

Awareness, practice, knowledge and attitude toward the covid 19 among antenatal patients at tertiary care Hospital

ABSTRACT

Objective: To determine the awareness, practice, knowledge and attitude toward the Covid 19 among antenatal patients at tertiary care Hospital.

Methodology: This was a cross sectional survey which was conducted at Gynae and obstetrics department at Liaquat University Hospital Hyderabad. Study duration was six months from March 2020 to August 2020. All the pregnant women visited antenatal clinic age 18 to 40 years and either of parity were included. All the pregnant females were interviewed by using a questioner regarding awareness, attitude and practice toward the Covid19 after taking informed consent. All the data was recorded via study proforma. Data was analyzed by using SPSS version 20.

Results: Total 173 pregnant women were interview regarding Covid-19, their mean age was 29.34±23.12 years. Most of the women were presented with age between 28 to 37 years. 70.5% were multigravida and majority of women were uneducated. Mostly women 75.1% had heard regarding. 72.8% women said, they should stay at home and 25.4% said should wear the face mask, while 38.7% said the women should inform the health care provider in advance before visit to Hospital if developed any symptom. Most of the women had good knowledge and attitude, while preventive practice was found to be unsatisfactory.

Conclusion: knowledge and awareness were found to adequate; while preventive practice has been observed unsatisfactory among pregnant women during antenatal clinic. Clinicians should provide appropriate counseling to reassure and clarify doubts of pregnant women towards COVID-19 during the antenatal.

Keywords: Covid-19, awareness, pregnancy.

Introduction

The current emerging respiratory disease known as the novel Coronavirus 2019 (COVID-19) is now an international concern and a pandemic with non-availability of treatment.¹ It is a newly emerged respiratory illness that is produced by a novel corona virus, which are single-stranded RNA viruses.¹ The COVID-19 pandemic is causing huge stress on the healthcare system of all countries in the world, putting on both social and economic distresses.² COVID-19 may predispose pregnant women to higher risks of severe disease and poorer neonatal outcome. Psychological sequelae of this pandemic may pose a greater conundrum than its clinical aspects.³ Pregnancy itself poses logistical challenges and conundrums for obstetricians managing pregnant women with suspected or diagnosed with COVID-19.³ The current COVID-19 pandemic has affected almost 17.3 million victims worldwide with mortality of almost 674K.⁴ Pregnancy is one of the most susceptible conditions for COVID-19 infection, but limited data is currently available about the clinical

characteristics of pregnant women with the disease.⁴ Although higher maternal age, presence of comorbidities, and high body mass index have been considered as risk factors for developing severe COVID-19 in expecting mothers.⁵ Pregnancy is a physiological state that predisposes women to viral respiratory infection due to the physiological changes in the immune and cardiopulmonary systems.^{2,6,7} Another factor as a high level of fear of COVID-19 infection among the pregnant population observed with a higher level of anxiety and stress related symptoms as most of women were worried about their health as well as the health of their newborn babies.⁹ Some of the stress-inducing factors that affect women in pregnancy worldwide include inadequate resources, poor employment conditions, the stress of family and household responsibilities, challenges in intimate relationships, and pregnancy complications.^{8,9} Therefore, pregnant women and household members should be educated about personal hygiene, basic Infection Prevention and Control (IPC) measures, and how to care as safely as possible for the person suspected of having COVID-19 to prevent the infection from spreading to household contacts,^{2,11,11} as there was most of the pregnant women found with poor knowledge and inappropriate practice.¹² However this study has been conducted to assess determine the awareness, practice, knowledge and attitude toward the Covid 19 among antenatal patients at tertiary care Hospital

Material and methods

This was a cross sectional survey which was conducted at Gynae and obstetrics department at Liaquat University Hospital Hyderabad. Study duration was six months from March 2020 to August 2020. All the pregnant women visited antenatal clinic age 18 to 40 years and either of parity were included. All the women those were not willing to participate in the study were excluded. All the pregnant females were interviewed during antenatal clinic regarding awareness, attitude and practice toward the Covid19 after taking informed consent. A questioner was adopted form previously recent published studied.^{5,13} All the data was recorded via study proforma. Data was analyzed by using SPSS version 20.

