	1
Graduation and above	100	20	2
Occupation			
a) Government employee	32	13	1
b) Private Employee	30	21	2
c)Others	99	33	5

Table 2 The table shows that majority of the participants belong to the age group 19-28 years (73) have good knowledge, majority of the participants who have good knowledge are female (81), majority of the participants who have good knowledge are graduated or have higher qualification (100), majority of the participants have other jobs then government and private jobs (99).

Table 3: The table represents the distribution as per domain level of knowledge regarding COVID 19 appropriate behavior. n =236

Domain	**Level of knowledge (%)**
General knowledge	81.78%
Cause	89.83%
Signs and Symptoms	76.69%
Prevention	63.98%

The table 3 as per domain shows that 81.78% participants have general knowledge regarding COVID-19, 89.83% participants have knowledge regarding the cause of COVID - 19, 76. 69% participants have knowledge regarding signs and symptoms of COVID-19 and 63.98% participants have knowledge regarding the prevention of COVID-19

Fig 3: Frequency and percentage distribution of attitude score regarding COVID 19 appropriate behaviors. N=236

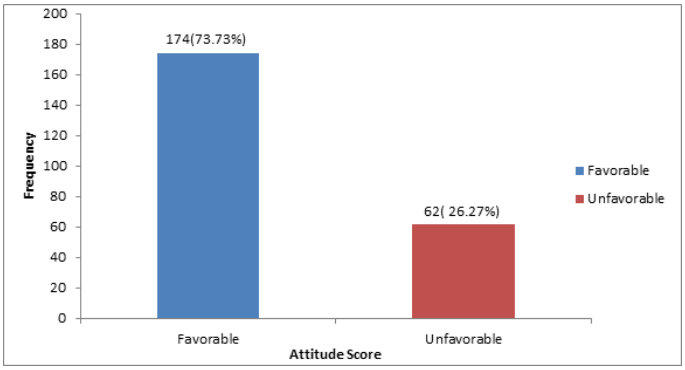


Fig 3 The above figure shows that out of 236 participants 174 (73.73%) had Favorable attitude, 62 (26.27%) had Unfavorable Attitude regarding COVID-19 appropriate behavior.

Table 4: Frequency distributions of attitude score regarding COVID 19 appropriate behavior according to demographic variables. n=236

Variables	Favorable (25-30)	Unfavorable (10-24)
Age in years a)19-28	83	18
b)29-38	47	21
c)39-48	18	16
d) 49 and above	25	8
Gender a) Male	82	42
b) Female	95	17
Education		
a) Primary School Level	4	7
b) Secondary School level	9	21
c)Higher Secondary level	51	19
d)Graduation level and above	111	14
Occupation a) Government Employee	31	14
b) Private Employee	36	19
c) Others	106	30

Table 4 Above table depicts that majority of the participants belongs to the age group 19-28 have favorable attitude and most of the participants are female (95), majority of the participants who have favorable attitude are Graduated and above, majority of participants have other jobs than Government and private jobs (106).

Fig 4: Bar diagram showing the distribution of expressed practices score regarding COVID 19 appropriate behaviors.

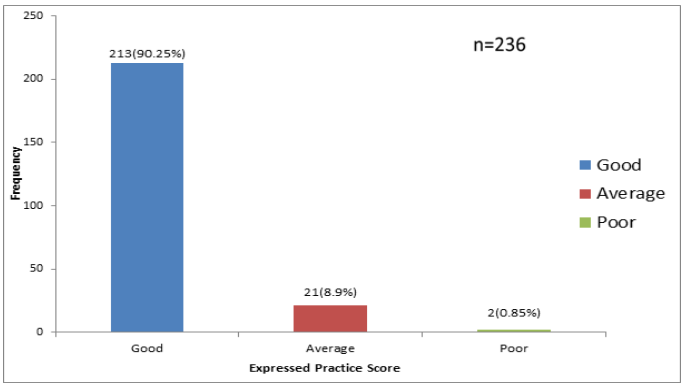


Fig 4 The data represented in the figure shows that out of 236 participants, 213 (90.25%) had good practice, 21 (8.9%) had Average practice, 2 (0.85%) had Poor practice regarding Covid-19 appropriate behavior.

