Assessment of Pregnant women's Practices Concerning Measures taken by Pregnant Women for Prevention of (Covid19) at Primary Health Care Centers in Baghdad City

Athraa Kadeem Kaream[1], Rabea Mohsen Ali[2]

[1]MSc. Student, [2]Professor, University of Baghdad, College of Nursing, Maternal and Neonate Nursing Department

Abstract

Corona virus is one of the major pathogens that mainly target the respiratory system of humans. Pregnant women considered to be a special population group because of the unique 'immune suppression' caused by pregnancy. The immunologic and physiologic changes might make pregnant women at higher risk of severe illness or mortality with Covid-19, compared with the general public.

Objectives: To assess pregnant women's practices concerning measures taken by pregnant women for prevention of (Covid19) at primary health care centers in Baghdad City. **Methodology:** A descriptive (cross sectional) study has been carried out on Non-probability sample of (150) of pregnant who attend five Primary health care centers. Study has been conducted for the period of February 8th to 18th March 2020.

Results: The results of the current study indicate that (33.3%) of pregnant women are with age group (21-25) year, (28%) with age group (16-20), and (27.3%) with age group (26 -30) years. (22.7%) of study sample are graduated from intermediate school, (76.7%) of pregnant women are housewives, (51.3%) of sample are resident in a high class neighborhood, (76%) of pregnant women are moderate monthly income, (34.7%) of pregnant women are gravid for (3) times, (81.4%) have (1-2) births, (53.3%) of pregnant women reporting they have normal vaginal delivery, (34%) of pregnant women have good level of practices regarding measures taken by pregnant women for prevention of (Covid19), (34%) have fair levels of practices, and (32%) have poor levels.

Conclusion: The study concludes that half of pregnant women have good level of practices regarding prevention of corona virus, and more than half of pregnant women are showing fair level of health behaviors toward reduction of corona virus spread.

Recommendations: the pregnant women should be supplied with instructional booklets in order to raise practice level of preventive measures of COVID-19 infection at the beginning of their pregnancy.

Keywords: *Assessment, Pregnant, Precaution Measures, Practices, COVID-19.*

Introduction

Corona virus is a severe disorder that mainly affects the respiratory systems of individuals. Severe acute respiratory syndrome (SARS)-CoV and Middle East respiratory syndrome (MERS)-CoV have both been reported as Corona virus epidemics in the past[1]. The variations are in the genetic make-up, clinical manifestations, case mortality, and global spread rate. SARS-CoV2, also known as the coronavirus virus, is a virus that causes coronavirus disease 2019 (COVID-19), which has become the world's newest health threat [2]. The most common COVID-19

symptoms include fever, dry cough, dyspnea, headache, sore throat, rhinorrhea, and hemoptysis, which can range from mild (or no symptoms) to severe illness [3].

Pregnancy is a state of partial immune suppression which makes pregnant women more vulnerable to viral infections, and the morbidity is higher even with seasonal influenza. Therefore, the COVID- 19 epidemic may have serious consequences for pregnant women. However, information on the effect of COVID-19 on the course and outcome of pregnancy in the first and second trimesters is not available yet. As COVID-19 still appears to be spreading, more infections in pregnant women are likely to be encountered in different regions, countries, and continents. Therefore, it is important that pregnant women and their families, as well as the general public and health- care providers, receive as accurate information as possible. During infectious disease outbreaks most frequently researched preventive behaviors and have proven to the spread of pandemics [4].

Materials and Methods

A descriptive (cross sectional) study has been carried out on Non-probability sample of (150) of pregnant women's Practices Concerning Corona Virus Disease Precaution Measures who attend five Primary health care centers. Study has been conducted for the period of February 8th to 18th March 2020. The questionnaire has been used as a tool of data collection and consist of three main parts; including Scio-Demographic Information, Pregnant Women History, and pregnant women's practices regarding measures to be taken by pregnant woman to prevent (COVID 19). A pilot study conducted on (15) pregnant women to determine the study reliability, descriptive and inferential statistic approaches are used for data analysis. Data are analyzed through the use of (SPSS) ver.24.

Results and Discussion

Discussion their Socio-demographic Characteristics of study (Table 1):-

The present study has reported that the highest percentage (33.3) of the study sample is at age group range (21 – 25) years old. This finding is consistent with, Abdulla, Akram, & Mardan Abullah,(2021) in Iraqi study which indicated that the highest percentage of the participants in the study were between the ages of 20 and 29, accounting for 50.5 percent of the total. And the study found that the age group range (36) years old has the lowest percentage (2.7) of the study sample than any other age group [5].