Results

Total 173 pregnant women were interview regarding Covid-19. Mean age of the women was 29.34±23.12 years. Out of all 70.5% were multigravida and majority of women were uneducated and low level of educations respectively. Out of all 71.1% women were from rural areas and mostly were housewives as shown in table.1

Mostly women 95.1% had heard regarding. Fig.1

Most of the women 86.1% were aware regarding fever as a symptom, 16.2% replied that headache is a symptom, 49.1% women said runny nose is the symptom, 51.4% said cough and 53.8% said breathing difficulty are the symptoms. 72.8% women said, they should stay at home and 25.4% said should wear the face mask, while 38.7% said the women should inform the health care provider in advance before visit to Hospital if developed any symptom. Table.2

Women adopted preventive measures, responses to attitudinal statements regarding covid-19 and practice regarding covid-19 are presented in table.3

TABLE: 1. Demographic characteristics of the women (n=173)

Variables	Frequency	%
Parity		
Primigravida	51	29.5
Multigravida	122	70.5
Educational level		
Illiterate	79	45.7
primary	73	42.2
secondary	19	11.0
Graduation	02	01.2
Residence		
Urban	50	28.9
Rural	123	71.1
Occupation		
Housewife	168	97.1
Employed	04	02.3
Own business	01	0.6
Age (mean+SD)	29.34+23.12 years	

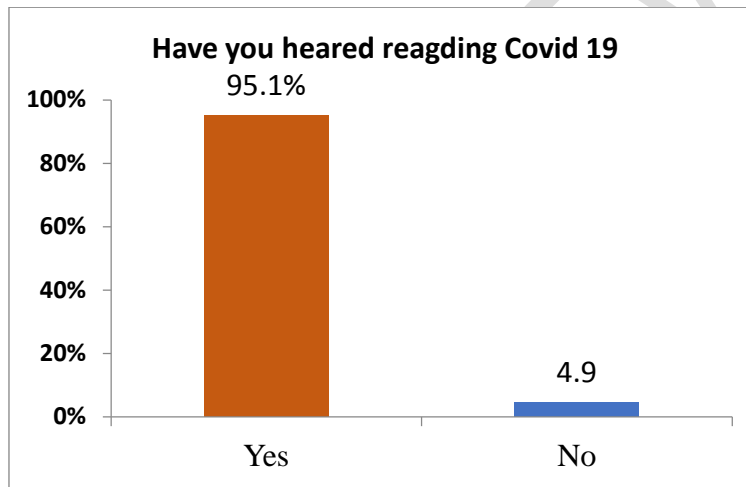


Fig:1. Frequency of awareness among pregnant women regarding Covid-19 (n=173)

TABLE: 2. Knowledge regarding symptoms and practice (n=173)

Questions	Variables	Frequency	%	
What are the symptoms of covid-19 infection?	Fever	Yes	149	86.1
		No	24	13.9
	Headache	Yes	28	16.2
		No	145	83.8
	Runny nose	Yes	88	50.9
		No	85	49.1
	Cough	Yes	84	48.6
		No	89	51.4
Breathing difficulty	Yes	80	46.2	
	No	93	53.8	
What will you do when you have the above	Stay home	Yes	126	72.8
		No	47	27.2
	Wear face mask	Yes	44	25.4

symptoms?		No	129	74.6
	Inform the health care provider in advance before visit to Hospital	Yes	67	38.7
		No	106	61.3

TABLE: 3. Awareness regarding preventive measures, attitude and practice n=173)

Questions		Frequency	%
Preventive measures			
Do you think avoid touching nose, eye and face with unwashed hand protect covid-19?	Yes	123	71.1
	No	50	28.9
Do you think wearing mask protect from covid-19?	Yes	117	67.6
	No	56	32.4
Do you think avoid hugging with people protect from covid-19	Yes	125	72.3
	No	48	27.7
Do you think drinking a lot of water can protect from covid-19?	Yes	133	76.9
	No	40	23.1
Do you think maintaining social distance can protect from covid-19?	Yes	127	73.4
	No	46	26.6
Do you think frequently washing hand for 20 second can protect covid-19?	Yes	149	86.1
	No	24	13.9
Responses to attitudinal statements regarding covid-19			
It is important to keep my distance from others	Yes	162	93.6
	No	11	6.4
washing hands is essential to protect myself from covid-19	Yes	148	85.5
	No	25	14.5
To protect myself from covid-19 exposure, I should stay home if I am sick, unless I am receiving medical care	Yes	137	79.2
	No	36	20.8
Covid-19 will eventually be successfully controlled	Yes	118	69.2
	No	55	31.8
Pakistan's strict measures can help win the battle against covid-19	Yes	128	74.0
	No	45	26.0
Compliance with ministry of health precautions will prevent spread of covid-19	Yes	149	84.1
	No	24	13.9
Practice related to covid-19			
Have you recently been to a social event involving a large number of people?	Yes	101	58.4
	No	72	41.6
Have you recently been to a crowded place?	Yes	106	61.3
	No	67	38.7
Have you recently avoided cultural behaviors, such as shaking hands?	Yes	90	52.0
	No	83	48.0
Have you been practicing social distancing?	Yes	94	54.3
	No	79	45.7
Recently, have you frequently washed your hand with soap and water, for at least 40 seconds, especially after going to a public place, or after	Yes	133	76.9
	No	40	23.1

