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General Perception, Practice and Health Awareness of the Common People Regarding COVID-19 Pandemic in Bangladesh



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ABSTRACT

Covid-19 pandemic is one of the major challenges in the world as well as in Bangladesh in the present time. It has a tremendous effect on all aspects of human life including their health, education, economy, activities etc. The daily practices and awareness of the people is must to manage the pandemic. So the study focused the knowledge, awareness and daily practices of the common people to prevent the disease. A cross sectional study in 26 different districts of the country involving random interview of 750 samples by semi structured questionnaire was used for the study. The major finding shows that, most of people have knowledge on the virus (69.3%), its' mode of transmission (77.2%) and symptoms of the disease (79.7%) while a considerable portion of them have partial knowledge. Urban peoples and graduates were found more to have knowledge than peoples living in village and illiterate. Most of the people (66.8%) collect regular information mainly from mass media (83.6%) and follow the health practices but less of them (49.6%) maintain social distances. Only 1.9 % of the peoples were found to go for the covid-19 test but most of them (77.1%) follow the government rules and think the initiatives as sufficient to prevent the pandemic. Still, a considerable number of people have lack of knowledge and awareness regarding the disease and more initiatives can be taken to make them aware as well as to improve their health practices.



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INTRODUCTION

The most alarming issue in the present days is Corona Virus Disease Covid-19 caused by Severe Acute Respiratory Syndrome Corona Virus (SARS-CoV-2) which is a pandemic around the world. Almost every part of the world is now affected by the virus which was identified first in Wuhan, China during the end of 2019 and spread around the world during the first months of 2020 ^[1]. The disease was found to affect mainly the respiratory organ of human body as well as some other major organs and cause severe pneumonia which caused death of about one million people till August, 2020 around the world ^[2-3]. According to Centers for Disease Control and Prevention (CDC), the major symptoms of the disease are fever or chills, pneumonia, dry cough, shortness of breath, fatigue, tastelessness, muscle or body aches, headache, sore throat, Congestion or runny nose, nausea, vomiting, diarrhea etc ^[4]. Research found the virus to spread through the air droplets of breathing and sneezing even through daily usable objects ^[5]. Wearing mask, sanitizing hand, maintaining social distancing and personal hygiene can reduce the chance of contamination of the virus ^[6]. Some of the existing drugs have been come into discussion to treat the disease but was not confirmed to be effective fully by scientific data since researchers trying for an effective vaccine as early as possible around the world ^[7].

Like other populated countries, Bangladesh was also affected seriously by the pandemic and the first case of contamination was confirmed by test on 8th March 2020. Till August 30th, a total of 3, 10,822 people has been identified as contaminated and 4,248 of them died from the disease in the country ^[8]. Government has taken many initiatives including complete lockdown, closing educational and other organizations for several months, making people aware of maintaining social distance, personal hygiene, sanitizing hand regularly etc. to prevent the contamination ^[9]. Although awareness and habit of the common people to follow the regulations is vital to prevent the disease, the scenario was different in many parts of the country where people did not followed the rules which may contribute largely to the spread of the virus ^[10].

Review of the literature on some other pandemic diseases like cholera, H1N1 flu, *chikungunya* outbreak etc. in Bangladesh shows the necessity of conducting this research as no such research on Covid-19 was found to be carried out till date in the country.

So the present study was designed to evaluate the knowledge and perception of the common people regarding the disease with its mode of transmission and ways of prevention and their health awareness and daily practices to prevent it.

MATERIALS AND METHODS

A. Study Design

The study was designed to find out the knowledge level or perception of the common people of Bangladesh and their daily practices to combat the Covid-19 pandemic. The study was area based, cross sectional and descriptive in nature where 750 samples were interviewed directly. Data was collected by asking the questions with semi-structured questionnaire.

B. Study Area

Data were collected from adult samples (age \geq 18 years) from 104 different upazilas of 26 different districts of Bangladesh by random sampling technique.

