

Preventive Practices against COVID-19 during the Period of Lockdown in the Eastern Part of Kathmandu

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ABSTRACT

A brief study of health seeking behavior was studied in the eastern region of the Kathmandu. 50 respondents were taken in the study. Their knowledge on the pandemic, their views of preventive measures, the practices they are doing and what are the problems they are facing and ultimately the possible way out of the disease was discussed with them taking their view. 50 respondent having equal number of male and female of the indigenous Tamang community were enrolled in the study taking their consent to take part in the study. The majority of the respondents were less educated with low income, thus have to work regularly for their daily essentials. Majority 92 % had stayed in one place and they were aware of the social distance (64%) as well. Regarding the hand washing with the soap and using sanitizer, they were found less serious about it.

KEYWORDS

COVID-19, Lockdown, Preventive Practices

INTRODUCTION

In the last month of 2019, a mysterious disease emerged in the Wuhan city of China causing Respiratory illness. The disease was supposed to spread from the local fish market. The transmission rate of the disease is very alarming which spread globally resulting in the ongoing 2019–20 Corona virus pandemic. The outbreak of Corona virus disease 2019 (COVID-19), has been declared a public health emergency of international concern by WHO. By 9th of May 2020, confirmed cases of 4014503 with death toll 276253 have been recorded worldwide in more than 212 countries and the Territories. In the context of Nepal till the date of making this article, 109 people have been confirmed as infected fortunately without any casualty. The maximum number of death have been recorded In America that is 78616(out of 1322163 infected) followed by UK having 31241 death (211364 infected (Worldometer .com).

COVID-19 is a highly contagious caused by Corona virus .The infected patients have reported mild to severe acute respiratory syndrome .Common symptoms of the disease include fever, cough and shortness of breath. Other symptoms may include fatigue, muscle pain, diarrhea, sore throat, loss of smell and abdominal pain. While the majority of cases result in mild symptoms, some progress to severe health problem causing severe viral pneumonia and multi-organ failure.

Corona virus was identified in 1960 belonging to the Corona viridae family .It is classified as α , β , γ , and δ and these viruses have been found circulating in a wide range of animal species, including humans (Cui, Li and Shi, 2019). The 6 types of corona viurs which were previously known are capable of spreading disease among human beings. The alpha and Beta genera of corona virus can cause infection to mankind. α corona viruses of type 229E and NL63, and β corona viruses of type OC43 and HKU1, are 4 different types of corona virus that is capable of causing mild upper respiratory tract disorder. In the contrary to these, the other 2 beta-corona viruses, SARS and MERS corona viruses, are highly pathogenic in humans. The fatality rates of SARS and MERS are about 10% and 35%, respectively (Donnelly *et.al.*, 2019 and Poon, 2004). SARS and MERS can be more virulent and transmit from man to man and may cause major epidemic in the community or in the health care setting. SARS and MERS corona viruses are of zoonotic origins. MERS CoV in 2012 had caused epidemic in the Middle East regions which was supposed to be transmitted from the camel. SARS epidemic in 2003 on the other hand, supposed to be transmitted from the mammals like raccoon dogs which may act as the animal sources of the virus (Guan *et.al.*, 2003).

While studying the genetic structure of the virus, it was found interesting that Human SARS corona virus is genetically similar to that of bat corona virus with few novel characters. So it assumed that SARS CoV 2 is a recombinant virus between several bat SARS-like beta-corona viruses (Hu *et.al.*, 2017).

SARS CoV2 has been found a very contagious that infect the person with a very high rate. It is also alarming that especially in the context of Nepal , most of the identified cases shows no sign and symptom regardless, the asymptomatic cases are also capable of transmitting disease to a large population .So the an urgent moves for effective infection prevention and control measures needs to be done.

The objective of the study is to monitor the effectiveness of the preventive steps taken by the Government of Nepal during lock down period. The country is in Lockdown since 45 days; however, the efficacy of the lockdown and preventive measures needs to be monitored whether it is being in the proper way or not.

