Original Article

Knowledge Attitude and Practices towards COVID-19 among Pregnant Patients Coming in Lady Aitchison Hospital, Lahore

Abida Sajid[1], Aqsam Sajid[2], Arham Sajid[3], Asif Hanif[4], Asma Wazir[5], Salik Cheema[6]

[1]Associate Professor, Gynae unit-5, Lady Aitchison Hospital, KEMU, Lahore
[2]4th Year MBBS student, SKZMDC, Lahore, [3]1st Year MBBS student, Shalamar Medical and Dental College,
[4]Associate Professor, University institute of public health, UOL, [5]Postgraduate Resident Gynae, Lady Aitcheson Hospital Lahore, [6]Postgraduate Resident Surgery, Mayo hospital Lahore

Correspondence: *Dr Abida Sajid*
Associate Professor
Gynae unit-5 ,Lady Aitchison Hospital
KEMU, Lahore.
Email: drsajidrafi@gmail.com

Abstract

Objective:To analyzing the Knowledge, Attitude and Practices towards COVID-19 among pregnant women coming to Lady Aitchison Hospital Lahore

Methodology:This cross sectional survey carried out at Lady Aitchison Hospital, KEMU, Lahore, Pakistan. After approval from the Advanced Study Board, the study was initiated and lasted for two months with a sample size of 600. Simple Random Sampling technique was used.

Results: Our results showed that the mean age of subjects was 27.63±5.20 years with minimum and maximum age as 18 and 65 years. The mean total knowledge score was 7.48 ± 2.34 while 455(85.69%) females had good knowledge (score ≥ 50%). 371(69.9%) females agreed that COVID-19 will finally be successfully controlled and 410(77.2%) females were also agreed that they have confidence that Pakistan can win the battle against the COVID-19 virus. There were 381(71.9%) females were gone to any crowded place and 476(89.6%) used to wear a mask when leaving home.

Conclusion: Our results concluded that pregnant females showed good knowledge, better attitude and adequate practices towards COVID-19. Furthermore good knowledge of COVID-19 is associated with positive attitude and safe practices. Health education programs helps in improving the knowledge, optimistic attitude and safe practices by focusing on lower knowledge for the prevention of covid- 19.

Keywords: COVID-19, mental health status, KAP,

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Introduction

The Coronavirus infection was first detected in December 2019, in the Wuhan city of Hubei Province, China mainly causing respiratory disease. It was a pandemic, a public health emergency all over the globe. It is an air born disease, spread by air born droplets from infected persons. The outbreak of COVID-19 was officially confirmed in Pakistan on 26th February 2020.

On 30th January 2020, World Health Organization (WHO) declared the emerging corona virus infection, mainly causing respiratory diseases.[1]It is known by many names, such as: COVID-19 and the Coronavirus

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and Novel Corona virus-2.It was a pandemic, a public health emergency all over the globe. This decision was made by the Emergency Committee of WHO in its second meeting, convened under the International Health Regulations (IHR) (2005). It was first detected in December 2019, In the Wuhan city of the Hubei Province, China, in the form of clusters of acute respiratory illness.[2] It is an air born disease, spread by the droplet from the infected persons. The disease is highly infectious and its main symptoms are fever, dry cough, a feeling of fatigue, myalgia and dyspnoae.[3,8] The outbreak of corona virus was officially confirmed in Pakistan on 26th February 2020, when a student came from Iran was diagnosed with COVID-19 in Karachi, Sindh Province. It spread very rapidly and number of cases increased in Sindh and Punjab [4]. The COVID-19 did not stay confined to Sindh and Punjab, but extended all over the country. Pakistan was one of the 198 countries which were affected by the COVID 19.Government of Pakistan decided to take some unprecedented measures to curb the COVID-19 transmission. On 15th March, the Government of Pakistan implemented 'Lockdown. The lockdown included suspension of public transport, closing markets, restaurants and public spaces. Schools, colleges, universities and all kinds of educational institutes were closed. People were advised to stay at home during the outbreak of COVID-19.All these steps were implemented to reduce the contact rate with others. People were also advised to wear a face mask outside of their homes and to implement social distancing, to limit contact as much as possible and ultimately, limit the spread of COVID-19. Thus the battle against COVID-19 started in Pakistan and it was up to the people of Pakistan to show commitment towards these Standard Operating Procedures (SOP's). The number of cases increased exponentially and the curve is still going upwards. The peak in Pakistan is expected to come on mid-July, 2020.[5]