C. Data Collection and Research Instrument

The research involved 750 in-depth interviews. Direct interview and online interview using electronic communication media and telephone was used as the primary research instruments using semi-structured questionnaires. Although the questionnaires were in English, they were translated in Bengali while asking for a better understanding of the participants. Data was collected during 15th July- 10th August, 2020 during the Covid-19 pandemic prevalence in Bangladesh. Pilot test was carried out among 50 samples.

D. Statistical Analysis

Data was analyzed using Microsoft Excel-2007 software. The incomplete questionnaires were sorted out and rejected to ensure the proper result.

E. Ethical Consideration

Written consent was taken from the willing samples participated in the research. Collected data was used only for research purposes and respondents confidentially were assured. As the human subjects only participated in this study, this survey based research did not take any further approval from the institutional ethics committee.

RESULT

1. Sample characteristics

The study focused on the assessment of the general perception as well as health awareness and practice of the common people of the country to prevent the Covid-19 disease. A total of 750 samples were interviewed among which 66% were male and 34% were female within the age range of 18-85 years. Most of the samples (63.5%) were from village and certain portion of them was from district town (19.2%), city corporation (10.3%) and upazila town (7.1%) as shown in figure-1. The study also involved 30.4% graduate samples as well as the same number of samples with the education level of higher secondary. Some samples with the education level of secondary and primary level as well as illiterate were also involved as shown in figure -2.

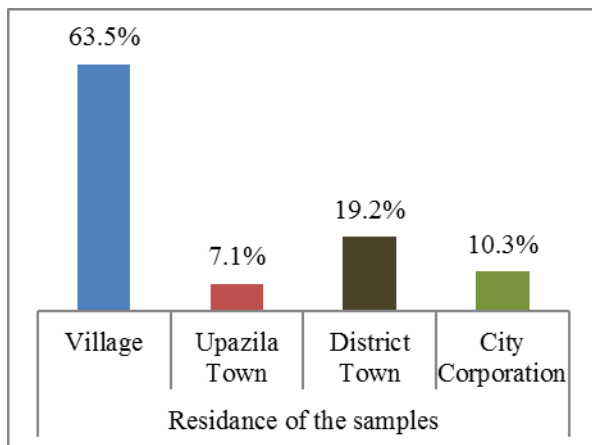


Figure No. 1: Residence status of the samples.

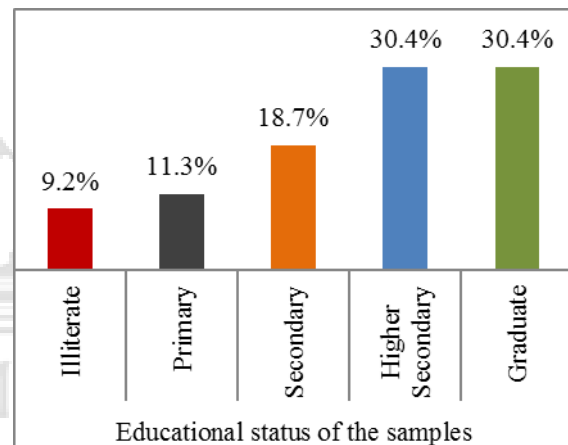


Figure No. 2: Educational status of the samples.

2. Knowledge on corona virus and Covid-19

The study found that majority of the samples (69.3%) has sufficient knowledge on coronavirus and the Covid-19 disease while a certain portion (25.3%) has partial knowledge on the virus and disease and a little percent answered that, they have no idea on it as shown in the figure-3.