Regarding the education level refers that the highest percentage among pregnant women are graduated from intermediate school (22.7%), (21.3%) are graduated from primary school, while (20.6%) are graduated from secondary school, and (18.7%) are Institute/college graduate. This finding is consistent with, Ferdous, et al. (2020) which indicates that the level of education for study sample was primary in (35%), secondary in (50%), and tertiary (15%) [6].

Regarding the occupational status indicates that (76.7%) of pregnant women are housewives and only 23.3% of them are working as governmental employee. This result supported by Maharlouei et al [7] who reported in the study that the majority of the sample (House wives) account for approximately 488 (90.4%) of the total sample, and the lowest percentage of the group, 52 (9.6%), was employed (7) , and Lee et al,(2020) reported in the study that the majority of the sample are (House wives), accounting for approximately 116 (69.5%) of the total sample, while the lowest level, 51 (30.5%), are employed[8]. Regarding monthly income, (76%) of pregnant women are perceived moderate monthly income. This study agree with yassa et al,(2020) who reported that (52.9%) of pregnant women are perceived moderate monthly income [9]. This study disagree with Maharlouei et al (2020) also observed that majority of study are high socioeconomic status[7].

Discussion of Reproductive Health Characteristics (Table 2) :-

Regarding reproductive history the results of present study reveals that pregnant women are gravid for (3) times as referred by high percentage (34.7%), the parity is shows that (81.4%) of pregnant women have (1-2) births, while (14.6%) of them have (3-4) births. Regarding mode of delivery, (53.3%) of pregnant women reporting they have normal vaginal delivery and (46.7%) having cesarean section, (61.3%) have delivered in hospital and only (38.7%) are delivered at home. This result agree with: Nie ,et al,.2020 who found that the majority of the participants in the study are pregnant for (1) time, as evidenced by a high number of 1 13 (39.4%), while the most of the participants have (1-2) parity, accounting for 66.7 percent of the total (3.0 percent) (10). Regarding the mode of delivery and delivery place, this study disagree with: Nile,et al,.2020 who found that of the Twenty-two (81.5%) women delivered via cesarean section, and 5(18.5%) had vaginal deliveries , (74%) of women were worried about being infected with COVID-19; (53%) of women would choose having a caesarean section over a vaginal delivery [10].

Overall Assessment of Measures taken by Pregnant Women for Prevention of Corona Virus among) Table 3):-

Regarding the measures taken for prevention of corona virus among pregnant women the study results presents the mean scores which indicate fair level. The overall assessment of measures taken by pregnant women for prevention of corona virus the results reveals that pregnant women have fair (34%), good (34%) , and poor (32%) levels of practices regarding measures taken to prevent corona virus.

The present results study supported by Metwally, & Desoky (2020) Who have reported that all of the women (100%) were aware of ongoing COVID-19 infection. Most of them reported fever and cough to be symptoms of COVID-19 infection (87.3% & 85.1% respectively). More than two thirds of women (70.8%) reported to wear face mask when they had that symptoms, (62.7%) of them reported to stay at home and (52.7%) reported to inform their health care provider before going to hospital. The majority of women (89.2%) reported that the COVID-19 virus spreads via respiratory droplets of infected individuals[11]. While Abdulla, Akram, & Mardan Abullah (2021) that about 2/3rd of the participants were presented with poor practice (67.25%), while less than 1/3rd (32.75%) with good practice .For the participant practice response for preventing COVID-19 show that 73 (18.25.0%) choose the washing hands frequently as major preventive way, 59 (14.75%) said that a distance for 2 meters and more between the people can prevent the infection with disease, 123 (30.75%) choose wearing mask, (75.16%) choose do not touch eye, nose and mouth common way to prevent the infection, and 78 (19.5%) mentioned staying home was the way to prevent infection with the disease [5].

Correlation among Practices related to Measures for Prevention COVID19 among Pregnant Women with regard to their Socio-demographic Characteristics (Table 4):- . The current study results shows that there are significant relationships (positive) among pregnant women practices with regard to their level of education and occupation at p-value= 0.003 and 0.006, and there are high significant relationships (strong positive) among pregnant women practices with regard to their monthly income at p-value= 0.001 respectively. This result of the study agrees with Metwally& Desoky (2020), that reported there were statistically significant relations between the studied women's level of practice about preventive measures against COVID-19 infection and their education level and parity with p-value <0.05. Women who had university education had higher practice level than other education levels (26.53% & 20.77% respectively), and the women whose income level was inadequate and just meet life expenses had higher positive practice about COVID-19 infection than those who had insufficient income (90.63%,

65.82 & 63.64% respectively) [11].