Isolation facilities have been made in the major hospitals and special wards have been created, all to house the infected and take care of them. Testing facilities for COVID-19 have been made available in public and some approved private laboratories. These testing facilities use PCR and ELISA to diagnose cases of COVID-19. This also helps in Contact Tracing and detection of hot spots for the Coronavirus.

The fight against COVID-19 is still continuing, we can win this war with highest success and achieve our goal by the implementing the SOP's and control measures in the community and reduce the transmission rate as much as possible.

According to the KAP theory, this is largely affected by their Knowledge, Attitude and Practices (KAP) towards COVID-19.It was learned from the SARS outbreak in 2003 that knowledge, attitude and practices towards infectious diseases relate directly to the level of fear, stress and panic among the public, which can further complicate all the attempts that have been made to prevent the spread of disease. [6, 7]

We have to educate the people and motivate them and by creating awareness towards COVID-19, as there are gaps between people's awareness and their desired actions. Media and other departments in educating the masses is a very good way of creating awareness among the masses. Awareness can modify the behavior of people towards outbreak. It has been proven through research that a change in community's behavior can lessen the spread of any disease outbreak [8]. Thus effective media reporting, which includes giving authentic news and sieving false baseless pieces of information must be carried out during the COVID-19 outbreak. We design this study to know the level of knowledge, attitude and practices of the patients, coming to Lady Aitcheson Hospital (LAH), towards COVID-19.This is the first study of its kind to be carried out at our hospital.

Methodology

The study design was a cross sectional survey, carried out at Lady Aitchison Hospital, KEMU, Lahore, Pakistan. After approval from the Advanced Study& Review board, the study was initiated. The study was carried out over a period of two months (1st July till 31st August, 2020) and approximately 600 consenting patients participated in the study [5]. Simple Random Sampling technique was used.

- **Inclusion Criteria:** Every Patient, that gives consent to being included in the study, will be included in the study
- **Exclusion Criteria:** Patients that don't give consent to being included in the study. Critically ill patients will also not be included in the study.

Data Collection Procedure: A patient that comes to LAH will follow a specific routine; each patient that comes into LAH has to get an entrance slip made by the registration office, before they can see a Doctor. After finishing examination and prescription, the patient

heads over to registration office, where they will have a Discharge Slip made. Along with making the discharge slip, the patient will be asked whether they want to fill a questionnaire about the COVID-19 outbreak. Patients who agree to it will be given the questionnaire. Patients that are not literate, will be answered the questions verbally and their questionnaires will be filled alongside by the reception staff. Patients will also fill a short Profile Form that will take their name and address, their age, whether they are educated, and their monthly income, which will be used to classify whether they belong to the Lower, Middle or Higher Socioeconomic Class.

Once all the responses have been collected, each questionnaire will be marked.

The questionnaire has been taken from the World Health Organization (WHO) Resource Materials of COVID-19.[5]

For Knowledge: There were a total of 12 questions in the survey

- A correct answer scores 1 mark
- A wrong answer scores no mark
- A 'No Opinion' scores no mark

Each variable's score was totaled, thus the score ranged from 0-12. A score less than 6 represented poor knowledge and score of more than 6 considered as good knowledge.

For Attitude: There were a total of 2 questions in the survey.

- A correct answer scores 1 mark
- A wrong answer scores no mark
- A 'No Opinion' scores no mark

Each variable's score was totaled, thus the score ranged from 0-2. A score less than 1 represented poor knowledge

For Practice: There were a total of 2 questions in the survey

- A correct answer scores 1 mark
- A wrong answer scores no mark
- A 'No Opinion' scores no mark

Each variable's score was totaled, thus the score ranged from 0-2. A score less than 1 represented poor knowledge

Data Analysis Procedure: Once all responses have been collected, the score for each variable will be tabulated. The average score, range and standard deviation will be calculated along with percentages of different answers to each question. This study will bring light to the amount of awareness different people have. It will become clear that which classes of people and which age groups give importance to the COVID-19 outbreak, and have been implementing SOP's. The study will tell what classes of people should be targeted for giving awareness about the virus.