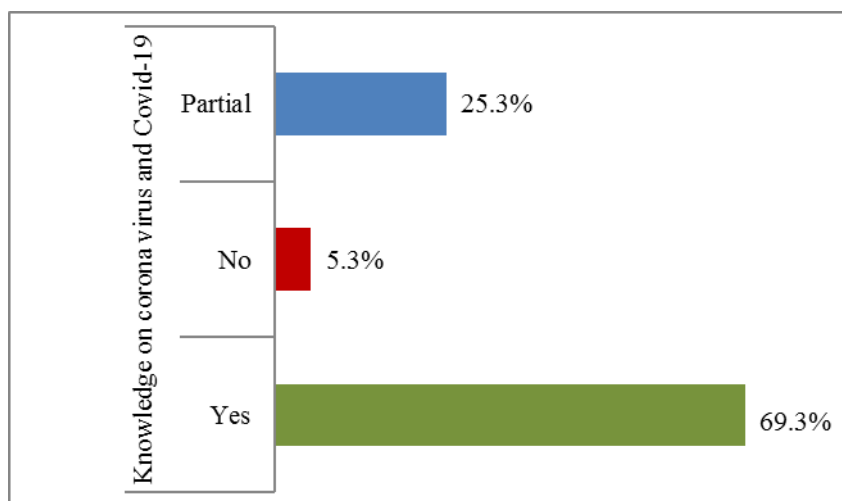


Figure No. 3: Knowledge of the samples on corona virus and Covid-19

The knowledge of the samples was found to vary according to their level of education where majority of the graduate samples were found to have proper knowledge (73.26%) or at least partial knowledge (20.83%) and the level of knowledge decreased gradually with the decrease of educational status from graduate to illiterate and was found least (30.77%) among the illiterate samples as shown in the table-1.

Table No. 1: Samples' education level wise knowledge scenario

Samples idea on corona virus and Covid-19 based on educational status (%)			
Level of Education	Yes	No	Partially
Illiterate	30.77	10.26	58.97
Primary	45.45	21.82	32.73
Secondary	50.00	7.86	42.14
Higher Secondary	68.86	5.26	25.88
Graduate	73.26	5.90	20.83

Table No. 2: Samples' residential area wise knowledge scenario

Idea on corona virus and Covid-19 of the samples from different resident status (%)			
Residence	Yes	No	Partially
Village	67.30	6.50	26.21
Upazila Town	67.31	1.92	30.77
District Town	69.44	5.56	25.00
City Corporation	83.12	0.00	16.88

The study also analyzed the knowledge of the samples on coronavirus and Covid-19 from different residential status. It was found that samples living in the urban areas (City Corporation or district town) have more idea on the disease than the samples living in the rural areas (village) as shown in the table-2.

3. Knowledge on the mode of transmission

The findings regarding the knowledge of the samples on the ways of transmission or contamination of the virus find that majority of the samples (77.2%) knows the ways of transmission or contamination while 20.1% of them know it partially and very small percentage (2.7%) do not know which is shown in the figure-4.

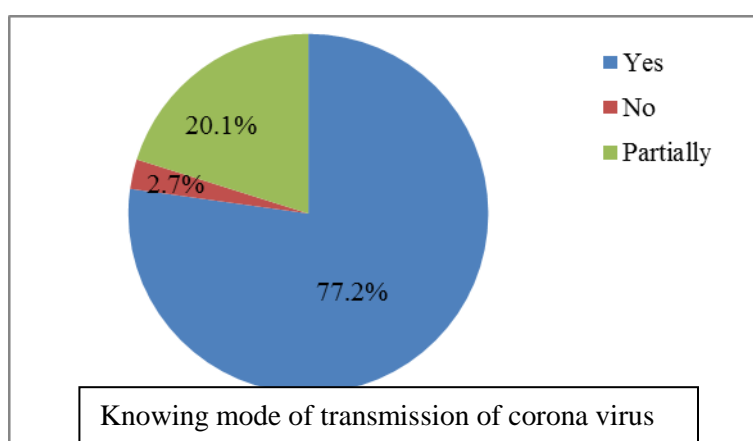


Figure No. 4: Knowledge of the samples on the mode of transmission of the virus.

4. Collection of information on Covid-19

As a new disease that caused pandemic situation, different updates of information were available which were important to make the people aware of it. The study found 66.8% of the samples to collect information on a regular basis while 23.2% of them collect information on Covid-19 on an irregular basis and 10% of them do not collect such information.

