

Awareness and Perception Regarding Corona Virus Disease 19 Outbreak among General Public of Selected Area of Kathmandu

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ABSTRACT

Background: Coronavirus disease 2019 is an upcoming contagious respiratory infection caused by a new coronavirus named severe acute respiratory syndrome (SARS-CoV2) which is transmitted through the respiratory droplets produced by coughing or sneezing of an infected person. The behavior of the general public will probably have an important bearing on the course of coronavirus disease 2019 (COVID-19) epidemic. Human behavior is influenced by knowledge and perceptions. This paper aims to identify the awareness and perception regarding COVID-19 among general public.

Method: A cross sectional descriptive design was used by using structured online questionnaire through Google form. The study was conducted at certain area of Kathmandu. Sample size was 423 with non probability convenience sampling technique.

Result: The findings revealed that overall, 44.9% respondents had low, 34.0% had average and 21% had high level of awareness. Likewise, 56.6% had positive perception and 43.2% had negative perception about COVID outbreak. Also 62% respondents had positive and 37.7% had negative perception about prevention of COVID. There is an association between educational status and level of awareness with 'p' value lesser than 0.05 at 95% level of confidence.

Conclusion: Majority of respondents were not aware about the outbreak of COVID19. Also more than half of respondents had positive perception about outbreak of COVID 19. The effective measures are being taken by the government and the public, still there remains a need for further awareness campaigns and knowledge of safe interventions to combat the spread of disease.

Keywords: awareness, perception, COVID19, general public

INTRODUCTION

Corona Virus Disease emerged in Wuhan, China at the end of 2019. Since then, it has spread to 200 countries and had been declared a global pandemic by World Health Organisation. To date, there are more than 2.3 million positive COVID-19 cases recorded with at least 150,000 deaths globally. [1]

The COVID-19 is caused by novel corona virus, which is transmitted through the respiratory droplets produced as a result of coughing or sneezing of a COVID-19

infected person. Wash your hands frequently, maintain social distance of one meter, follow good respiratory hygiene are some of the preventive measures we can take against this pandemic. [2]

On 24 March 2020 government imposed a complete lockdown in Nepal including business and college closures and restrictions on movement within the country and flight access in and out. Discussion is ongoing to enable the movement of those supporting preparedness and response to the current situation. [3]

METHOD

Selection and description of participants

The population of this study were adult of age above 18. The sample size for this study was 423. The study was conducted at a municipality in Kathmandu District in the province no 3 of Nepal. Informed consent was obtained from all the respondents in the study. Respondent's privacy, anonymity and confidentiality were fully maintained.

Technical information

The objective of this study was to assess the awareness and perception of general public regarding COVID 19. Cross sectional descriptive design was used to assess the awareness and perception regarding COVID 19. Non probability convenience sampling technique was used to collect the data. A structured self administered English version questionnaire was developed into a digital form (Google form) that was developed by reviewing the relevant literature and consulting experts. The questionnaire was divided into four parts. First part was about the respondent's biodemographic data, second part regarding awareness about COVID likewise the third part was concerned about perception about COVID. The questions were pre tested and took about 10-15 minutes to complete.

Statistical analysis

The received responses, in Google form, were exported to Microsoft Excel and then imported into IBM Statistical Package for Social Sciences (SPSS) Statistics for windows Version 20 for data analysis. Descriptive statistics such as frequency and percentage described respondents' demographic characteristics. In inferential statistics used fisher's exact test to find out the association between awareness level and selected demographic variables. Awareness score 0 to 39% was considered as low awareness, 40-69% was considered as average level of awareness and 70% and above was considered as high level of awareness.^[4] The total score was calculated.

Likert scale was used to obtain perception of the respondents where a type of psychometric scale was used in which responders specify their level of agreement to a statement typically in five points which are (1) Strongly agree (2) agree (3) neutral (4) disagree (5) Strongly disagree. And for association of awareness level with a variable, Fisher's exact test was used. The data were presented in tabular form.

Ethical consideration

The Institutional Review Committee at Nobel College, Sinamangal affiliated under Pokhara University, Nepal, approved this study. And the tool was developed by consulting experts. The link was circulated through the viber and messenger. The first page of the survey had an informed consent page that provided details of the study and required respondents to participate (or decline) the survey. Participation in the survey was voluntary, and no incentive was provided to respondents. Respondents' rights were respected by obtaining informed consent, maintaining confidentiality, anonymity and privacy, as well as showing respect for the dignity of respondents.

RESULTS

Table 1: Respondent's age, gender, ethnicity and religion, n=423

Sociodemographic data	Frequency	Percentage
Age		
18-25yrs	232	54.8
26-35yrs	173	40.9
36-45yrs	17	4.0
46yrs and above	1	0.2
Gender		
Male	215	50.8
Female	208	49.2
Ethnicity		
Brahmin	94	22.2
Chhetri	226	53.4
Newar	94	22.2
Others	9	2.1
Religion		
Hindu	357	84.4
Buddist	26	6.1
Christian	22	5.2
Muslim	11	2.6
Others	7	1.7

Table 1 revealed the distribution of respondents according to demographic data whereas out of total respondents,

232(54.8%) were of 18- 25 years, 173(40.9%) were of 26-35 years, 17(4.0%) were of 36-45 years and 1(0.2%) was of 46 years and above. 215(50.8%) were male and 208(49.2%) were female. 94(22.2%) were Brahmin, 226(53.4%) were Chhetri, 94(22.2%) Newar and 9(2.1%) others, also 357(84.4%) belong to Hindu religion, 26(6.1%) Buddhist, 22(5.2%) Christian and 11 (2.6%) were Muslim.