Table 5: Frequency distributions of expressed practices score regarding COVID 19 appropriate behavior accord ing to demo graphic variable. n =236

Variables	Good (8-above)	Average (5-7)	Poor (4 or less)

Age (in years) 19-28	92	9	1
29-38	59	5	1
39-48	32	3	0
49 and above	31	3	0
Gender Male	112	11	1
Female	101	10	1
Education Primary School level	10	2	0
Secondary School level	24	6	0
Higher Secondary level	58	10	0
Graduation and above	120	4	2
Occupation Government Employee	43	2	1
Private Employee	49	4	0
Others	120	16	1

Table 5 The above table depicts that majority of the participants belong to the age group 19-28 years (92) have good practice, majority of the participants who have good practice are male (112), majority of the participants who have good practice are graduated or have higher qualification (120), majority of the participants have other jobs then government and private jobs (120).

Table 6: Association of knowledge regarding COVID-19 appropriate behaviour with the demographic variable n-236

Variables	Good Know ledge (9-7)	Average Know ledge (6-4)	Poor Know ledge (3-0)	Degree of freedom (Df)	Tabulated Value	Calculated Value
Age (in years) a)19-28	73	28	2	6	12.59	5.149
b)29-38	47	16	3			
c)39-48	18	14	2			
d)49 and above	23	9	1			
Gender a) Male	78	38	6	4	9.49	2.3
b) Female	81	31	2			
Educational status a) Primary School level	0	11	3	6	12.59	*61.81
b) Secondary School	10	18	2			
c)Higher Secondary	50	19	1			
d) Graduation and above	100	20	2			
Occupation a) Government employee	32	13	1	4	9.49	4.928
b) Private Employee	30	21	2			
c)Others	99	33	5			

*P value is <0.05 level

Table 6 shows that the computed chi-square value of educational status (x2 – 61.81) were found to be statistic ally significant. However, the computed chi-square value of Age (x2 – 5.149), Gender (x2 – 2.3), Occupation (x2 -4.928) were found to be statistically not significant. Hence there is an association between educational status and Knowledge.

Table 7: Association of attitude regarding COVID-19 appropriate behaviour with the demographic variable. N=236

Variables	Favorable (25-30)	Unfavorable (10-24)	Degree Of freedom	Tabulated value	Calculated value
Age in years a)19-28	83	18	3	7.82	*11.92
b)29-38	47	21			
c)39-48	18	16			
d)49and Above	25	8			
Gender a) Male	82	42	2	5.99	*10.96
b) Female	95	17			
Education a) Primary School Level	4	7	3	7.82	*52.63
b) Secondary School level	9	21			
c)Higher Secondary level	51	19			
d)Graduation level and above	111	14			
Occupation a) Government Employee	31	14	2	5.99	3.65
b) Private Employee	36	19			
c) Others	106	30			

*P value is <0.05 level

Table 7 shows that the computed chi-square value of Age (x2 – 11.49), Gender (x2 – 10.96), and educational status (x 2 – 52.63)) were found to be statistically significant. However, the computed chi-square value of Occupation (x2 -3.65) were found to be statistically not significant. Hence there is an association between Age, Gender, Educational status and Attitude.

Table 8: Association of expressed practices regarding COVID -19 appropriate behaviour with the demographic variable. n =236

Variables	Good (8-10)	Average (5-7)	Poor (0-5)	Degree of Freedom (Df)	Tabulated Value	Calculated Value
Age (in years) a)19-28	92	9	1	6	12.59	0.8
b)29-38	59	5	1			

c)39-48	32	3	0			
d)49 and above	31	3	0			
Gender				4	9.49	0.01
a) Male	112	11	1			
b) Female	101	10	1			
Education				6	12.59	*14.25
a) Primary School level	10	2	0			
b) Secondary School level	24	6	0			
c)Higher Secondary level	58	10	0			
d)Graduation and above	120	4	2			
Occupation				4	9.49	3.96
a) Government Employee	43	2	1			
b) Private Employee	49	4	0			
c)Others	120	16	1			

*P value is <0.05 level

Table 8 shows that the computed chi-square value of educational status (x2 – 14.25) were found to be statistically significant. However, the computed chi-square value of Age (x2 –0.8), Gender (x2 – 0.01), Occupation (x2 -3.96) were found to be statistically not significant. Hence there is an association between educational status and Express practice.