Correlation among Practices related to Measures for Prevention COVID19 among Pregnant Women with regard to their Reproductive Characteristics) Table 5):-

Table (1): Distribution of Pregnant Women According to their Socio-demographic Characteristics (N= 150)

%	F	Characteristics		List
28	42	16 – 20 year	Age (M±SD=24±5)	1
33.3	50	21 – 25 year		
27.3	41	26 – 30 year		
8.7	13	31 – 35 year		
2.7	4	36 ≤ year		
6	9	Doesn't read & write	Level of education	2
10.7	16	Read & write		
21.3	32	Primary school		
22.7	34	Intermediate school		
20.6	31	Secondary school		
18.7	28	Institute/college +		
76.7	115	Housewife	Occupation	3
23.3	35	Employee		
23.3	35	Low	Monthly income	5
76	114	Moderate		
0.7	1	High		

f: Frequency, %: Percentage, M: Mean, SD: Standard deviation

Table (2): Distribution of Pregnant Women according to their Reproductive Health Characteristics (N=150)

%	F	Characteristics		List
11	7	1	Gravidity	1
21.3	32	2		
34.7	52	3		
27.3	41	4		
12	18	5+		
4	6	None	Parity	2
81.4	122	1 – 2		
14.6	22	3 – 4		
53.3	80	Normal vaginal	Mode of delivery	8
46.7	70	Cesarean section		
38.7	58	House	Delivery place	9
61.3	92	Hospital		

f: Frequency, %: Percentage, M: Mean, SD: Standard deviation

Table (3): Overall Assessment of Measures taken by Pregnant Women for Prevention of Corona Virus among

SD	M	%	F	Levels
7.042	13.18	32	48	Poor
		34	51	Fair
		34	51	Good
		100	150	Total

f: Frequency, %: Percentage, M: Mean for total score, SD: Standard Deviation, Poor= 0 – 8; Fair= 9 – 17; Good= 18 – 26

Table (4): Correlation among Practices related to Measures for Prevention COVID19 among Pregnant Women with regard to their Socio-demographic Characteristics (N=150)

Sig	p-value	Pearson correlation	Practices Variables
N.S	0.734	-0.028	Age
S	0.003	0.244	Level of education
S	0.006	0.223	Occupation
H.S	0.001	0.296	Monthly income

P: probability, Sig: Significance, N.S: Not Significant, S: Significant, H.S: High significant

Table (5): Correlation among Practices related to Measures for Prevention COVID19 among Pregnant Women with regard to their Reproductive Characteristics

Sig	p-value	Pearson correlation	Practices Variables
N.S	0.136	0.122	Gravidity
S	0.041	0.167	Parity
N.S	0.191	-0.107	Mode of delivery
N.S	0.402	0.069	Delivery place

P: probability, Sig: Significance, N.S: Not Significant, S: Significant, H.S: High significant

The study results present that there is significant relationships (positive) between pregnant women practices and their parity at p-value= 0.041, while there is no significant relationship has been reported among pregnant women practices with regard to gravidity, mode of delivery, and delivery place. This study supported by Metwally& Desoky. (2020), Multiparous women had a higher level of practice than primiparous women, according to the study (64.40 % & 6.98%) respectively [11].

Conclusion

The study finding manifests that overall assessment of measures taken by pregnant women for prevention of corona virus, the results reveals that pregnant women have fair to good levels of practices regarding measures taken to prevent corona virus, also there is significant relationship relationships (positive) among pregnant women practices with regard to their level of education and occupation at p-value= 0.003 and 0.006, and there are high significant relationships (strong positive) among pregnant women practices with regard to their monthly income at p-value= 0.001 respectively, and significant relationships (positive) between pregnant women practices and their parity at p-value= 0.041.

Recommendations: The study suggests further research studies are needed to determine the impact of COVID-19 on pregnant women and fetal outcomes.

Acknowledgments: we would like to thank all the pregnant women who participated in this study.

Ethical Clearance: The Research Ethical Committee at scientific research by ethical approval of both environmental and health and higher education and scientific research ministries in Iraq

Conflict of Interest: The authors declare that they have no conflict of interest.

Funding: Self-funding

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