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A questionnaire based survey on assessing the level of awareness and knowledge of covid 19 pandemic among public

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ABSTRACT

To assess the current level of awareness towards COVID 19 among Public through a well-designed questionnaire. This study investigates the level of awareness and knowledge about COVID 19. The main objective of this study is to assess the level of awareness of public about the knowledge of Information about COVID 19 and protection methods. This study was conducted through a valid and reliable questionnaire including socio-demographic and COVID 19 knowledge data. Data were collected online from a sample of 150 respondents. The majority of the participants showed generally moderate knowledge about COVID 19. Age, education, level of education and occupation were the only significant factors that improved the level awareness. Groups of respondents of age 20-34 years, college graduates showed high level of knowledge and whereas groups of respondents of age 35-50 with low education level respondents showed the opposite. The major findings of this study are that most people do not have awareness about COVID 19, transmission and prevention methods. Empowering public information regarding the epidemiology of the COVID 19 is needed. Medical profession respondents can be helpful in educating other groups and they can communicate with health care providers in order to control COVID 19 outbreak.

INTRODUCTION

Coronavirus disease 2019 (COVID-19) is defined as an illness caused by a novel coronavirus. COVID-19 is an emerging respiratory infection that was first discovered in December 2019, in Wuhan city, China [1]. COVID 19 found in China is genetically closely related to the SARS-CoV1 virus which caused thousands of deaths in 2002. The current COVID-19 pandemic caused so many reported cases around the world [2]. The WHO (World Health Organization) declared the corona virus outbreak 2019-2020 as a public health emergency of international concern (PHEIC) on 30 January 2020 and a pandemic on 11 March 2020[3]. This disease causes severe acute respiratory syndrome , which presents with symptoms like fever, cough, shortness of breath, muscle pain, sputum production, sore throat, diarrhea, abdominal pain, loss of smell, and in severe conditions leading to viral pneumonia and multi-organ failure[4]. People who are at greater risk of developing severe symptoms are: elderly people and those with health disorders such as hypertension, diabetes, cardiovascular disease, chronic respiratory disease and cancer. There is no specific treatment for this disease, so healthcare providers treat the clinical symptoms of patients. Supportive care (e.g. fluid management, oxygen therapy, etc.) can be highly effective for patients with symptoms [5]. There is not enough epidemiological information at this time to determine how easily and sustainably this virus spreads between people, but it is currently estimated that, on average, one infected person will infect between two and three more [6]. In general, there is a lack of studies on the awareness and attitude of the publics towards infectious diseases. [7]. The aim of this study is to assess the level of awareness and knowledge of the public about COVID 19 outbreak and the methods should be followed in order to counter this virus and to set up recommendations which can be beneficial for the public population.

METHODOLOGY

It was a prospective observational questionnaire study distributed among over 150 participants. The data were collected using questionnaires. The questionnaire consisted of two sections. Section one was about demographic and socioeconomic data (age, gender, income, education) whereas section two was

about epidemiological data of COVID 19. The 150 respondents for this study consisted of 50 males and 100 females. Their ages were from 20 to 65 and had different education level. Each correct answer of the question in the questionnaire was given one point in order to assess the awareness and the knowledge of public about COVID 19. After collecting the questionnaires, the points were added for each question and the responses were classified as a percentage of correct answers. The results of the awareness

S No	Questions	Yes	No	Don't No
1	Covid 19 is caused by a virus.	-	-	-
2	Maintain atleast 1metre (3feet) distance between yourself and others	-	-	-
3	Incubation period of Covid 19 is 5-14 days	-	-	-
4	Covid 19 is transmitted by cough and sneeze	-	-	+
5	Covid 19 is transmitted by droplets in surfaces	-	-	-
6	Covid 19 is transmitted by droplets in air	-	-	-
7	Covid 19 has upper respiratory and lower respiratory symptoms	-	-	-
8	Covid 19 has gastrointestinal symptoms	-	-	-
9	Covid 19 has fever and muscle pain:	-	-	-
10	Covid 19 mortality rate is higher in elderly	-	-	-
11	Covid 19 can be prevented by wearing mask	-	-	-
12	People should avoid touching eyes,nose and mouth with unwashed hands	-	-	-
13	Covid 19 can be prevented by washing hands for 20 seconds	-	-	-
14	Covid 19 can be prevented by having good immune system	-	-	-
15	Covid 19 can be prevented by balanced nutrition	-	-	-
16	covid 19 patients need ventilator to survey	-	-	-
17	No drug treatment available for covid 19	-	-	-
18	Vitamin D is important in covid 19 treatment	-	-	-
20	Vitamin C is important in covid 19 treatment	-	-	-
21	People with Covid 19 also show no symptoms	-	-	-
22	Isolation and treatment of patient with Covid 19 virus are an effective way to reduce the spread of virus	-	-	-
23	To prevent transmission of Covid 19, people must avoid going to crowded places and avoid taking public transport	-	-	-

questions were analyzed using the answer key. The knowledge score for the whole sample was expressed as the percentage of correct answers of the 25 questions in the questionnaire. Categorical variables are reported as number and percentage, and continuous variables are expressed as mean and standard deviation (SD). Comparison of scores between groups was based on analysis of variance chi-squared test and P value was set at P<0.05.

