CONSCIOUSNESS, THREATS AND PERCEPTIONS TOWARDS COVID-19 AMONG THE BUSINESS PERSONS OF AGRICULTURAL PRODUCT MARKET, BIRTAMOD, JHAPA, NEPAL

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Abstract

Corona virus disease (COVID-19) has been the emerging as an unseen enemy transmitted by people-to-people. Not only as the first variant now second variant also terrifying people in all over the world. Most of the countries including Nepal are suffering by COVID-19 pandemic therefore proper consciousness, knowledge, and perception towards COVID-19 is crucial. This study aimed to explore the causes, transmission, knowledge and measures to control of COVID-19 using cross-sectional design by the basis of primary data collection. Convenience sample performed from 18 to 24 April, 2021 to collects 103 sample respondents in Market area of agricultural product, Birtamod. Majority of the respondents were conscious about information, knowledge, modes of transmission, symptoms and measures of prevention in basis of the responses of COVID-19 infection, airborne, touching contaminated objects/surfaces, contact with contaminated animals, fever, coughing/sneezing, shortness of breath, washing hand regularly by using alcohol or soap and water, avoid close contact with anyone who has a fever and cough etc. Respondents were worried about bad effects of COVID-19 mostly in economic, health, social and religious, and educational and psychological areas. All the background variables of the respondents like gender, age, marital status, education, ethnicity, family size and religion are closely related with knowledge and perception of COVID-19. Among them, marital status and religion of the respondents were statistically significant variables. It is advisable to create sound knowledge to cope COVID-19 crisis by providing proper information about bad effects of infection and preventing precautions and measures through local authorities and all concerned stake holders.

Key words: *first variant, using alcohol, in economic, marital status, crisis*

Introduction

A newly existed corona virus disease (COVID-19) is an infectious disease produced by mysterious virus. The infection by the COVID-19 has been experiencing differently by different people. Up to first variant of COVID-19 it was very dangerous for the older people and for those people who are underlying medical problems of cardiovascular, diabetes, chronic respiratory, cancer etc. diseases. Nowadays, when COVID-19 variant-II came in the society, young and the children also are not beyond from the danger zone as the older and medically problematic people. But if the period of first, second and third (now it is expecting to come soon) variant of COVID-19 the sources and causes of infection, and transmission and the measures to preventions are the same. Therefore, the proper knowledge, attitude and perception towards COVID-19 are the prime matter for decreasing and eliminating of COVID-19 pandemic.

Corona virus disease-2019 (COVID-19) is a newly emerged disease caused by a highly infectious novel corona virus that primarily affects the respiratory system. The first case was reported in the Hubei province of China on 29th December 2019 (Vandeweered and Van, 2020). Subsequently, it has spread dramatically, both inside and outside of China (Giovanetti, Benvenuto & Ciccozzi, 2020), and has grown to become an exceptional, global, public health problem (Shigemura, Ursano, Morganstein, Kurosawa & Benedek, 2020).

Bassetti, Vena & Giacobbe (2020) have shown that in the context of the novel corona virus outbreak in 2020, the world is racing to contain the spread of the lethal virus, worldwide. At present, the fatality rate associated with COVID-19 is lower than those for previous epidemics, such as SARS and Middle East respiratory syndrome (MERS). COVID-19 transmission occurs rapidly, through direct human-to-human contacts, which has made effectively informing the public regarding the risks and necessary precautions for transmission prevention difficult to achieve. On 30 January 2020, the World Health Organization (WHO) declared the outbreak of COVID-19 to be a global public health emergency. Following the exponential growth observed in the numbers of infected cases and affected countries, COVID-19 was consequently declared to be a pandemic on 11 March 2020 (Rabi, Zoubi, Kasasbeh, Salameh, AlNasser & WHO, 2020). Peiris, Yuen, Osterhaus & stohr (2003) analyzed that infected humans produce and replicate massive amounts of the virus in the upper respiratory tract during a prodromal period, during which time the infected

individuals are generally actively mobile and can continue to perform their usual activities, which has contributed to rapid and widespread infections. In contrast, the transmission of SARS-CoV was not verified to be able to occur during the prodromal period, when infected patients report only mild illness, and most transmissions were confirmed to occur when the infected individuals presented with symptoms and were extremely ill, likely resulting in SARS-CoV outbreaks being easier to contain than modern-day outbreaks associated with COVID-19.