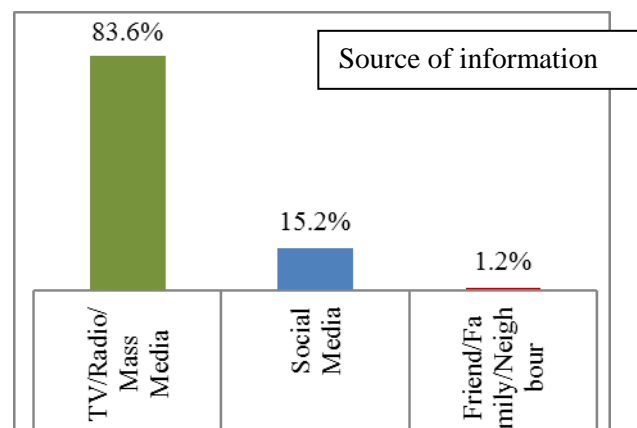
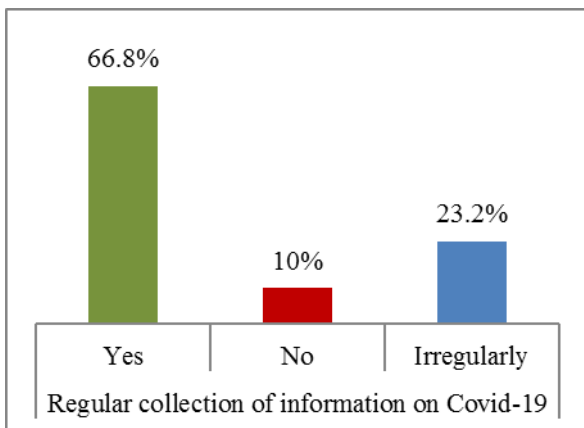


Figure No. 5: Collection of information by the samples.

Figure No. 6: Different sources of information for the samples.

The major sources of information of the samples were mainly TV/radio/mass media (66.8%), social media (15.2%) and family/friends/neighbor as only 1.2%. The result was shown in the figure-5 and 6.

5. Knowledge on the symptoms of Covid-19

The study assessed the samples on having knowledge on the symptoms of Covid-19 as an indicator of their ability to suspect the possible contamination and go for a test. It was found that majority of them (79.7%) knows the symptoms of Covid-19 contamination while 18.1% of them know it partially and 2.1% have no idea on it as shown in figure-7.

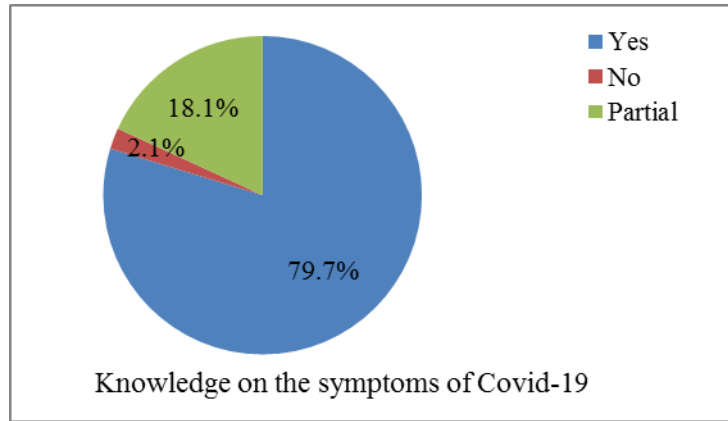


Figure No. 7: Knowledge of the samples on the symptoms of Covid-19.

6. Tendency to follow government rules to prevent Covid-19

Around the world, authority has declared different emergency rules to prevent Covid-19 pandemic. In this study, it was found that majority of the samples (77.1%) were following the rules while a certain portion (20.3%) were following partially and small portion (2.7%) were not following the rules to prevent the pandemic. The scenario was varying from urban to rural areas when the maximum people (about 92%) were found to follow the rules in the urban areas and a considerable percentage of people (about 70%) were also found in the rural or village areas to follow the rules. The results were shown in the figure-8 and table-3.

