

Impact of Covid-19 Pandemic upon Iraqi women's Sexual and Reproductive Health at Primary Health Care Centers

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Abstract

Objectives: The aim of this study was to assess the repercussions of the COVID-19 pandemic on the sexual and reproductive well-being of women.

Methods: Employing a descriptive design with a correlational approach, the study was conducted between November 2021 and July 2022. The sample consisted of (180) women within the reproductive age range of 17 to 49 years. This non-probability 'purposive sample' was chosen deliberately. Data analysis was conducted using descriptive and correlational statistics.

Results: The investigation divulged significant findings. A considerable proportion of women (55.6%) reported being unable to access contraception during the pandemic. Moreover, (45%) experienced unintended pregnancies amid the pandemic. Additionally, concerns linked to the pandemic led to a lack of follow-up visits for (73.3%) of participants. The study also highlighted the distressing issue of domestic violence during COVID-19: Over half of the women (51.1%) reported exposure to domestic violence, attributing it to prolonged periods of their husbands staying at home. Furthermore, (51.7%) noted an escalation in domestic violence, and (38.3%) revealed that their husbands showed inadequate concern for their sexual well-being.

Conclusion: The COVID-19 pandemic detrimentally affected the sexual and reproductive health of women, manifested through challenges encountered during pregnancy, childbirth, postpartum phases, and family planning. Furthermore, a significant proportion of women faced an increased risk of domestic violence due to the pandemic and the extended presence of their husbands at home.

Keywords: Women, sexual health, COVID-19, domestic violence

Introduction

Reproductive health is a complete state of physical, psychological and social well-being and not just the absence of disease or disability. It allows people to get their rights in healthy reproductive and sexual life and decide to have children or not, the number of family members they want, and access to family planning methods, regardless of any social, racial or religious factors. Reproductive health services, information about a healthy lifestyle, physical and mental health services can all help women maintaining their rights in health. During COVID-19, the health of women generally is adversely impacted through the changes in places of services and priorities, including sexual and reproductive health services.¹

Sexual and reproductive health (SRH) and rights is an important public health issue during the incidence of epidemics. COVID-19 is new to humans, and there is a few scientific evidence is available to identify the impact of COVID-19 on SRH, including signs and symptoms and outcomes of the COVID-19 during pregnancy and its impacts on fetus. These impacts include all health system levels and disruptions the regular provision of SRH services. Domestic violence is also a major issue of SRH and rights, the impacts of enforced self-quarantine or compulsory quarantine policy to contain the outbreak are unknown. Many studies shows that quarantine causes increase the risk of gender-based violence and domestic abuse, negative psychological effect, including post-traumatic stress symptoms, anger and confusion.²

The impact of COVID-19 on women sexual and reproductive health (SRH) have no scientific evidence yet known. The right of women to reproductive autonomy, including have a safe abortion, family planning services, bear and raise children; regardless race, class and gender. COVID-19 pandemic leads to service disruptions and effected access to abortion,

family planning services, and changes in sexual behaviors, menstruation, pregnancy, delivery and postpartum.³

Pandemics can causes many problems in health system and make it more difficult for women to access treatment and consultations for their health problems. This is related to many factors such as socioeconomic status, disability, age and sexual awareness. Many women are being forced to 'lockdown' at home, and they are not able to visit the primary health care centers to receive consultation, treatment for their health problems related to fear of the pandemic or because the economic problems.^{4,5}

In Iraq, the Adolescent marriage and pregnancy still the highest in the region (70/1,000 adolescent girls); about (36%) use of modern contraceptives, it means that many women who need services of family planning do not have access to them. The Government of Iraq is trying to improving maternal health and encouraged Birth Spacing/Family Planning (BS/FP) as an essential element of the efforts as indicated in the RMNCAH strategy 2016–2020. In addition, the Government is fully aware of the beneficial effects services of family planning to reducing maternal morbidity and morbidity, empowering women and their role in national economy. In fact, BS/FP is an effective tools that helps reduce maternal and infant mortality, as well as improving the health of women and their infants.⁶

Around worldwide about (35%) of women have exposed to either physical or sexual violence by an intimate male partner, parents, or any family relative. Women who exposed to violence ranged from (15 to 71%) during their lifetime. COVID-19 causes lockdown and this lead to increase in several areas of the developed countries like UK, USA, France, and Alberta violence increase through call reports where have increased by (20%), (21–35%), (32–36%), and (30–50%), respectively. Besides, in China, Italy, and Spain, Intimate

partner violence call emergency has been increasing during the COVID-19 pandemic. Available data in Africa showed that (36.6%) of women exposed lifetime physical or sexual Intimate partner violence among ever partnered women. majorly in Africa, Tunisia, Intimate partner violence has been reported as high as before. In specific Addis Ababa Ethiopia, within less than two months, more than 100 girls have been exposed to violence, some of them by family relative.⁷

Methodology

Research Design

A descriptive design, correlational approach was conducted from November/2021 to July/2022 to identify the impact of COVID-19 upon women's sexual and reproductive health.