Risk perception is a central characteristic of many health-behavior theories. According to the Protection Motivation Theory, protection motivation is a consequence of risk or threat assessment and coping appraisal. Threat assessment consists of estimating the hazard of contracting a disease (perceived vulnerability or susceptibility) and estimating the seriousness of a disorder or sickness (perceived severity) (Rogers, Cacioppo & Petty, 1983). The personal perception of infection threat is a key issue that influences the spread of epidemics, to obtain realistic inferences; epidemiological models must consider such parameters (Colizza, Barrat, Barthélemy & Vespignani, 2006).

Zhong at el. (2020) done one of the first and recent studies analyzing attitudes and knowledge, about Corona virus carried out in Hubei, conclude that attitudes towards government measures to contain the epidemic are highly associated with the level of knowledge about Covid-19. Roy, Tripathy, Kar, Sharma and Verma (2020) & Zhong at el. (2020) studied in detail that the higher the level of information, and education, the more the individuals would maintain a positive attitude towards Covid-19 preventive practices. In fact, in an examination during the spread of the SARS epidemic, it is noted that psychological responses potentially generate massive distress. The author even describes these as "disproportionate" reactions (Brooks at el., 2020)), the same ones that any citizen might be susceptible to experience.

Various studies based on developed and European experiences towards COVID-19 are available. Data related to knowledge, attitudes and perceptions were analyzed mainly based on online surveys at national level. Therefore, there may be gap between the situation of particular local and national and provincial level. Hence, what is the current consciousness, feeling of threats and perceptions towards COVID-19 pandemic may be the prime research question for this study. Considering this core question of the present study, it aimed to

explore the real situation of knowledge, feeling of wariness and perceptions towards COVID-19 according to background variables.

Methodology of the Study

Brief descriptions of the methodological aspects are as follows:

Study Area and Period

The location of the study area was the eastern part of Nepal, only far from 17 kilometer west from the West Bengal of India border. This area is the eastern part of Province number 1 and central part of the Jhapa district, and it is the main market area of Mechi Zone. The main address of the study area is called market of Agricultural product, Birtamod. This market area was selected for the study due to very crowded area and there were high social mobility for business (daily necessary goods) activities. This situation is very risky for COVID-19 infection and spreads of transmission. This study was carried out from18 to 24 April, 2021.

Study Design

The cross sectional survey has been employed among the business people in the market area. The respondents were found aged between 18 and 65 and above years old. The design of questionnaire was made according to the objective of the study as structured format. All respondents were requested to give adequate time for responses at the period of filling questionnaire properly. The questionnaire was prepared and asked in Nepali to make convenience for both respondents and researcher. The questionnaire consisted of two main parts: the first part of the questionnaire focuses on socio-demographic or background information such as gender, age, education, marital status, family size etc. of the respondents. In the second part of the questionnaire asked about the respondents' consciousness towards COVID-19, threats by COVID-19 and perception towards COVID-19. The possible answers were structured as 'Yes', 'No' and 'Don't know'.

Sample Size

The sample size to conduct this research was 103 which were 50 percent of total business holders in the Market area of Agricultural Product, Birtamod.

Study Variables

Socio-Demographic characteristics or background variables were gender, age, education, religion; ethnicity, marital status, and family size were considered as explanatory/independent variables. Other variables, the level of consciousness, threats and perceptions towards COVID-19 were considered as response/dependent variables.

Data Collection and Analysis Techniques

Adequate and targeted data were collected through face-to-face interview approaching conveniently to fulfill each and every sample respondents. Simple methods of data presentation and analysis as frequency and percentages were used in the data analysis. Besides these, a simple statistical analysis technique, Chi-square to calculate the relationship between the variables was used in the study.

Data Analysis and Results

Socio-Demographic Characteristics, Consciousness towards COVID-19, feelings of expected threats/challenges of COVID-19 and statistical analysis according to the background variables of the respondents are outlined in this title.

Socio-Demographic Variables of the Respondents

Some limited background variables like gender, age, marital status, education, ethnicity, family size and religion wise distribution of respondents are presented in Table 1.