In my study I had included both female and male with age greater than 20years to 65years and excluded people under the age of 20 and greater than 65years aswell as those who not wished to participate in the study.

Data were collected during the 2020 academic year. Questionnaires were distributed to 210 Participants. 150 participants completed the questionnaire. All the participants were between the age group 20-34. Respondents completed the online structured questionnaire forms which composed of check box questions regarding socio-demographic data, transmission, treatment and prevention etc.

All data collected were analyzed using both descriptive and inferential statistics. The data were analyzed using descriptive statistics for demographic characteristics, treatment, prevention, transmission. Categorical variables are reported as number and percentage, and continuous variables are expressed as mean and standard deviation (SD). Comparison of scores between groups was based on analysis of variance chi-squared test and P value was set at P<0.05.

RESULTS

A prospective observational questionnaire study was conducted to assess the level of awareness and knowledge of covid 19 among public. The data was collected from 150 Participants using questionnaires. The questionnaire consisted of two sections. Section one was about demographic and socioeconomic data (age, gender, income, education) whereas section two was about epidemiological data of COVID 19.

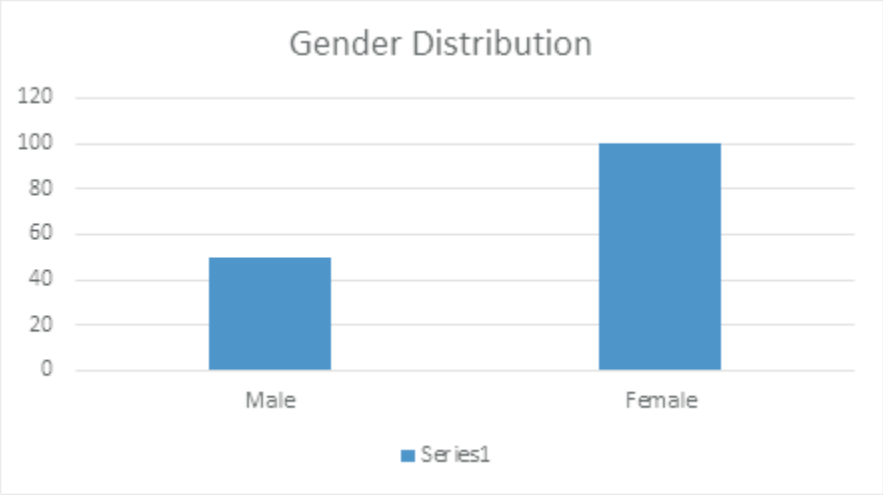

Fig. 1

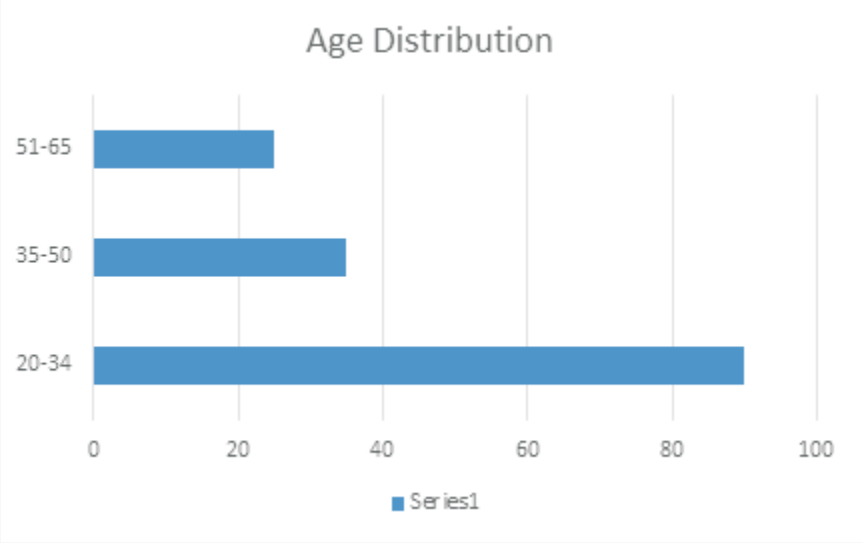

Fig. 2

Table 1

Gender	Yes	No	Don't No	Total
Female	85(85%)	9(9%)	6(6%)	100
Male	39(75%)	8(16%)	3(6%)	50

1. Distribution of Gender

The data was collected from 150 participants. Among 150 participants 50 (33%) of the respondents were males while 100 (67%) were females.