Results

The mean age of subjects was 27.63±5.20 years with minimum and maximum age as 18 and 65 years. The mean total knowledge score was 7.48 ± 2.34 while 455(85.69%) females had good knowledge (score ≥ 50%). (Table I)371(69.9%) females were agree that COVID-19 will finally be successfully controlled and 410(77.2%) females also agreed that they have confidence that Pakistan can win the battle against the COVID-19 virus. There were 381(71.9%) females were gone to any crowded place and 476(89.6%) used to wear a mask when leaving home. (Table II)

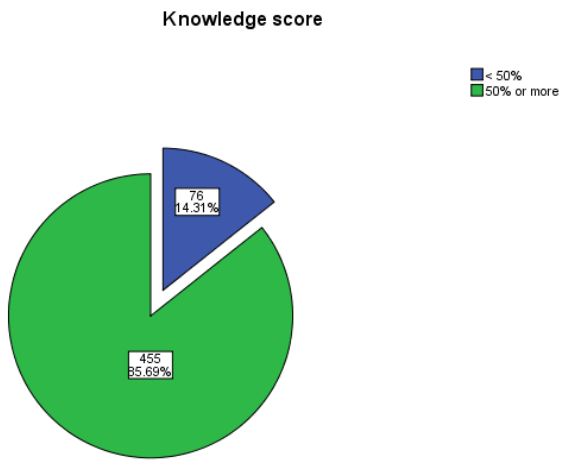

Figure 1: knowledge score of pregnant females regarding covid-19

Table I: Knowledge Score Analysis

	Age (years)	Total Score
Mean	27.63	7.48
SD	5.20	2.34
Range	47	12.00
Minimum	18	0
Maximum	65	12.00

Table II: KAP Questionnaire towards Covid-19 among Pregnant patients.

Knowledge	**True**	**False**	**I don't know**
The main clinical symptoms of COVID-19 are fever, fatigue, dry cough, and myalgia	499(94%)	19(3.6%)	13(2.4%)
Unlike the common cold, stuffy nose, runny nose, and sneezing are less common in persons infected with the COVID-19 virus	273(51.4%)	186(35%)	72(13.6%)
There currently is no effective cure for COVID-2019, but early symptomatic and supportive treatment can help most patients recover from the infection	423(51.4%)	46(8.7%)	62(11.7%)
Not all persons with COVID-2019 will develop to severe cases. Only those who are elderly, have chronic illnesses, and are obese are more likely to be severe cases.	250(47.1%)	228(42.9%)	53(10%)
Eating or contacting wild animals would result in the infection by the COVID-19 virus	170(32%)	217(40.9%)	144(27.1%)
Persons with COVID-2019 cannot infect the virus to others when a fever is not present.	129(24.3%)	330(62.1%)	72(13.6%)
The COVID-19 virus spreads via respiratory droplets of infected individuals	389(73.3%)	85(16%)	57(10.7%)
Ordinary residents can wear general medical masks to prevent the infection by the COVID-19 virus.	399(75.1%)	84(15.8%)	48(9%)
It is not necessary for children and young adults to take measures to prevent the infection by the COVID-19 virus	156(29.4%)	303(57.1%)	72(13.6%)
To prevent the infection by COVID-19, individuals should avoid going to crowded places such as train stations and avoid taking public transportations	441(83.1%)	51(9.6%)	39(7.3%)
Isolation and treatment of people who are infected with the COVID-19 virus are effective ways to reduce the spread of the virus	425(80.1%)	40(7.5%)	66(12.4%)
People who have contact with someone infected with the COVID-19 virus should be immediately isolated in a proper place. In general, the observation period is 14 days.	424(79.9%)	42(7.9%)	65(12.2%)
Attitude	**Agree**	**Disagree**	**I don't know**
Do you agree that COVID-19 will finally be successfully controlled?	371(69.9%)	118(22.2%)	42(7.9%)
Do you have confidence that Pakistan can win the battle against the COVID-19 virus?	410(77.2%)	121(22.8%)	0(0%)
Practices	**Yes**	**No**	
In recent days, have you gone to any crowded place?	381(71.9%)	149(28.1%)	
In recent days, have you worn a mask when leaving home?	476(89.6%)	55(10.4%)	