All the 103 respondents were interviewed in the study. Of the total respondents, 62 (60.2%) were male and 41 (39.8%) were female. As age pattern of the respondents, one-third (37.9%) were under the 25-44 years age group, 27.2 percent were in the 45-64, 22.3 percent in the 18-24 and 12.6 percent were in the 65 and above years age group. Majority (82.5%) respondents were married, 14.6 percent were unmarried and remaining 2.9 percent were Divorced/Widowed as their marital status. Educationally, 56.3 percent were up to 10 classes, 32.1 percent were up to Bachelor and 11.6 percent respondents were above Bachelor level. Only three categories of ethnicity as Brahmin/Chhetri, Newar and other were found at the period of interview. Among them 60.2 percent was Brahmin/Chhetri, 19.4 percent were Newar and 20.4 percent were other category of ethnicity. Most of the family structure of the respondents was small type. Of the total, 44.6 percent had 3, 40.8 percent had 4 and above and 14.6 percent had 2 family members respectively. Overwhelming (78.6%) respondents were Hindu, then 9.7 percent were Muslim, 7.8 percent were Bauddha and 3.9 percent were other category of religion (Table 1).

Table 1

Frequency Distribution of Background Variables of the Respondents (N=103)

Variables	Categories	Frequency	Percent
Gender	Male	62	60.2
Age Group	Female	41	39.8
	18-24	23	22.3
	25-44	39	37.9
	45-64	28	27.2
	65$^+$	13	12.6
Marital Status	Unmarried	15	14.6
	Married	85	82.5
	Divorced/Widowed	3	2.9
Educational Status	Up to Class 10	58	56.3
	Up to Bachelor	33	32.1
	Above Bachelor	12	11.6
Ethnicity	Brahmin/Chhetri	62	60.2
	Newar	20	19.4
	Other	21	20.4
Family Size	2	15	14.6
	3	46	44.6
	4 & above	42	40.8
Religion	Hindu	81	78.6
	Bauddha	8	7.8
	Muslim	10	9.7
	Other	4	3.9

Consciousness (Knowledge, Modes of Transmission, Symptoms and Methods of Prevention) of COVID-19

Consciousness in respect of knowledge, modes of transmission, symptoms and methods of prevention towards COVID-19 pandemic related responses are presented in Table 2.

Table 2 depicts the information about consciousness regarding COVID-19 including respondents' knowledge, modes of transmission, symptoms and preventive measures. Majority 97.1 and 92.2 percent respondents had heard and knowledge about preventive measures of COVID-19 disease. Of the total 103 respondents, 77.7 percent had the knowledge about vaccine against the COVID-19.

Table 2

Distribution of Respondents according to the Responses of Consciousness (Knowledge, Modes of Transmission, Symptoms and Methods of Prevention) of COVID-19 (N=103)

Statement	Response					
	Yes		No		Don't Know	
	No.	%	No.	%	No.	%
Knowledge of COVID-19						
Heard about COVID-19	100	97.1	1	0.9	2	2.0
Knowledge of Preventive Measures	95	92.2	5	4.9	3	2.9
Knowledge of Vaccine against COVID-19	80	77.7	12	11.6	11	10.7
Modes of Transmission of COVID-19						
Droplets	85	82.5	10	9.7	8	7.8
Airborne	60	58.2	38	36.9	3	4.9
Direct Contact with Infected People	93	90.3	6	5.8	4	3.9
Touching Contaminated Objects/Surfaces	75	72.8	23	22.3	5	4.9
Contact with Contaminated Animals	60	58.2	35	34.0	8	7.8
Mosquito Bites	50	48.6	30	29.1	23	22.3
Symptoms of COVID-19 Infection						
Fever	83	80.6	10	9.7	10	9.7
Coughing/Sneezing	85	82.5	8	7.8	10	9.7
Shortness of Breath/Breathing Difficulties	75	72.8	22	21.4	6	5.8
Tiredness/Weakness	70	68.0	24	23.3	9	8.7
Methods/Measures to Prevent COVID-19						
Wash hands regularly using Alcohol or Soap and Water	90	87.4	3	2.9	10	9.7
Avoid close Contact with anyone who has a fever and cough	77	74.7	8	7.8	18	17.5
Avoid unprotected direct contact with live animals and surfaces	65	63.1	25	24.3	13	12.6
Vaccine against COVID-19	50	48.6	50	48.5	3	2.9