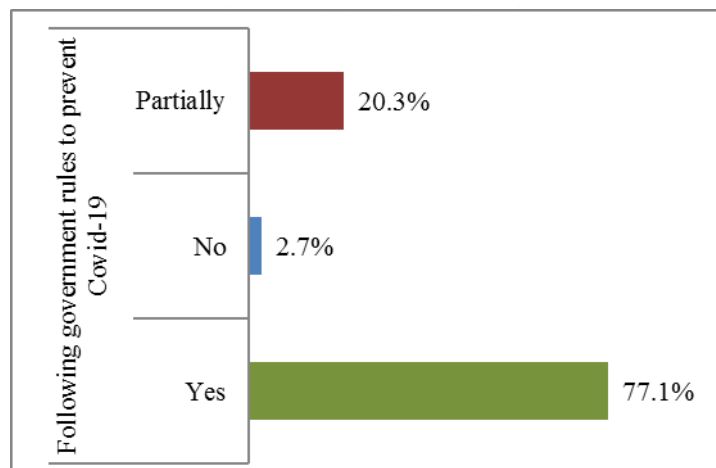


Figure No. 8: Tendency of the samples to follow government rules to prevent Covid-19.

Table No. 3: Rules following tendency in different living areas

Following government rules to prevent Covid-19 in different areas (%)			
Residence	Yes	No	Partially
Village	70.02	3.35	26.62
Upazila Town	78.85	5.77	15.38
District Town	92.36	0.00	7.64
City Corporation	90.91	1.30	7.79

7. Health and hygiene practice to prevent Covid-19

Specialist suggested some health practices to prevent the virus contamination including wearing mask, sanitizing hand with soap or disinfectant on a regular basis, maintaining social distance and personal hygiene etc. The present study also focused on such practices among the samples and found to wear mask (85.9%), sanitize hand (74.4%) and maintaining personal hygiene (88.1%) of the samples when staying home was relatively less (69.7%) and most of the samples do not maintain social distance as shown in the figure-9.

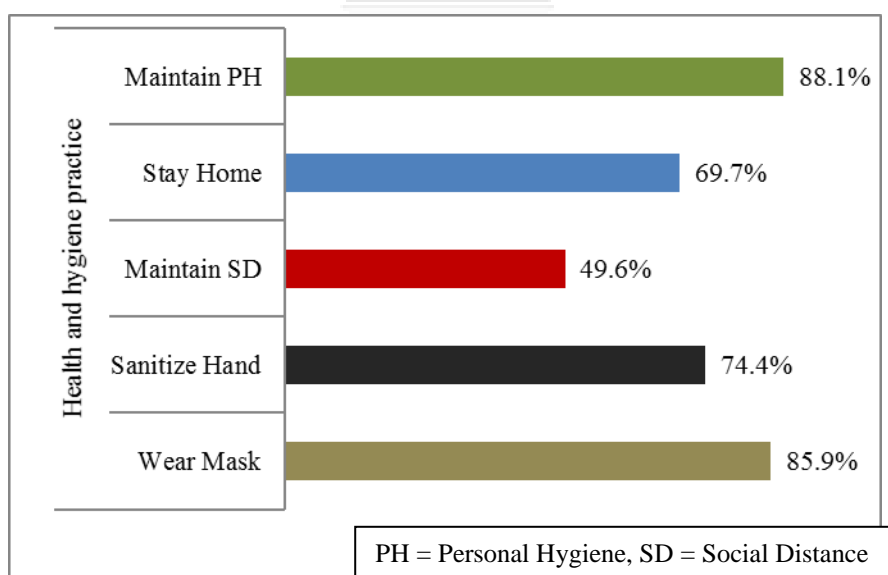


Figure No. 9: Health and hygiene practice of the samples to prevent Covid-19.

8. Taking special food for preventing Covid-19

Some foods can boost the immune system to fight against the virus specially those containing some essential vitamins, minerals, proteins etc. It was found that most of the samples (52.1%) were not taking such special foods to prevent coronavirus while some less than the half (47.9%) of them were taking such foods including tea, hot water, lemon, guava and other citrus fruits, vitamin-c, Zinc, green vegetables, egg etc. The result was shown in figure-10.

