Knowledge, attitude and practice (KAP) with regard to COVID-19 among patients visiting eye hospitals of province number 2, Nepal

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Background

Coronavirus disease-19 (COVID-19) is a global pandemic. The clinical spectrum of SARS-CoV-2 infection appears to be wide, encompassing asymptomatic infection, mild upper respiratory tract illness, and severe viral pneumonia with respiratory failure and even death.[1-3] The virus family was not considered as highly pathogenic before SARS in the Guangdong state of China in 2002/ 2003 and MERS in the Middle East countries in 2012.[4-7]

There is no evidence of transmitting MERS-CoV, SARS-CoV or recent SARS-CoV-2 through eyes in spite of its presence (seen through polymerase chain reaction) in tears of patients.[8] The number of cases in Nepal is steadily increasing.[9] Province number 2 shares borders with India which may increase vulnerability to COVID-19.

In this context, this study aimed to explore patients' knowledge, attitude and practice regarding COVID-19 and their level of satisfaction with efforts made by eye hospitals and government in the province to halt further spread of the disease.

Methodology

This was a cross sectional study carried out during the study period (May 27-June 7 2020) in three major eye hospitals of province number 2. All eligible patients (n=1112) presenting during that period were interviewed using validated semi structured questionnaire maintaining social distance, mask and personal hygiene. Non-probability convenience sampling technique was applied for the selection of respondents. All information was entered and validated in Epi-Info 7 software and analysis was done using R software 3.5.2.

Results

During the study, about 95% (i.e. n=1112) of the total hospital patients were interviewed. Out of which about 24% of them visited hospital due to defective vision and 19% due to red eye.

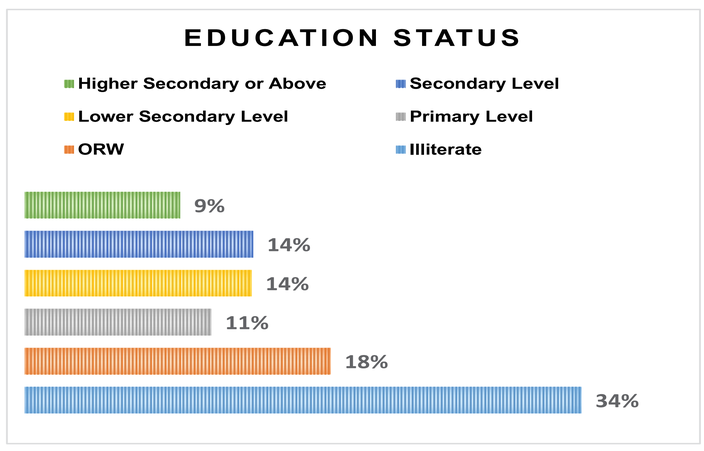

Figure 1: Education Status of respondents

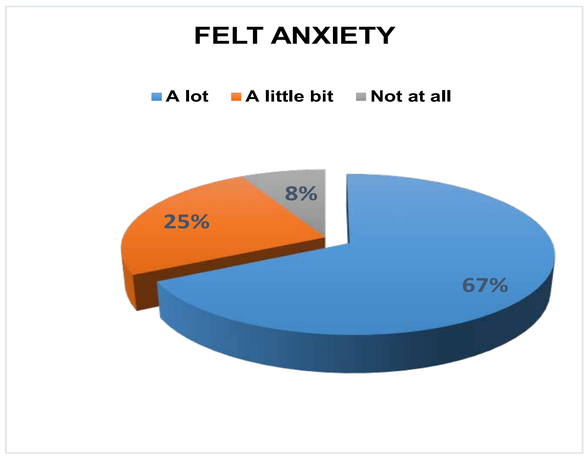

Figure 2: Anxiety Felt Due to Spread of COVID-19

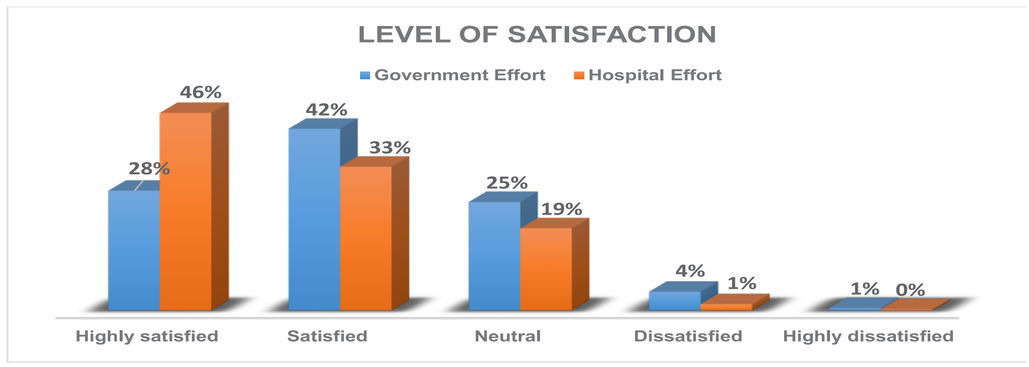

Figure 3: Level of Satisfaction on Efforts Made to Halt the Further Spread of COVID-19