A significant respondent had the about ways of transmission of COVID-19. Among the total, 82.5 percent and 90.3 percent respondents thought that COVID-19 was transmitted from droplets and direct contact with infected people respectively. According to the respondents' view that other modes of spread of COVID-19 were airborne (58.2%), touching contaminated objects/surfaces (72.8%), contact with contaminated animal (58.2%) and mosquito bites (48.6%). Majority of the respondents, 80.6, 82.5, 72.8 and 68 percent respectively thought

that the symptoms of COVID-19 infection were the fever, coughing/sneezing, shortness of breath/breathing difficulties and tiredness/weakness.

Most of the respondents were knowledgeable about major preventive measures of COVID-19, 87.4 percent responded wash hands regularly using alcohol or soap and water. A significant proportion of the respondents responded about preventive measures of COVID-19: avoid close contact with anyone who has a fever and cough (74.7%), avoid unprotected direct contact with live animals and surfaces (63.1%) and vaccine against COVID-19 (48.6%). Near about half of the respondents hadn't the sound knowledge about idea, ways of transmission, symptoms and measures to prevention of COVID-19. They said 'no' and 'don't know' about the COVID-19 related disease and its prevention (Table 2).

Threats (Feeling of Wariness) of the Respondents Created by COVID-19

Feeling of wariness of the respondents as economic, health, social and religious, and education and psychological point of view as threats created by COVID-19 is displayed in Table 3.

Table 3 presents the present and future worries and threats produced by COVID-19 pandemic. Most of the respondents feel to say that economic, health, social and religious and education, and psychological sides of the human being may negatively affect due to COVID-19 problem. They concerned mainly about overall economic status (89.3%), employment status (91.3%), formal and informal economy (82.5%), and downward family economic condition (83.5%). They thought moderately in the possible challenges in the food shortage (53.4%), price spikes (69.9%), and poverty and hunger (68.9%) as the economic threats by COVID-19 pandemic. Least (48.5%) proportion of the respondents worried in agriculture sectors by the effects of COVID-19. Some respondents responded that they have 'no, and 'don't know' ideas about economic threats produced by COVID-19 pandemic.

Respondents thought about health treats and hazards created by COVID-19 in physical health (81.5%), health complications (93.2%) and high challenges in medical sector (91.3%). Three fourth (77.7%) respondents thought that mental health of the people will negatively affected by COVID-19 pandemic. Only half (49.5%) respondents thought that COVID-19 may life threatening. Less than half (41.8%) respondents thought that COVID-19 will not obstruct the life.

Table 3

Distribution of Respondents according to the Threats (feeling of wariness) created by COVID-19 Problem (N=103)

Area of Wariness	Response					
	Yes		No		Don't Know	
	No.	%	No.	%	No.	%
Economic						
Economic status	92	89.3	5	4.9	6	5.8
Employment status	94	91.3	4	3.9	5	4.8
Agriculture	50	48.5	43	41.8	10	9.7
Economy (Formal & informal)	85	82.5	10	9.7	8	7.8
Food shortage	55	53.4	39	37.9	9	8.7
Price spikes	72	69.9	9	9.7	22	21.4
Poverty & hunger	71	68.9	22	21.4	10	9.7
Downward family economic condition	86	83.5	6	5.8	11	10.7
Health						
Physical health	84	81.5	7	6.8	12	11.7
Mental health	80	77.7	14	13.6	9	8.7
Life threatening	51	49.5	43	41.8	9	8.7
Health complication	96	93.2	2	1.9	5	4.9
High challenges for medical sector	94	91.3	3	2.9	6	5.8
Social and Religious						
Social disconnection	56	54.4	28	27.2	19	18.4
Decline in religious belief system	64	62.1	30	29.1	9	8.8
Dismantling the social relationship	57	55.3	29	28.2	17	16.5
Higher social disintegration	59	57.3	24	23.3	20	19.4
Education and Psychological						
Disruption of Schools & Universities	62	60.2	25	24.3	16	15.5
Creating fear, stress, stigma & depression	55	53.4	30	29.1	18	17.5
Deaths of nearest people	58	56.3	27	26.2	18	17.5
High death rate with health complication	61	59.2	23	22.3	19	18.5