Setting and Sample

A non-probability 'purposive sample' consists of (180) women at reproductive age (17–49) years old who attending primary health care centers in Baghdad City.

Measurement and Data Collection

A Paper-based questionnaire was utilized for data collection in this study. The instrument consists of two main parts, the first part was developed by the researcher is related to demographic data included (age, residency, educational level and occupation). The second part is a scale from a previous study consists of six items included (reproductive history, impact of Covid-19 on pregnancy, impact of Covid-19 on childbirth, impact of Covid-19 on postpartum, impact of Covid-19 on Family Planning, and exposure to Domestic Violence during COVID-19).⁸ After the approval from the original authors has been obtained to use, modify, a bilingual academician who has extensive expertise in scientific research checked instrument for adequacy, conceptual correspondence, and any missing concepts or expressions. The researchers conducted a pilot study, the pilot study included (15) women who were excluded from the original sample. Reliability statistical analysis was performed and showed that Cronbach alpha was 0.89 for the instrument, which indicated that the research instrument have a good internal consistency and acceptable. The total number of questions is (42). The time for data collecting is 8:30 am to 2:30 pm daily during official working days and each interview takes about 20–30 minutes for each woman. Women were asked to answer the questions with (yes) or (no) the score of answer with (yes) is one and the score for the answer with (No) is zero.

Data Analysis

The researchers used SPSS 22.0 (IBM Corp., Armonk, N.Y., USA) to analyze data. Frequencies, and percentages were computed to describe data related to women's socio demographic characteristics, reproductive history, impact of Covid-19 on pregnancy, impact of Covid-19 on childbirth, impact of Covid-19 on postpartum, impact of Covid-19 on Family Planning, and exposure to Domestic Violence during COVID-19, and correlational analysis to relationship among Socio-demographic Variables and Problems during COVID-19 Pandemic and Correlation among Reproductive Health Variables and Problems during COVID-19 Pandemic.

Ethical Considerations

The study protocol was approved by the Scientific Research Ethical Committee, College of Nursing, University of Baghdad, Baghdad, Iraq (Ref. 551 number: 25 August 2021). Furthermore, the researchers informed the women about their rights of voluntarily participation, withdraw at any time, confidentiality, and privacy. Women who agreed to participate were asked to sign the consent form.

Results

The analysis of Table 1 shows that women are with average age of 30 ± 6 years in which the highest percentage is seen with age group of 24–30 years (43.3%). Regarding education, 33.3% of them are graduated from institute and college and 32.8% are graduated from secondary schools. The residency refers to urban among 61.7% of women. Concerning occupation, 62.2% of women are housewives while remaining are working as governmental employees. All participants' women are seen married (100%).

Table 2 reveals that 40% of women are married for 6–10 years; the average year of marriage is referring to 7 ± 4 years. Concerning number of pregnancies, 78.3% of women reported they got pregnant for 1–3 times. The birth number is referring to 1–3 among 91.1% of women. The highest

Table 1. Distribution of the Sample according to their Demographic Characteristics

Characteristics	No	%	
Age M ± SD = 30 ± 6	17 – 23 years	24	13.3
	24 – 30 years	78	43.3
	31 – 37 years	57	31.7
	38 – 44 years	17	9.4
	45 ≤ years	4	2.2
	Total	180	100
Educational level	Doesn't read & write	3	1.7
	Primary	0	0
	Intermediate	32	17.8
	Secondary	59	32.8
	Institute/College	60	33.3
Higher education	26	14.4	
Total	180	100	
Residency	Urban	111	61.7
	Rural	0	0
	Sub-urban	69	38.3
	Total	180	100
Occupation	Employee	68	37.8
	Housewife	112	62.2
	Total	180	100
Marital status	Unmarried	0	0
	Married	180	100
	Total	180	100

No: Number, %: Percentage, M: Mean, SD: Standard deviation.

percentage regarding number of abortion is referring to one among 23.3%.