nose-blowing, coughing or sneezing?	No		
-------------------------------------	----	--	--

Discussion

COVID-19 is a new viral disease, and health researchers are currently evaluating its effects on pregnant women and their unborn children. In this study most of the women were presented with age between 28 to 37 years. In this study mean age of the women was 29.34 ± 23.12 years. On other hand Degu A et al¹ reported that the mean age of study participants was 27.19 ± 4.72 years. Ding W et al¹⁴ also reported that the mean maternal age was 29.1 ± 4.0 years. In this study 70.5% were multigravida and majority of women were uneducated. However in the study of Maharlouei N et al⁵ reported that 22% were below high school diploma, 36.9% had high school diploma and 41.1% had university degree. In this study mostly women 95.1% had heard regarding covid-19. Similarly Degu A et al¹ reported that the almost all of the respondents 399 (100%) mentioned that they had ever heard about COVID-19. Adhikari SP et al¹⁵ also reported that the almost all the participants had heard about COVID-19 (96.6%). In this study, there was a satisfactory knowledge and positive attitude among the study participants, but unfortunately there was a big ignorance of preventive practice among these women and this may because of low level of education in out rural communities because in this study mostly women were from rural areas. On other hand Aboma D et al¹⁶ reported that the overall, 63.1% of the visitors had high knowledge. The majority, 170(68.8%), felt self-efficacious to control Covid-19. 207(83.3%) believed that Covid-19 pandemic is a stigmatized disease. Maharlouei N et al⁵ reported that the frequent hand washing (73.7%) and avoidance of shaking hands (53.0%) were the dominant practices.¹⁶ The results of this study indicated that the overall knowledge regarding COVID-19 was poor in less than 9% of pregnant women, although about 70% of the cases achieved acceptable knowledge score. Like knowledge regarding symptoms of covid-19 in participants of this study, the Aboma D et al¹⁶ reported that one hundred ninety-eight (83.0%) of pregnant mothers visiting the centre knew the main clinical symptoms as fever, fatigue, dry cough, and myalgia. 42.7 % of the respondents mentioned other symptoms such as the stuffy nose, runny nose, and sneezing, which distinguishes from common cold or the flu. In this study there was no proper knowledge regarding covid-19 but mostly patients heard regarding it that it is very harmful to human health, we observed that the education in the common population is very important for the management and prevention of these type diseases. However various research studies clearly indicate the importance of improving residents' COVID-19 knowledge via health education, which may also result in improvements in their attitudes and practices towards COVID-19,¹⁷ and these findings further suggest that the health education intervention would be more effective if it targets certain demographic groups, for example, the COVID-19 knowledge may be greatly increased if the health education programs are specifically designed for pregnant women.¹⁷ Health education programs and health care provider counseling can play an important role in improving COVID-19 knowledge and also are helpful for encouraging an optimistic attitudes and maintaining safe practices.

Conclusion

Knowledge and awareness were found to be adequate; while preventive practice has been observed unsatisfactory among pregnant women during antenatal clinic. There was a big ignorance among the women and few women were in stress regarding their babies. Clinicians should provide

appropriate counseling to reassure and clarify doubts of pregnant women towards COVID-19 during the antenatal.