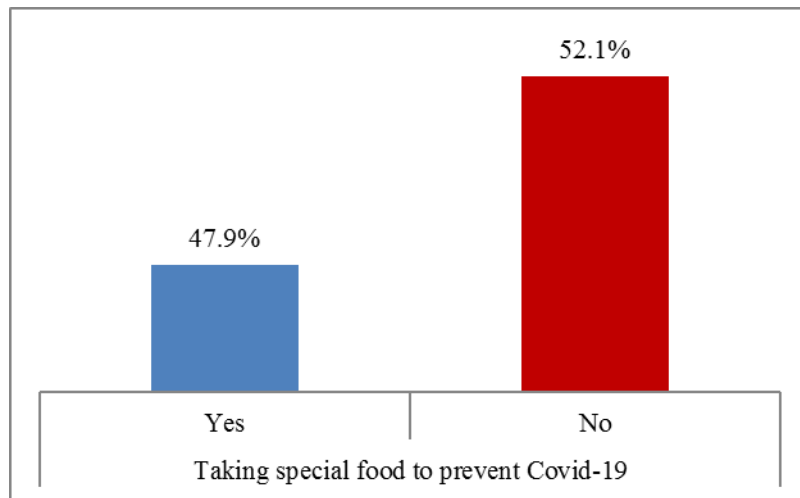


Figure No. 10: Special food taking tendency of the samples.

9. Samples undergoing Covid-19 test

Although the test facilities were available around the whole country, it is found that only a negligible amount of the total sample (1.9%) has gone for the test while 98.1% of the samples were not. The samples opinion was also noted regarding the availability of the test facilities and majority of them reported that test facilities were not available to them or rarely available. A small portion (5.7%) was found to have no idea on the availability of the facility. The result was shown on the figure-11 and 12.

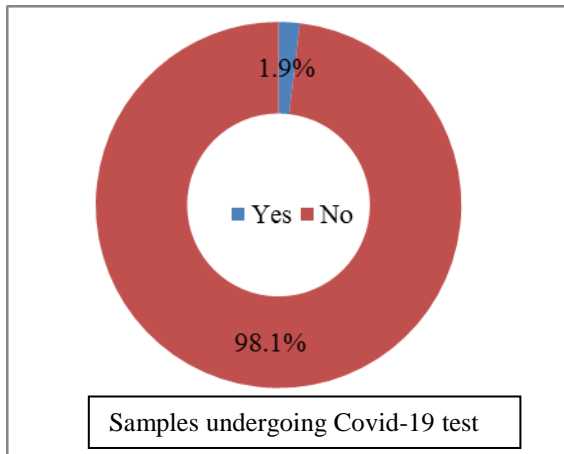


Figure No. 11: Samples undergoing Covid-19 test.

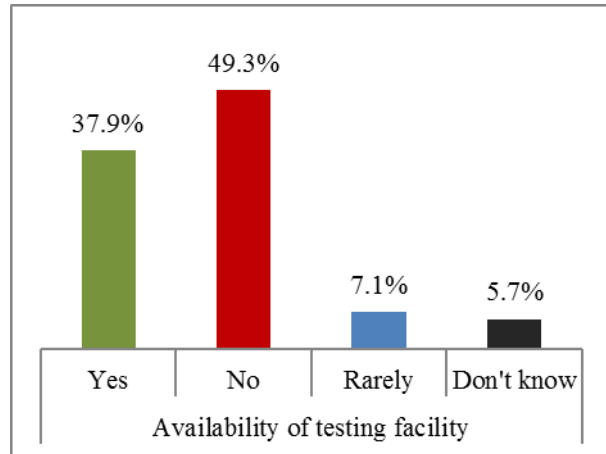


Figure No. 12: Opinion of the samples regarding the availability of test facility.

10. Facing treatment difficulties and opinion on government initiatives

Difficulties in treating diseases other than Covid-19 including unavailability of doctor, bed and other services, doctor did not cooperated for treatment and hospital closing etc. were also reported by the samples. It was found that a small portion of the samples faced these difficulties when majority of them (45.6%) either did not faced the problems or did not faced any disease during the pandemic. The result was shown in the figure-13. The samples were asked for their opinions regarding the sufficiency of government initiatives to prevent Covid-19. Majority of them (59.3%) reported the initiatives as sufficient while a considerable portion (40.7%) of them do not considered the initiatives as sufficient as shown in figure-14.