Discussion

COVID-19 is a new highly infectious disease poses the serious threat to human health. In the presence of the serious threats and absence of appropriate treatment and vaccine, preventive and control measures are of extreme importance to curb the infection rate and disease spread. This means people's adherence to preventive and control measures are needed, which in turn effected by their knowledge, attitude and practices.

This is one of the initial studies carried out in the consolidated phase that examine the KAP towards covid-19 among the pregnant patients coming to Lady Aitchison Hospital Lahore Pakistan. In this research the primary target are female, from all socio-economic classes and with various level of education. We found an overall correct rate of 85.69% on knowledge questionnaire, showing that most of the respondents are knowledgeable about COVID-19. This is comparable to an Iranian study in which they achieved the similar results (85%) for knowledge test, however a lower rate than Chinese study which had (90%) correct rate carried out in the rapid rise phase of this disease.[9,10]

Most of the participants have a moderate attitude for the covid-19 pandemic, 69.9% females were agreed that COVID-19 will finally be controlled successfully and 77.2% were also confident that Pakistan can win the battle against the COVID-19. When we compared to KAP-study in bordered population of North Thailand, Pakistani population showed higher KAP score towards COVID-19. In Thailand, 73.4% had poor knowledge of disease prevention and control; while in our study 14.1% had poor knowledge of disease. Furthermore, 28.5% had poor attitude of disease prevention and control in Iranian study; while in our study 22.8% had poor attitude towards disease prevention and control [9, 10]. In Thailand only 13.6% had proper skills to prevent and control the disease while in Iran 16.7% practiced

the appropriate skills and in our study 28.1% participants showed excellent practice score [9, 10]. The main reason for the score differences could be the period in which study was done. In Iran and in Pakistan the survey was conducted in the main phase of outbreak when people were actively learn knowledge from various media channels about its routes of transmission and ways of prevention, in Thailand the study population was not affected by the disease.[4, 7, 9, 10]

Although attitude towards COVID-19 were optimistic, majority of the respondents took precautions: not going out to crowded places and wore a mask when going outside, 72.6% and 77.8% respectively. These control measures and preventive practices could be due to strict measures implemented by the government and participant's good knowledge regarding the high infectivity of COVID-19 virus, which can be easily transmitted from one person to another via respiratory droplets.[9, 15]

Furthermore, our study showed higher knowledge score regarding COVID-19 with lower likelihood of negative attitude and tendency of risky practices towards COVID-19 in this study. These findings show the importance of health education and could raise the awareness, which may also result to improve the attitude and practices of pregnant ladies. Our findings of demographic variables are consistent with the previous KAP-Studies on SARS and COVID-19 in China.[5, 11]

During the SARS epidemic 70.1-88.9% of the Chinese residents believed that SARS can be successfully controlled and 94.7-100% had confident that china can win the war against SARS. These figures were almost equivalent to the results of our study in achieving the final success and winning the battle against COVID-19.[12] These findings suggested that health education intervention were more effective if it target the more vulnerable groups: females with low socio-economic status and with lower level of education [11, 13].

The strength of the study lies that it is the one of the initial study conducted on pregnant females during the critical phase. The sample is representative of all pregnant females.

Limitation of the study is that it is carried in a single hospital, only female participants and from urban areas of Lahore city.

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Conclusion

Our results concluded that pregnant females showed good knowledge, better attitude and adequate practices towards COVID-19. Furthermore, good knowledge of COVID-19 is associated with positive attitude and safe practices. Health education programs helps in improving the knowledge, optimistic attitude and safe practices by focusing on lower knowledge for the prevention of Covid- 19.

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