References

1. Degu A, Nibret G, Gebrehana H, Getie A, Getnet B. Knowledge and Attitude Towards the Current Pandemic Corona Virus Disease and Associated Factors Among Pregnant Women Attending Antenatal Care in Debre Tabor General Hospital Northwest Ethiopia: An Institutional-Based Cross-Sectional Study. *International Journal of Women's Health*. 2021;13:61.
2. Fikadu Y, Yeshaneh A, Melis T, Mesele M, Anmut W, Argaw M. COVID-19 Preventive Measure Practices and Knowledge of Pregnant Women in Guraghe Zone Hospitals. *International Journal of Women's Health*. 2021;13:39.
3. Lee RW, Loy SL, Yang L, Chan JK, Tan LK. Attitudes and precaution practices towards COVID-19 among pregnant women in Singapore: a cross-sectional survey. *BMC pregnancy and childbirth*. 2020 Dec;20(1):1-0.
4. Syed S, Noreen H, Masood H, Batool I, Gul H, Naheed N. COVID-19 and Pregnancy Outcome: An Experience in 'COVID-19 Management Designated' Tertiary Care Hospital, Rawalpindi, Pakistan. *Journal of Rawalpindi Medical College*. 2020 Aug 16;24(Supp-1):85-91.
5. Maharlouei N, Asadi N, Bazrafshan K, Roozmeh S, Rezaianzadeh A, Zahed-Roozegar MH, Shaygani F, Kharmandar A, Honarvar B, Hemyari C, Omidifar N. Knowledge and Attitude regarding COVID-19 among Pregnant Women in Southwestern Iran in the Early Period of its Outbreak: A Cross-Sectional Study. *The American journal of tropical medicine and hygiene*. 2020 Dec 2;103(6):2368-75.
6. Rochelson B, Nimaroff M, Combs A, et al. The care of pregnant women during the COVID-19 pandemic – response of a large health system in metropolitan New York. *J Perinat Med*. 2020;48(5):453–461.
7. Muchinsky PM. Maternal psychological distress during Covid-19. *Psychol Appl to Work an Introd to Ind Organ Psychol Tenth Ed Paul*. 2020;53:1689–1699.
8. Woods SM, Melville JL, Guo Y, Fan MY. Psychosocial stress during pregnancy. *Am J Obst Gynecol*. 2010;202(1):61-7
9. : Nausheen S, Bhamani S, Makhdoom A, Sheikh L. Fear of COVID-19 among pregnant women in Pakistan: a cross-sectional study. *Int J Community Med Public Health* 2020;7:4749-55
10. Beheshtkhoo N, Alipour MH, Nemat R, et al. A review of COVID-19: the main ways of transmission and some prevention solutions, clinical symptoms, more vulnerable human groups, risk factors, diagnosis, and treatment. *J Environmental Treat Tech*. 2020;8:884–893
11. Abdollahpour S, Khadivzadeh T. Improving the quality of care in pregnancy and childbirth with coronavirus (COVID-19): a systematic review. *J Matern Neonatal Med*. 2020;1–9.
12. Ayele AD, Mihretie GN, Belay HG, Teffera AG, Kassa BG, Amsalu BT. Knowledge and Practice to Prevent Against Corona Virus Disease (COVID-19) and Its Associated Factors Among

Pregnant Women in Debre Tabor Town Northwest Ethiopia: a Community Based Cross-Sectional Study.2020;1-28

13. Juliet Ifeoluwa. KNOWLEDGE, ATTITUDE AND PRACTICE OF PREVENTIVE MEASURES TOWARDS COVID-19 AMONG PREGNANT WOMEN ATTENDING SELECTED PRIMARY HEALTH CENTRE'S IN OSOGBO, OSUN STATE Adegoke. International Journal of Nursing, Midwife and Health Related Cases. 2020;6;2;29-45

14. Ding W, Lu J, Zhou Y, Wei W, Zhou Z, Chen M. Knowledge, attitudes, practices, and influencing factors of anxiety among pregnant women in Wuhan during the outbreak of COVID-19: a cross-sectional study. BMC pregnancy and childbirth. 2021 Dec;21(1):1-9.

15. Adhikari SP, Pariyar J, Sapkota K, Gurung TK, Adhikari SR. Evaluation of Knowledge, Attitude, Practice and Hospital Experience Regarding COVID-19 Among Post-Partum Mothers at a Tertiary Care Center: A Cross-sectional Study. Kathmandu University Medical Journal. 2020 Nov 17;18(2):10-4.

16. Aboma D, Gurmu S..Level of Knowledge and Preventive Practices against Covid-19 Pandemic Infection among Pregnant Women Visiting Serbo Health Center, Jimma Town South West Ethiopia. J Women's Health 2021;Care 10:510. doi:10.35248/2167- 0420.21.10.510.

17. Mohamed AI, Elsayed DM, Abosree TH, Eltohamy NA. Pregnant Women's Knowledge, Attitude and Self-Protective Measures Practice regarding Corona virus prevention: Health Educational Intervention. Egyptian Journal of Health Care. 2020 Dec 1;11(4):260-78.

UNDER PEER REVIEW