2. Distribution of Age

The age of the respondents participants was from 20 to 65 years old and it was distributed in 3 categories as follows: 20 to 34-yearsold (90 respondents or 60%),35 to 50 years old (35 respondents or 23%) and 51 to 65 years old (25 respondents or 17%).

3. Percentage of all answers between males and females

There was no significant difference (P<0.05) between males and females. 85% of the females gave the correct answers comparing with 78% of males.

4. Percentage of all answers among age groups

With regard to the correct answers among the age groups, there was a significant difference among the groups. The highest percentage of the correct answers were in the age group 20-34 years with 83% of people of this group had the correct answers followed by age group 35-50 years where 66% of the group had correct answers. The last group was 51-65 in which 56% only gave that correct answers.

5. Percentage of all answers among education groups

Education level played an important role in the COVID 19 knowledge and awareness. The number of respondents gave the right answers increased with the level of education. The highest percentage of respondents gave the correct answers was in the group who had college education (79%) followed by those who had high school (66%) and primary education (48%). The

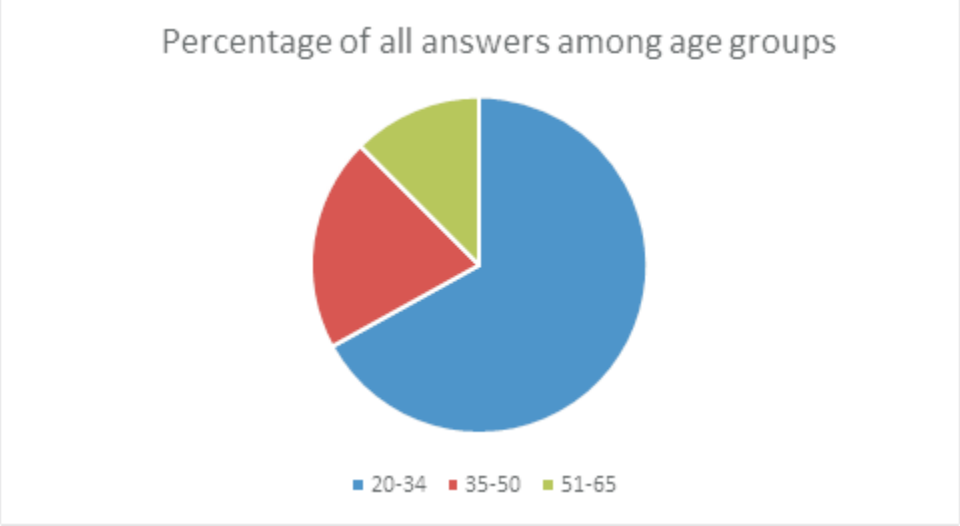

Fig. 3

Table 2

Education level	Yes	No	Don't No	Total
Primary	12	9	4	25
High school	38	12	8	58
College	53	9	5	67

difference was significant between college education level and high school and primary education at P<0.05.

DISCUSSION

This study shows that the awareness of a sample of public regarding COVID 19 pandemic following a recent outbreak is acceptable. The data was collected from 150 participants. Among 150 participants 50 (33%) of the respondents were males while 100 (67%) were females. The age of the respondents participants was from 20 to 65 years old and it was distributed in 3 categories as follows: 20 to 34-yearsold (90 respondents or 60%),35 to 50 years old (35 respondents or 23%) and 51 to 65 years old (25 respondents or 17%). Knowledge of disease symptoms and daily preventive measures was relatively good. Some of the respondents had a very low level of knowledge. The age group 20-34 years had also positively impacted the level of awareness which can be explained that at this age many of the respondents are already involved in COVID 19 campaigns about either prevention or treatment of the infected people.The other studies of COVID-19: Assessment of knowledge and awareness in Indian society carried out by Ashish Kumar Singh also indicates that the highest percentage of the correct answers were in the age group 26-34 years. There was no significant difference (P<0.05) between males and females. 85% of the females gave the correct answers comparing with 78% of males. The highest percentage of respondents gave the correct answers was in the group who had college education (79%) followed by those who had high school (66%) and primary education (48%). In a similar study of Louay Labban of Assessing the level of awareness and knowledge COVID 19 pandemic among Syrians, the highest percentage of respondents gave the correct answer was also belongs to groups of college education, that is about 87% . The difference was significant between college education level and high school and primary education at P<0.05.

LIMITATIONS

- Questionnaires can be only filled by People who can understand English and possess smartphones with Internet connectivity, so this cannot be generalized to the whole community.
- The time duration of the data collection was a little bit less.

CONCLUSION

The findings of this study suggest that public of a relatively high level of socioeconomic status have had good knowledge and awareness of COVID-19. In addition, good COVID-19 knowledge is associated with higher education level and medical profession suggesting that health professionals including medical doctors, pharmacists, nutritionists and dentists can play an important role in educating communities. Low education population have the least awareness and knowledge level. The health authorities should concentrate on these groups in order to further prevent COVID 19 pandemic from spreading.

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CONFLICTS OF INTEREST

The author declares no conflict of interests.

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