COVID-19 is spread by the airborne route especially by the droplets in the aerosols. So the proper use of the mask can be effective method of creating physical barrier. The mask

doesn't need to be N95. Any protective barrier with the filter paper can help achieve the goal (WHO).

The spraying of disinfectant and alcohol in the air on roads, vehicles, and personnel doesn't make any sense. Rather, huge amount of alcohol and disinfectant can be hazardous to humans and needs to be stopped (NHCPRC).

METHOD

Study Population

The study was carried out in the eastern region of Kathmandu among the indigenous Tamang community during the lockdown period of Nepal in April 2020. Total 50 Respondents aged in between 15 – 70 were selected for the questionnaire survey.

Research Design

Research was based on the cross sectional descriptive case study.

Sampling Design

The simple random sampling technique was used. Total 50 Respondents were selected for the questionnaire survey .the semi structured questionnaire was used as the tool for data collection. The study was designed to explore the preventive practices against Corona virus, their attitude, level of knowledge and the problem they were facing during lockdown period.

DATA ANALYSIS

The result was drawn from the primary data .The analysis among the different socio economic variables are enumerated with the simple statics.

RESULT

The study has been tabulated as follows. The presented data shows the familiarity with the COVID -19

Table 1: Source of Knowledge on COVID-19

S.N.	Heard about COVID	Respondent	Percentage (%)
1	Radio /Television	10	20
2	Friends	4	8
3	Social Media	35	70
4	Don't know anything	1	2

Most of the respondents (70 %) got to know about COVID-19 using the social media, especially from Facebook . Some also knew from the radio or Television (20%) and 1 person (2%) was found completely ignorant of the disease and the pandemic (Table 1).

Table 2: Educational and Financial Status of Respondents

S.N.	Education	Respondents	Financial status	Respondents
1	Illiterate	10	Daily income(Daily wages)	30
2	Up to high school level	36	10 -20 thousand NPR per month	16
3	University Graduate	4	More than NRs 50000 per month.	4

Most of the respondent was educated to high school and the financial status was observed as the daily income that depends upon the daily wages (Table 2).

Table 3: Knowledge on COVID-19

S.N.	Knowledge on	Respondents		Total	%
		Male	Female		
1	Transmission	11	9	20	40
2	Sign symptom	7	7	14	28
3	Preventive measure	8	6	14	28
4	Treatment.	2	0	2	4

40% respondent was aware of the transmission of the disease whereas only 4 % were known about the symptomatic treatment. 28% were known about the preventive measures and the sign and symptoms of the disease (Table 3).

Table 4: Preventive measures against COVID-19

S.N.	Types of Prevention	Respondents			
		Male	Female	Total	%
1	Use of Mask	15	9	24	48
2	Hand wash with soap/sanitizer	10	4	14	28
3	Social Distance	14	18	32	64
4	No Travel (Stayed home)	22	24	46	92

Majority of the respondent have mentioned their stay during lock down period and the respondents were found least aware of hand wash with soap or sanitize their hand with the alcoholic sanitizer (Table 4).

Table 5: Use of Mask as the protective barrier

S.N.	Frequency of use of Mask	Respondents		Total	%
		Male	Female		
1	Always while going out	20	13	33	66
2	Sometimes don't wear	5	5	10	20
3	Never used.	0	7	7	14

66% of the respondent used mask while going outside, however, there are 14 % who never used mask as the physical barrier (Table 5).

Table 6: Frequency of hand washing/use of sanitizer

S.N.	Frequency of hand wash	Respondents		Total	%
		Male	Female		
1	3-5 times a day	7	14	21	42
2	Less than 3 times	11	6	17	34
3	Don't wash with soap or sanitize	7	5	12	24

The 42% respondents were aware of washing hand 3-5 times a day.24% said they didn't use soap or sanitizer (Table, 6).