Top (62.1%) proportion of respondents thought to decline in religious and belief system by COVID-19 as social and religious threats. Second (29.1%) respondents thought there will no decline in religious belief system. Only 8.8 percent respondents had replied 'don't know' about decline in religious belief systems. Of the total respondents 54.4 percent thought COVID-19 crisis creates the social disconnection, while 27.2 percent and 18.4 percent responded 'no' and 'don't know' respectively. More than half (55.3%) believed that COVID-19 pandemic will dismantle the social relationship where as 28.2 percent were not supported the statement and 16.5 percent didn't know COVID-19 will creates the dismantling the social relationship or not. Higher social disintegration is one of the social and religious threats and hazards supported by 57.3 percent respondents. But 23.3 percent respondents were opponent of that statement and 19.4 percent respondents didn't know about higher social disintegration as social and religious threats.

Among all the respondents, 60.2 percent thought that disruption of schools and universities during the COVID-19 crisis was one of the educational challenges. One fourth (24.3%) didn't believe that and 15.5 percent didn't know about disruption of schools and universities as the consequence of COVID-19 crisis. About a half (53.4%) respondents thought that creating fear, stress, stigma and depression may arises by the COVID-19 crisis. Remarkable (29.1%) respondents were not believed to creating fear, stress, stigma and depression due to COVID-19 and 17.5 percent respondents didn't know about that. More than half (56.3%) respondents feared by death of nearest people as psychological threats. More than one-fourth (26.2%) respondents did not believed while 17.5 percent respondents didn't know about deaths of nearest people creates as psychological threats due to COVID-19 crisis. Near to three-fifth (59.2%) respondents supported that high death rate with health complications may arises by the COVID-19. But 22.3 percent didn't believe that statement and 18.5 percent respondents didn't know about high death rate with health complications as psychological challenges/threats due to COVID-19 pandemic (Table 3).

Statistical Analysis (Chi-square) of the Perceptions of the Respondents towards COVID-19 According to Background Variables

Chi-square analysis according to background variables of the respondents is elucidated in Table 4.

Table 4

Perceptions of respondents towards COVID-19 according to relationships between background and categorical variables (N=103)

Variables & Categories	Response (Awareness/ Understanding)						P-value
	Yes		No		Don't Know		
	No.	%	No.	%	No.	%	
Gender							.554
Male	48	77.4	5	8.1	9	14.5	
Female	34	82.9	3	7.3	4	9.8	
Age Group							.225
18-24	19	82.6	2	8.7	2	8.7	
25-44	32	82.1	3	7.7	4	10.2	
45-64	22	78.6	2	7.1	4	14.3	
65$^+$	6	46.1	3	23.1	4	30.8	
Marital Status							.001
Unmarried	13	86.6	1	6.7	1	6.7	
Married	81	95.3	1	1.2	3	3.5	
Divorced/Widowed	1	33.3	1	33.3	1	33.4	
Educational Status							.693
Up to Class 10	49	84.4	3	5.2	6	10.4	
Up to Bachelor	31	93.9	1	3.0	1	3.1	
Above Bachelor	10	83.4	1	8.3	1	8.3	
Ethnicity							.215
Brahmin/Chhetri	59	95.2	2	3.2	1	1.6	
Newar	16	80.0	2	10.0	2	10.0	
Other	17	81.0	2	9.5	2	9.5	
Family Size							.800
2	12	80.0	1	6.7	2	13.3	
3	42	91.3	2	4.3	2	4.4	
4 & above	37	88.1	2	4.8	3	7.1	
Religion							.028
Hindu	75	92.6	2	2.5	4	4.9	
Bauddha	6	75.0	1	12.5	1	12.5	
Muslim	5	50.0	3	30.0	2	20.0	
Other	1	25.0	2	50.0	1	25.0	

Note: Chi-Square (χ^2) analyses with cross tabulation were performed between responses in regarding the perceptions towards COVID-19 of the respondents according to the background characteristics (Gender, Age, Marital Status, Educational Status, Ethnicity, Family Size and Religion).