Table 1: Knowledge about COVID-19

Variables	Frequency	
Heard about COVID-19 (n=1112)		
Yes	1086	98 %
No	26	2%
Medium of information (n=1086)		
Electronic Media	629	57%
Family/Friend/Neighbors	298	27%
Health Personnel	17	2%
IEC Materials	1	0%
Online Media	48	5%
Print Media	23	3%
Social Media	70	6%
Know symptoms (n=1112)		
Yes	897	81%
No	215	19%
Symptoms (n=897; Total responses =2604)		
Fever	823	32%
Shortness of breath	322	12%
Cough/sneezing	698	27%
Sore throat	218	8%
Runny/stuffy nose	107	4%
Headache	284	11%
Tiredness	95	4%
Nausea	44	1.5%
Taste/Odorless	13	0.5%
Know preventive measures		
Yes	992	89%
No	120	11%
Preventive measures (n=992; Total responses=2508)		
Isolation and Quarantine	203	8%
Use of PPE	493	20%
Avoid unhealthy face touch	108	4%
Frequent hand washing	658	26%
Avoiding mass gathering	532	21%
Maintaining social distance	514	21%
Know correct method of handwashing (n=1112)		
Yes	554	50%
No	558	50%
Incubation period (n=532)		
2-14 days of infection	380	71%
2-21 days of infection	108	20%
Immediate after infection	17	3%
Others	27	6%

Table 2: Attitude about COVID-19

Variables	Frequency	
Garlic consumption can prevent COVID-19 (n=1112)		
Don't Know	327	29%
No	308	28%
Yes	477	43%
COVID-19 affects only particular age group (n=1112)		
Don't Know	205	18%
No	468	42%
Yes	439	40%
Domestic animals can transmit COVID-19 (n=1112)		
Don't Know	278	25%
No	265	24%
Yes	569	51%
Mosquito bite can transmit COVID-19 (n=1112)		
Don't Know	325	29%
No	312	28%
Yes	475	43%
Consumption of hot water/hot water bath can prevent (n=1112)		
Don't Know	174	16%
No	227	20%
Yes	711	64%
Alcohol consumption can prevent COVID-19 (n=1112)		
Don't Know	401	36%
No	484	44%
Yes	227	20%
Exposure to high temperature can prevent COVID-19 (n=1112)		
Don't Know	396	36%
No	275	24%
Yes	441	40%
COVID-19 slowed down with temperature variation (n=1112)		
Don't Know	413	37%
No	310	28%
Yes	389	35%
Can holding breath means free of COVID-19 (n=1112)		
Don't Know	687	62%
No	227	20%
Yes	198	18%

Table 3: Practice on COVID-19

Variables	Frequency	
What if you feel symptoms of COVID-19 (n=1112; Total response= 2228)		
Inform the concerned authorities	604	27%
Use PPE	230	10%
Self-isolation and quarantine as per experts	520	23%
Avoid unsafe touches	125	6%
Avoid mass gathering	357	16%
Maintain social distance	379	17%
Other	13	1%
Current practices against COVID-19 (n=1112; Total response= 2616)		
Use of PPE	403	15%
Self-isolation /home quarantine	420	16%
Avoid unsafe touches	129	5%
Avoid mass gathering	528	20%
Frequent hand wash	552	21%
Maintain social distance	577	22%
Other	7	1%

Conclusion

Preventive and promotive dimension of health along with specific awareness campaigns must be conducted using appropriate methods and media. Proper safety and precautionary measures should also be put in place.

References

1. Huang C, Wang Y, Li X, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet 2020; 395: 497–506.
2. Wang D, Hu B, Hu C, et al. Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China. JAMA 2020; published online Feb 7. DOI:10.1001/jama.2020.1585.
3. Chen N, Zhou M, Dong X, et al. Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. Lancet 2020; 395: 507–13.
4. Sahin AR, Erdogan A, Mutlu Agaoglu P, Dineri Y, Cakirci AY, Senel ME, et al. 2019 Novel Coronavirus (COVID-19) Outbreak: A Review of the Current Literature. EJMO 2020;4(1):1-7.
5. CormanVM, Muth D, Niemeyer D, Drosten C. Hosts and sources of endemic human coronaviruses. Adv Virus Res. 2018;100:163–188.
6. Vassilara F, Spyridaki A, Pothitos G, Deliveliotou A, Papadopoulos A. A rare case of human coronavirus 229E associated with acute respiratory distress syndrome in a healthy adult. Case Rep Infect Dis. 2018;2018:6796839.
7. Gralinski LE, Baric RS. Molecular pathology of emerging coronavirus infections. J Pathol. 2015;235(2):185–195. doi:10.1002/ path.4454.
8. 17. van der Hoek L, Pyrc K, Jebbink MF, et al. Identification of a new human coronavirus. Nat Med. 2004;10(4):368–373. doi:10.1038/nm1024.
9. https://www.worldometers.info/coronavirus/country/nepal/