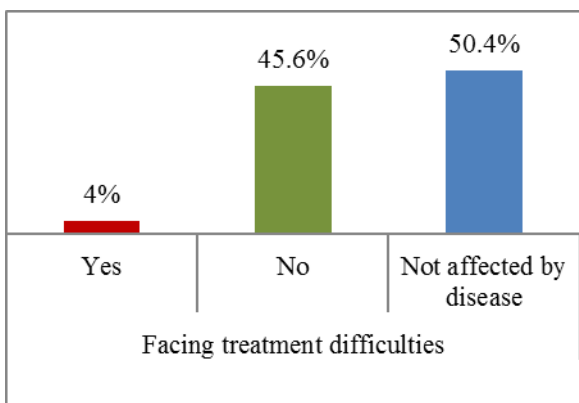


Figure No. 13: Treatment difficulties faced by the samples to treat diseases other than Covid-19.

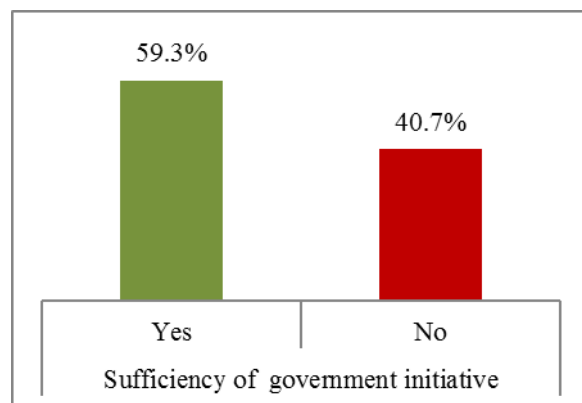


Figure No. 14: Opinion of the samples regarding sufficiency of government initiatives.

DISCUSSION

A fully effective treatment option or medication is still not available to combat the Covid-19 pandemic. Hence the prevention of contamination is the best way till now to fight the virus [11]. So some important daily health practices like wearing mask, sanitizing hand with soap or disinfectant on a regular basis, maintaining social distance and personal hygiene etc. are suggested by the experts [12]. Awareness and knowledge of the people in following such practices is important. The present study found that, most of the people (69.3%) have good knowledge on the virus and the disease, its' mode of transmission (77.2%) with the symptoms of disease (79.7%) and a considerable portion of them have partial idea while very small portion have no idea which indicates a positive scenario of knowledge and the findings were almost similar to the findings in India and other sub continental countries [13-15]. But the scenario was quite different in urban and rural areas and from educated people to illiterate people. This is due to the availability of resources, living standards, self awareness and daily needs. The social media was found to spread some fake information regarding the pandemic by several studies [16]. So, people still rely mainly on mass media (83.6%) like TV, radio, newspaper etc. than social media (12.2%) to collect information due to more reliable information. Following good health practices was found in most of the cases regarding wearing mask, sanitizing hand, maintaining personal hygiene but maintain social distances was found less (49.6%) which may be due to the high population density of the country. Scarcity of Covid-19 test facility has a remarkable effect and only 1.9% people were found to go for the test and most people do not think the test facility was readily available to them. The test facility and rate was found lower compared to many other countries although huge test was very important to manage the condition [17]. Government issued many rules and regulations to prevent the virus contamination and most of the people (77.1%) were found to follow the rules and was satisfied on it (59.3%) which was also a positive sign and helped to prevent the contamination by large number.

CONCLUSION

Still there some lacking regarding test facility as well as awareness and knowledge of the people regarding test of the disease, some health practices and daily living. So authority should carry their effort to overcome the lacking and make people aware and habituated with good health practices.

AUTHORS' CONTRIBUTION

MSH has designed the study, prepared the manuscript and supervised the research. Other authors have conducted the study by collecting field data and taking interviews as well as conducted the pilot study.

CONFLICTS OF INTEREST

The author declares no conflict of interest regarding the study.

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