Table 3 reveals that the problems occurs highly as a result for COVID19 pandemic are hypertension with pregnancy (22.8%), anemia during pregnancy (43.9%), UTI related to pregnancy (38.3%), abnormal vaginal secretion unable to treat (45.6%), and neglecting doctor visits during pregnancy (65%).

Table 4 displays that the frequently problems occurred during COVID19 pandemic related to childbirth are: premature birth (21.7%), forced to give birth at home (18.3%), and forced to give birth in unwanted hospitals (31.1%).

Table 5 exhibits that common problems occurred after childbirth during pandemic are: feeling of isolation (80%) and neglected to visit a doctors during postpartum (63.3%).

Table 6 shows that 55.6% of women are unable to use contraception during pandemic, 45% are got unwanted pregnancy during pandemic, and 73.3% are lack of follow-up visits due to fair of pandemic.

Table 7 indicates that more than half of women are exposed to domestic violence due to pandemic of COVID19; 51.1% are reported they exposed to domestic violence due to pandemic and husband's stay in home for long time, 51.7% reported increased domestic violence during pandemic, and 38.3% reported that their husband didn't care about her sexual feelings.

Table 8 indicates that there is reverse relationship between pregnancy related problems and women age at p -value= .048 while there is positive relationship between exposed to violence and age at P -value = .024. There is significant relationship between childbirth related problems and women occupation at P -value = .003.

Table 2. Distribution of the Sample according to their Reproductive Health History

Variables	No	%
Marriage years $M \pm SD = 7 \pm 4$	1 – 5 years	69 38.3
	6 – 10 years	72 40
	11 – 15 year	24 13.3
	16 – 20 year	14 7.8
	21 – 25 year	1 0.6
	Total	180 100
Gravida	1 – 3	141 78.3
	4 – 6	37 20.6
	7 ≤	2 1.1
	Total	180 100
Para	1 – 3	164 91.1
	4 ≤	16 8.9
	Total	180 100
Abortion	None	125 69.4
	One	42 23.3
	Two	9 5
	Three and more	4 2.3
	Total	180 100

No: Number, %: Percentage

Table 3. Impact of COVID19 Pandemic on Pregnancy ($N = 180$)

No	Problems	NO	YES
		No (%)	No (%)
1	Uterine bleeding unable to treat it in a timely manner	147 (81.7)	33 (18.3)
2	Placental abruption that you didn't know about in time	163 (90.6)	17 (9.4)
3	Hypertension associated with pregnancy unable to treat	139 (77.2)	41 (22.8)
4	Gestational diabetes unable to treat	162 (90)	18 (10)
5	Anemia during pregnancy unable to treat	101 (56.1)	79 (43.9)
6	Pregnancy-related UTI unable to treat	111 (61.7)	69 (38.3)
7	Abnormal vaginal secretions unable to treat	98 (54.4)	82 (45.6)
8	Miscarriage and unable to see a doctor	162 (90)	18 (10)
9	Neglecting visits to the doctor during pregnancy	63 (35)	117 (65)

No: Number, %: Percentage

Table 4. Impact of COVID-19 Pandemic on Childbirth ($N = 180$)

No	Problems	NO	YES
		No (%)	No (%)
1	Premature birth (before 37 weeks) because did not visit a doctor	141(78.3)	39(21.7)
2	Fetal death during childbirth as a result of the lack of a visit a doctor	173(96.1)	7(3.9)
3	Forced to give birth at home	147(81.7)	33(18.3)
4	Forced to give birth in an unwanted hospital	124(68.9)	56(31.1)
5	Forced to give birth at home by midwife	171(95)	9(5)

No: Number, %: Percentage

Table 5. Impact of COVID-19 Pandemic on Women postpartum ($N = 180$)

No	Problems	NO	YES
		No (%)	No (%)
1	Postpartum Hemorrhage and unable to visit a doctor	150(83.3)	30(16.7)
2	A feeling of isolation	36(20)	144(80)
3	Lack of milk secretion related to fair of pandemic	127(70.6)	53(29.4)
4	Neglected to visit a doctor on time after giving birth	66(36.7)	114(63.3)
5	Inability to get necessary medication	144(80)	36(20)

No: Number, %: Percentage

Table 9 reveals that there are significant relationships among problems related to after childbirth, family planning and exposed to violence with years of marriage at P -values = .001, .031, and .014.

The finding show reverse relationship between number of gravida and pregnancy related problems while there are positive relationship among problems related to childbirth, after childbirth, and family planning at P -values = .023, .044, and .026.