Of the total 62 male respondents 77.4 percent reported having knowledge and understanding of COVID-19. Only 8.1 percent respondents reported having 'no' and 14.5 percent having 'don't know' knowledge and understanding towards COVID-19.But among

41 female respondents 82.9 percent reported having knowledge and understanding of COVID-19. But only 7.3 and 9.8 percent respondents respectively reported to having 'no' and 'don't know' about knowledge and understanding to COVID-19 pandemic. Data clearly indicates that female had higher level of knowledge and understanding of COVID-19 than male. The relation between the categories of gender was not significant statistically X^2(1, N=103) = 0.554, p<.05. Gender did not play the significant role for creating knowledge/understanding of COVID-19.

Respondents ranged from 18 to 65 and over years of age, of which 82.1 percent 25-44 years age group knew about COVID-19. Some 7.7 and 10.2 percent respondents of 25-44 years age group respectively responded 'no' and 'don't know' about COVID-19. The majority of the respondents (86.2%) of 18-24, 78.6 percent of 45-64 and 46.1 percent of 65 and above years respectively were well informed about COVID-19. The statistical association between age group and awareness of COVID-19 were not significant. The Chi-square statistics is 8.171. The p-value is .225 and the result is not significant at p<.05.

Majority (95.3% and 86.6% respectively) of the respondents of married and unmarried were well informed about COVID-19. But equal one-third (33.33%) of the divorced/widowed respondents responded 'yes', 'no' and 'don't know' about the awareness and perception related questions. Marital status is statistically correlated with knowledge and understanding of COVID-19. The chi-square statistic is 17.823. The p-value is .001 and the result is significant at p<.05.

Majority of the respondents, 84.4 percent of up to class 10, 93.9 percent of up to bachelor level and 83.4 percent of above bachelor level educational attainment had good knowledge and understanding towards COVID-19. Statistically not significant relationship between educational status and knowledge of COVID-19 was found. The chi-square statistic is 2.232. The p-value is .693 and the result is not significant at p<.05.

Among the respondents of ethnic category, 95.2 percent of Brahmin/Chhetri, 80 percent of Newar and 81 percent of other ethnic group had good knowledge and understanding towards COVID-19. Ethnicity and knowledge of COVID-19 is statistically not significant. The chi-square statistic is 5.782. The p-value is .215 and the result is not significant at p<.05.

Most of the respondents had small family having 2, 3 and 4 and above members. Among them, 80 percent who had 2 members' family, 91.3 percent who had 3 members' family and 88.1 percent who had 4 and above members' family size respectively had the good knowledge and understanding towards COVID-19. Family size and awareness and understanding towards COVID-19 were not statistically significant. The chi-square statistic is 1.647. The p-value is .800 and the result is not significant at p<.05.

Majority 81 (78.6%) respondents were Hindu. Among them, 92.6 percent had knowledge and understanding, but 2.5 percent had 'no' and 4.9 percent had 'don't know' the knowledge and understanding towards COVID-19. Of the total 8 Bauddhist, 75 percent had well, 12.5 percent had 'no' and 12.5 percent had 'don't know' knowledge and understanding towards COVID-19. Among the total 10 Muslims, only 50 percent had knowledge, 30 percent had 'no' and 20 percent had 'don't know' ideas about COVID-19. Likewise, of the total 4 other category of religion, only 25 percent had knowledge and understanding and 50 percent had 'no' knowledge and 25 percent had 'don't know' ideas about COVID-19. The chi-square statistic between the religious category regarding COVID-19 knowledge and understanding is 27.028. The p-value is .000 and the result is significant at p<.05 (Table 4).

Discussion

The present study has been designed to evaluate the consciousness, threats and perceptions (knowledge and understanding) regarding COVID-19. This study confined only to the business persons of agricultural products market in Birtamod, Jhapa. This study exposed that majority of the respondents were conscious about COVID-19 in the general ideas, sources of transmission, symptoms of COVID-19 infection and measures to prevent it. More than 90 percent respondents had clear knowledge of COVID-19 information and preventive measures but three-fourth (77.7%) respondents had knowledge of vaccine against COVID-19. In the context of ways of COVID-19 transmission most (90.3%) of the respondents thought that from direct contact with infected people 82.5 percent from droplets, and 72.8 percent from touching contaminated objects/surfaces. This finding is similar to the studies conducted in Iran and China, which reported a knowledge score of 85 percent and 90 percent respectively (Gebretsadik, Gebremichael and Belete, 2021). The findings of this study contradicts the claim of the findings of Lettor, Apanga, Kumbeni, Akunvane and Akparigo (2020) that participants who perceived that COVID-19 is transmitted by eating

contaminated food and drinking contaminated water constituted 27.9 percent and 26.8 percent respectively. Some participants perceived that COVID-19 is transmitted by mosquitoes (19.7%). The participants who perceived that there is no need to take any measures because COVID-19 is not deadly and not real, constituted 20.2 percent and 17.1 percent respectively of the sample.