Table 2: respondent's educational status, occupation, marital status and monthly income, n=423

Sociodemographic data	Frequency	Percentage
Educational status		
SEE passed	57	13.5
+2 or intermediate level	117	27.7
Bachelor	199	47.0
masters and above	50	11.8
Occupation		
Student	276	65.2
health care provider	49	11.6
home maker	4	0.9
Service	33	7.8
Business	60	14.2
Others	1	0.2
marital status		
Married	249	58.9
Unmarried	174	41.1
monthly income		
<10,000 rupee	19	4.5
11-20,000 rupee	21	5.0
21-30,000 rupees	74	17.5
31,000-40,000 rupees	91	21.5
more than 40000	218	51.5

Table 2 revealed the distribution of respondents according to demographic data where out of total respondents, 57(13.5%) were SEE passed, 117(27.7%) were +2 passed, 199(47%) were educated to bachelor level, and 50(11.8%) were educated to masters and above. Also 276 (65.2%) were students, 49 (11.6%) were health care providers, 4(0.9%) were homemakers, 33(7.8%) were in service and 60(14.2%) were businessperson. 24(58.9%) of the

respondents were married and 174(41.15) were unmarried. 91(21.5%) respondents had an income of 31,000-40,000 rupees and 218(51.5%) had monthly income more than Rs40,000.

Table 3: overall awareness level of respondents regarding outbreak of COVID -19, n= 423

level of awareness	Frequency	percent
low awareness	190	44.9
average awareness	144	34.0
high awareness	89	21

Table 3 revealed the awareness level of respondents whereas out of all the respondents, 190(44.9%) had low awareness level, 144(34.0%) had average awareness level and 89(21%) had high awareness level. The awareness level was adopted from Thakrar R (2014)et al. [4]

Table 4: perception of respondents about outbreak of covid 19, n=423

perception about COVID 19 break	Frequency	Percent
positive perception	240	56.6
negative perception	183	43.2

Table 4 revealed the perception of respondents about outbreak of covid 19 whereas out of all the respondents, 240(56.6%) had positive perception about covid outbreak and 183(43.2%) had negative perception about covid outbreak.

Table 5: perception of respondents about prevention of covid 19, n=423

Perception about prevention of COVID 19	Frequency	Percent
positive perception	263	62
negative perception	160	37.7

Table 5 revealed the perception of respondents about prevention of covid 19 where out of all respondents 263(62%) respondents had positive perception and 160(37.7%) had negative perception regarding prevention of covid 19.

Table 6: Association between selected sociodemographic variables and level of awareness, n=423

		Awareness level			p value
		Low awareness	average awareness	High awareness	
Age group	18-25	109	74	49	0.117
	26-35	76	58	39	
	36-45	5	11	1	
	46 and above	0	1	0	
Education status	SEE passed	8	28	21	0.012
	+2 or intermediate level	62	35	20	
	Bachelor	116	47	36	
	masters and above	4	34	12	

Table 6 showed that there was no association between age and awareness level where the “p” value was greater than 0.05 at 95% level of confidence also there was an association between education and awareness level where the “p” value was lesser than 0.05 at 95% level of confidence.

DISCUSSION

This study is intended to assess the awareness and perception regarding COVID 19 outbreak in a certain area of Kathmandu. A total of 423 respondents were undertaken in this study.

According to the findings, 79.9% had given correct answer for COVID 19 as infectious respiratory disease caused by novel corona virus. This finding was similar to the study done among Nepali residents where the rates for correct answer for COVID-19 knowledge questionnaire ranged from 60-98.7%. [4]

In concern to the incubation period, 59.6% had given correct answer for incubation period of COVID 19. This finding contradicts to the study done among Indian academicians and students where 91.8% knew about the incubation period of Covid19. [5]

Regarding awareness level, respondents with bachelor degree have more awareness than respondents who are SLC passed, +2 or intermediate level and masters and above. This finding contradicts with the study done among general public of Tamil Naidu where the people who hold post graduate and above have more awareness, than the people having school education only. [4]

Majority of the respondents 78.7% respondents uses mask while going outside and also cover both mouth and nose with the mask. This finding was similar to a study done among Nepali residents where 92.4% participants wore masks while going out which significantly differed across gender. [6]

In response to the study, 62.2% of the respondents had positive perception about the prevention and control of COVID

19. This finding was similar to a study done among residents where 87% of them were positive that COVID 19 could be controlled. [7]

CONCLUSION

Based on the findings, it was concluded that majority of respondents were not aware about the outbreak of COVID 19. And regarding perception, more than a half of respondents had positive perception about outbreak of COVID 19 and majority of them had positive perception about prevention of COVID 19. Also there was an association between education status and awareness level of participants. On its implication, this study can help assess the total awareness regarding COVID 19 among general public so that further activities regarding prevention can be carried out. Also this study can help the local policy makers for planning their further steps in preventing transmission of COVID 19.

Conflict of Interest

The authors declared that there are no conflicts of interest.

Authors' Contribution

Kiran Chhetri carried out the design of the study, the paper's conception, data collection, analysis, and interpretation of data and drafted the paper. Puspa Kumari Deo participated in the design of the study, data analysis, and interpretation of data and review of the paper. Authors are participated in editing and approved the final manuscript.

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