Discussion

In this section the major findings of the present study have been discussed with references to results obtained by other investigators in the same aspect.

Association of knowledge with selected demographic variables

In our present study there is no association between age of respondent and knowledge regarding COVID-19 appropriate behavior. In a similar study conducted by Josephine S Christy, et al. Elderly population had significantly lower knowledge regarding way to reduce COVID-19 risk behavior. Also there is a association between gender of the respondents and the knowledge regarding COVID-19 appropriate behavior in our study which is similar to the study conducted by Ludecke D et al. which found that there is a significant association between gender of the participants and knowledge. In both studies females have more knowledge regarding COVID-19 appropriate behavior. In our study we also found association between educational status and knowledge which is similar to the study conducted by Josephine S Christy et al. where illiterate population had significantly lower knowledge regarding COVID-19 risk. Also, in our study there is no association between occupation of the respondents and the knowledge regarding COVID-19 appropriate behavior.

Association of attitude with selected demographic variables

In our present study, there is a significant association between age of respondent and attitude regarding COVID-19 appropriate behavior. Also, there is a significant association between educational status of the respondent and attitude regarding COVID-19 appropriate behavior which is similar to the study conducted by Josephine S Christy where elderly and illiterate population had lower attitude towards way to reduce

COVID -19 risks. Also, there is a significant association between gender of respondent and attitude regarding COVID-19 appropriate behavior. There is no association between occupation of the participants and the attitude regarding COVID-19 appropriate behavior.

Association of expressed practice with selected demographic variables

In our present study, there is no significant association between age of respondent and expressed practice regarding COVID-19 appropriate behaviour but in a similar study conducted by Josephine S Christy et al. they found association between age and expressed practice. Also there is a no association between gender and expressed practice regarding COVID 19 appropriate behaviour. And in our study, there is a association between educational status and expressed practices regarding COVID 19 appropriate behaviour which is similar to a study conducted by Josephine S Christy et al. they found that illiterate population had lower expressed practice to reduce COVID-19 risk. In our study there is no association between occupation of the respondents and the expressed practices regarding COVID-19 appropriate behavior.

Conclusion

From the study it was found that the respondents have good knowledge and favourable attitude regarding COVID 19 appropriate behaviour. It was also found that majority of the participants have good practice regarding COVID 19 appropriate behaviour. The present study also depicts that there was an association between knowledge and educational status, attitude with gender, educational status and age, expressed practice and educational status. Even though most people have good knowledge and practice the study also suggests the need for health education, awareness programs such as role-plays , newspaper , display of posters etc. , maintenance of strict rules and regulation in public areas and eliminate of inappropriate practice and break the chain of transmission.

References

1. Dkhar SA, Quansar R, Saleem SM, Khan SMS. Knowledge, attitude, and practices related to COVID-19 pandemic among social media users in J&K, India. Indian J Public Health [Internet]. 2020 [cited 2023 Feb 14]; 64 (Supplement): S205–10. Available from: https:// PubMed. ncbi.nlm.nih.gov/32496256

2. Christy JS, Kaur K, Gurnani B, Hess OM, Narendran K, Venugopal A, et al. Knowledge, attitude and practise toward COVID-19 among patients presenting to five tertiary eye care hospitals in South India – A multicentre questionnaire-based survey. Indian J Ophthalmol [Internet]. 2020 [cited 2023 Feb 14]; 68 (11): 2385–90. Available from: http:// dx. doi. org/ 10. 4103/ ijo.IJO_2522_20

3. Gara K, Kartheek ASV, Vanamali D. Knowledge, attitude and practices towards COVID-19 among Indian residents during the pandemic: A cross-sectional online survey. J Dr NTR Univ Health Sci [Internet]. 2020 [cited 2023 Feb 14]; 9 (2): 107. Available from: https:// www. jdrntruhs. org/ article. asp? Issn = 2277-8632; year = 2020; volume =9; issue = 2; spage = 107; epage = 115; au last = Kartheek

4. Prasad Singh J, Sewda A, Shiv DG. Assessing the knowledge, attitude and practices of students regarding the COVID-19 pandemic. J Health Manag [Internet]. 2020; 22 (2): 281–90. Available from: http:// dx. doi. org/ 10. 1177/ 097206342093566.