This study calculated that most of the respondents believed to suspecting possible challenges (93.2% of health complications, 91.3% of medical sector and 81.5% of physical health related) from COVID-19 pandemic. More than 50 percent respondents (60.2% in disruption of Schools and Universities, 53.4% in creating fear, stress, stigma and depression, 56.3% in death of nearest people and 59.2% in high death rate with health complications) viewed as educational and psychological threats/challenges from COVID-19. According to the World Bank (2020b) viewed in the nearest approach that the COVID-19 pandemic has caused more than 1.6 billion children and youth in 161 countries to be out of school, which is close to 80% of the world's enrolled students. Parents have experienced increased pressure to work from home, to keep their work running as well as to take care of schooling children at home at the same time, while caregiver resources including grandparents and the wider family have been restricted (Fegert, Vitiello, Plener and Clemens, 2020). With the unprecedented lockdown, most parents have worries about their children's education and future as their school education has been halted until further notice.

Perceptions as the well awareness and understanding towards COVID-19 by gender ((82.6% female versus 77.4% male) and age group (82.6% in 18-24, 82.1% in 25-44 and 78.6% in 45-64 years) were found in the study population. According to other background variables like marital status of 95.percent married, 86.6 percent unmarried and 33.3 percent divorced/widowed were aware to COVID-19. Respondents who completed up to bachelor level were more (93.9%) aware than class 10 (84.4%) whereas Brahmin/Chhtri were most (95.2%) aware than Newar and others (80% and 81%) respectively. Respondents whose family size was 3 were most (91.3%) aware than who had number of family member 4 and above (88.1%). Hindu (92.6%) was more aware than Bauddha (75%) towards COVID-19 pandemic. Various background variables with some categories were closely related with awareness/understanding towards COVID-19. Gender (male, female), age group (18-24, 25-44, 45-64 and 65$^+$), marital status, educational status, ethnicity, family size and religion were

no doubt to associated with the COVID-19 knowledge and understanding. Among these background variables marital status (p-value is .001) and religion (p-value is .000) are statistically significant at p<.05. Some similarity and dissimilarity was found in this study with the study has done by Paudel, Shrestha. Karmacharya and Pathak (2020) using multiple regression analysis to investigate the relationship between demographic variables with knowledge scores. The analysis showed that knowledge score were significantly associated with occupation, education and practices at 95% confidence level. Health worker average knowledge level is higher than students, teachers and others by about 0.11 (β: -0.11, p<0.001). Education of higher secondary is lower than bachelor level by 0.025 (vs. bachelor, β: 0.25, p<0.05). One-unit increase in the standard deviation of the practice index is associated with a 0.091 standard deviation increase in the knowledge score index (β: 0.091, p<0.05) while fixing other demographic variables.

Conclusion

The newly emerged COVID-19 pandemic is one of the more significant human experiences of the current era. Present global pandemic threats claims immense consciousness, knowledge about threats and perceptions (awareness and understanding) about COVID-19. It has been observed that majority of respondents have adequate consciousness, thoughts created by COVID-19 pandemic and knowledge and perceptions. Most of the respondents well informed about ways of transmissions, symptoms and measures to prevention by the bad effects from COVID-19. Most of the respondents worried of threats like economic, health, social and religious and, education and psychological aspects created by COVID-19. The findings of this study highlights to create the specific knowledge and perceptions towards COVD-19 and its preventive measures. For that all persons of the community are the responsible for prevention of COVID-19 pandemic by taking precaution for proper social distancing, wearing masks, sanitizing and washing hands by water and soap. This general rules have to organize, coordinate and monitored by local representatives, local leaders, social activists, consumer welfare protection wings etc. If required, supportive facilitation may achieve by Provincial and Central level authorities.