Table 7: Effectiveness of Lockdown

S.N.	Frequency of lockdown break	Respondents		Total	%
		Male	Female		
1	More than 5 times.	16	6	22	44
2	3-5 times	6	12	18	36
3	Not broke at all	3	7	10	20

Because of the regular important works 44% of the respondents were found to have broken lock down more than 5 times (Table, 7).

Table 8: Steps if Corona Virus is suspected

S.N.	Activity in case of sickness	Respondents		Total	%
		Male	Female		
1	Self medication(From medical)	16	6	22	44
2	Wait till situation worsen	6	16	22	44
3	Isolate few days then seek medical treatment if needed.	3	3	6	12
4	Go to the hospital immediately	0	0	0	0

44% of the respondents told that in case of any illness, either they go to the medical store and ask for the medicine or they wait till the disease subside by itself, though, the illness may worsen as well. Non of the respondent said would go to hospital immediately after the illness (Table, 8).

Table 9: Effectiveness of Lockdown

S.N.	Effectiveness of lock down	Respondents		Total	%
		Male	Female		
	Yes	17	2	19	38
	No	4	21	25	50
	Don't know	4	2	6	12

50 % of the respondent said the lockdown is effective to control Corona virus, however 12% were totally indifferent about it (Table, 9).

Table 10: Problems encountered during Lockdown .

S.N.	Problem faced	Respondents		Total	%
		Male	Female		
1	Financial	17	11	28	54
2	Psychological	4	2	6	12
3	Domestic violence	2	7	9	18
4	Commodities unavailability.	2	5	7	14

Majority of the respondent 54% faced financial problem during Lockdown period whereas 14% were concerned with the unavailability of the commodities (Table, 10).

Table 11: Modality of Lockdown

S.N.	How to tackle	Respondents		Total	%
		Male	Female		
1	Continue lock down	3	4	7	14
2	Open Lockdown	3	3	6	12
3	Open Lockdown with social dist	19	18	37	74

Majority of the respondents 74% said that the lockdown should open with significantly maintaining the social distance (Table, 11).

DISCUSSION

The COVID-19 takes 2-14 days after exposure to show its sign and symptom. Thus, this period is very critical and if the patient don't show much sensitivity, easily transmits to 1000 s of other healthy people not even knowing what he/she is doing in the society. During coughing, sneezing and even during laughing and talking the virus come out from the infected person and remain suspended in the air as the aerosol. The same air when inhaled by the healthy person gets infected easily due to droplet infection. Till date no any medicine or the vaccine has been made. So the one and only method of being safe from the contagious Corona virus is the preventive measures. The use of the protective mask acts as the barrier and protect against the virus to great extent. In our study, 48% of the respondents were aware of wearing mask while going outside. Besides, once the virus settle in any surface, it may remain there for even 12 hours, though depends upon the type of the surface. So to minimize the infection, one needs to wash hand frequently with the soap water or using a sanitizer containing 70% alcohol which is also considered effective to lyses the virus by disintegrating the outer lipid layer of viral particle. In our study, due to the monitory constrain and lack of adequate knowledge, only 28% used soap for disinfecting their hands. The basic routine behavior and consciousness in sanitation and hygiene can help the person to be safe from disease. Travel –associated cases have also been reported in majority of other countries and the outbreaks in health care workers has also proved its human to human transmission (Zunyou and Jennifer, 2020) In our study, because of the government rule 94% of the respondent hadn't had the long travel history and significantly they have maintained the social distancing.. However financial problem (54%), Psychological (12 %), Domestic violence (18%), has raised many question that should be addressed by the government to assure their citizen (WHO, 2020). Majority of the respondent in our study suggested that the lockdown for the control of the pandemic diseases is good effort, however government should

think about the low income person who has to depend upon their every day work. So the lock down should be opened with the maintenance of social distance.

CONCLUSION

The majority of the respondents are less educated with low income, thus have to work regularly for their daily essentials. Majority 92 % had stayed in one place and they are aware of the social distance (64%) as well. Regarding the hand washing with the soap and using sanitizer, the result was found somewhat disappointing as only 28% used soap water because of the financial burden and also due to lack of adequate knowledge.

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