5. Al rubaiee GG, Al-Qalah TA, Al-Aawar MS. Knowledge, attitudes, anxiety, and preventive behaviours towards COVID-19 among health care providers in Yemen: an online cross-sectional survey. BMC Public Health. 2020 Dec; 20 (1): 1-1. http:// search. proquest.

com.elibraryneigrihms.remotexs.in/docview/2451935609/88B964F0DEE74C61PQ/5?accountid=171300

6. Chen X, Chen H. Differences in preventive behaviours of COVID-19 between urban and rural residents: lessons learned from a cross-sectional study in China. International journal of environmental research and public health. 2020 Jan;17 (12):4437. http:// search. proquest.com.elibraryneigrihms.remotexs.in/docview/2417039573/88B964F0DEE74C61PQ/10?accountid=171300

7. Yoseph A, Tamiso A, Ejeso A. Knowledge, attitudes, and practices related to COVID-19 pandemic among adult population in Sidama Regional State, Southern Ethiopia: A community based cross-sectional study. PLoS One [Internet]. 2021 [cited 2023 Feb 14]; 16 (1): e0246283. Available from: https:// PubMed. ncbi. nlm. nih. gov/33513211/

8. Ludecke D, von demKnese beck O. Protective behaviour in course of the COVID-19 outbreak—survey results from Germany. Front Public Health [Internet]. 2020 [cited 2023 Feb 14];8. Available from: https:// PubMed. ncbi.nlm.nih.gov/33072712

9. Lee M, Kang BA, You M. Knowledge, attitudes, and practices (KAP) toward COVID-19: a cross-sectional study in South Korea. BMC public health. 2021 Dec;21(1):1-0

https://www.google.com/url?sa=t&source=web&rct=j&url=https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-021-10285 y & Ved = 2ahUKEwi37 cexkoPvAhVoqksFHUIUD0EQFjABegQICxAC&usg=AOvVaw1buPcecRqu1sGqwXEQnT7w&cshid=1614191126848

10. Shahabi N, Takhti HK, Azad MH, Rad RE, Ghaffari HR, Mohseni S, Aghamolaei T, Norozian F. Knowledge, attitude, and preventive behaviours of Hormoz an residents toward COVID-19, one month after the epidemic in Iran. Journal of Public Health. 2021 Jan 7:1-2.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7788169/#__ffn_sectitle

11. Murray JF, Nadel JA, Broaddus VC, Mason RJ, Ernst JD, King Jr TE, Lazarus SC, Slutsky AS, Got way MB. Preface to the sixth edition. In Murray and Nadel's Textbook of Respiratory Medicine 2016 Jan 1 (p. XX). WB Saunders. Ub in R, Strayer DS, Rubin E, editors. Rubin's pathology: clinicopathologic foundations of medicine. Lippincott Williams & Wilkins; 2008.

12. Nelson KE, Williams CM, editors. Infectious disease epidemiology: theory and practice. Jones & Bartlett Publishers; 2014.

13. Zuckerman AJ. Principles and practice of clinical virology. John Wiley & Sons; 2009 Mar 12.

14. COVID Appropriate Behaviour Activities / Initiatives by AIIMS Jodhpur [Internet]. Edu.in. [cited 2023 Feb 14]. Available from: https:// www. aiims jodhpur. Edu. in/ covid19 /PDF/ COVID %20 Appropriate % 20Behavior%20Activities_Report_V3.pdf

15. Coronavirus disease (COVID-19) – World Health Organization [Internet]. Who.int. [cited 2023 Feb 14]. Available from: https:// www. who. int/ emergencies/ diseases/ novel – corona virus-2019

16. Asefa A, Qanche Q, Hailemariam S, Dhuguma T, Nigussie T. Risk perception towards COVID-19 and its associated factors among waiters in selected towns of southwest Ethiopia. Risk Manag Healthc Policy [Internet]. 2020 [cited 2023 Feb 14]; 13:2601–10. Available from: https:// PubMed. ncbi. nlm. nih. gov/ 33223860/