References

Bassetti, M., Vena, A. and Giacobbe, D.R. (2020). The novel Chinese coronavirus (2019-nCoV) infections: challenges for fighting the storm. Eur J Clin Invest 50(3):e13209. https://doi.org/10.1111/eci.13209

Brooks, S.K., Webster, R.K., Smith, L.E., Woodland, L., Wessely, S., Greenberg, N., et al. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. The Lancet. 2020;395 (10227):912-20.

Colizza, V., Barrat, A., Barthélemy, M. and Vespignani, A. (2006). The role of the airline transportation network in the prediction and predictability of global epidemics. Proc Natl Acad Sci U S A 103(7):2015–2020. https://doi.org/10.1073/pnas.0510525103

Fegert, J. M., Vitiello, B., Plener, P. L. and Clemens, V. (2020). Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: A narrative review to highlight clinical and research needs in the acute phase and the long return to normality. Child and Adolescent Psychiatry and Mental Health, 14, Article 20. https://doi.org/10.1186/s13034-020-00329-335 Google Scholar

Gebretsadik, D., Gebremichael, S. and Belete, M. A. (2021). Knowledge, Attitude and Practice Toward COVID-19 Pandemic Among Population Visiting Dessie Health Center for COVID-19 Screening, Northeast Ethiopia. V 2021:14 Pages 905-915. DOI https://doi.org/10.2147/IDR.S297047

Giovanetti, M., Benvenuto, D., Angeletti, S. and Ciccozzi, M. (2020). The first two cases of 2019-nCoV in Italy: where they come from? J Med Virol 92(5):518–521. https://doi.org/10.1002/jmv.25699

Lettor, I.B. K., Apanga, P.A., Kumbeni, M.T., Akunvane, R. and Akparigo, R. (2020). Knowledge and Perception on COVID-19 among Senior High School Students in Ghana: A Cross-Sectional Study. Doi: https//doi.org/10.1101/2020.11.18.20234088

Paudel, S., Shrestha, P., Karmacharya, I. and Pathak, O.K. (2020). Knowledge, Attitude and Practices (KAP) towards COVID-19 Among Nepalese Residents during the COVID-19 Outbreak: An online cross sectional study. https://orcid.org/0000-0002-6020-4545

Peiris, J.S., Yuen, K.Y., Osterhaus, A.D. and Stöhr, K. (2003). The severe acute respiratory syndrome. N Engl J Med 349(25):2431–2441. https://doi.org/10.1056/NEJMra032498

Rabi, F.A., Al Zoubi, M.S., Kasasbeh, G.A., Salameh, D.M. and Al-Nasser, A.D. (2020). SARS-CoV-2 and coronavirus disease 2019: what we know so far. Pathogens 9(3):231. https://doi.org/10.3390/pathogens9030231

Rogers, R., Cacioppo, J. and Petty, R. (1983). Cognitive and physiological processes in fear appeals and attitude change: a revised theory of protection motivation. In: Social psychophysiology: a sourcebook. Guilford, New York, pp 153–177 Google Scholar

Roy, D., Tripathy, S., Kar, S. K., Sharma, N. and Verma, S. K. (2020). Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. Journal of the Neurological Sciences. 2020;116544.

Shigemura, J., Ursano, R.J., Morganstein, J.C., Kurosawa, M. and Benedek, D.M. (2020). Public responses to the novel 2019 coronavirus (2019-nCoV) in Japan: mental health consequences and target populations. Psychiatry Clin Neurosci 74(4):281. https://doi.org/10.1111/pcn.12988

Vandeweered, V. and Van Der, V.D. (2020).COVID-19 overview of information available to support the development of medical countermeasures and interventions against

COVID-19. 2020;1–120.

World Bank (WB). (2020b, March 20). Educational challenges and opportunities of the Coronavirus (COVID-19) pandemic. https://blogs.worldbank.org/education/educational-challenges-and-opportunities-covid-19-pandemic Google Scholar

World Health Organization (WHO). (2020). WHO announces COVID-19 outbreak a pandemic. WHO Regional Office For Europe https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic. Accessed 16 Apr 2020

Zhong, B.L., Luo, W., Li, H.M., Zhang, Q.Q., Liu, X.G., Li, W.T. at el. (2020). Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey. International Journal of Biological Sciences. 2020; 16(10):1745-52. 1