Table 6. Impact of COVID19 Pandemic on Use of Family Planning Methods ($N = 180$)

No	Problems	NO	YES
		No (%)	No (%)
1	Inability to use contraceptive methods	80 (44.4)	100 (55.6)
2	Unintended pregnancy during the pandemic	99 (55)	81 (45)
3	induced abortion of unintended pregnancy	179 (99.4)	1 (0.6)
4	Miscarriage during the pandemic	154 (85.6)	26 (14.4)
5	Lack of follow up to visits a doctor due to fair of pandemic	48 (26.7)	132 (73.3)

No: Number, %: Percentage

The number of para is correlated reversely with pregnancy related problems at P -value = .041. The problems related to family planning use is correlated with number of abortion at P -value = .003.

Discussion

The results of this study shows that the highest percentage is seen with age group of 24–30 years (43.3%). About their education, (33.3%) of them are graduated from institute and college. The residency refers to urban among (61.7%) of women that attending primary health care centers. Concerning occupation, (62.2%) of women are housewives. All participants' women are seen married (100%). About the years of marriage (40%) of women are married for (6–10) years, Concerning number of pregnancies, (78.3%) of women reported they got pregnant for (1–3) times. The birth number is referring to (1–3) among (91.1%) of women. The highest percentage regarding number of abortion is referring to one among (23.3%).

The population of Iraq has increased in the past 25 years by more than (50%) to about 40 million in 2018 according to the data of civil society organization, about (30%) of them living in rural areas. Most of population is young, women in reproductive age (15–49) about (24.7%) of the total population they cannot able to access family planning eservices. Iraq

Table 7. Exposure to Domestic Violence during COVID-19 Pandemic ($N = 180$)

No	Problems	NO	YES
		No (%)	No (%)
1	Exposed to domestic violence due to the pandemic and the husband's stay at home for a long time	88(48.9)	92(51.1)
2	Domestic violence has increased in light of the Corona pandemic	87(48.3)	93(51.7)
3	Domestic violence has been reported to the police	168(93.3)	12(6.7)
4	I previously been admitted to a hospital due to domestic violence	176(97.8)	4(2.2)
5	I were forced to have sex against my will	173(96.1)	7(3.9)
6	My husband abstains from sex as a punishment because of his temper during the pandemic	150(83.3)	30(16.7)
7	Hurting or using force when having sex	156(86.7)	24(13.3)
8	My husband uses rude and painful sexual profanity when having sex	166(92.2)	14(7.8)
9	My husband doesn't care about my sexual feelings	111(61.7)	69(38.3)

No: Number, %: Percentage

Table 8. Correlation among Socio-demographic Variables and Problems during COVID-19 Pandemic ($N = 180$)

Problems	Correlation	Age	Residency	Education	Occupation
Pregnancy	Correlation coefficient	-.147	.093	.101	.036
	Significance	.048	.216	.178	.632
Childbirth	Correlation coefficient	.078	.019	.131	.223
	Significance	.297	.802	.079	.003
postpartum	Correlation coefficient	.109	.088	.038	.003
	Significance	.146	.242	.610	.966
Family planning	Correlation coefficient	.114	.076	.004	.097
	Significance	.127	.312	.961	.195
Violence	Correlation coefficient	.168	.131	.038	.029
	Significance	.024	.079	.613	.704

Table 9. Correlation among Reproductive Health Variables and Problems during COVID-19 Pandemic (N = 180)

Problems	Correlation	Marriage years	Gravida	Para	Abortion
Pregnancy	Correlation coefficient	.104	-.204	-.153	.023
	Significance	.167	.006	.041	.760
Childbirth	Correlation coefficient	.020	.169	.138	.132
	Significance	.786	.023	.065	.078
Postpartum	Correlation coefficient	.225	.150	.057	.016
	Significance	.001	.044	.450	.820
Family planning	Correlation coefficient	.161	.166	.001	.220
	Significance	.031	.026	.991	.003
Violence	Correlation coefficient	.182	.091	.014	.060
	Significance	.014	.227	.851	.427

is one of the highest fertility rate in the region among 10 countries in the Eastern Mediterranean, the Iraqi fertility rate about (3.6).^{9,10}

Most of Iraqi women in reproductive age get married and have at least (1–3) children, and this is a basic project in Iraqi women's lives, especially in a country where job opportunities may be very few, even for women with educational qualifications, as in the study sample, which showed that the highest percentage of them have a university qualification, and despite that, Most of them are housewives, even those who live in the capital.

During pregnancy the most common problems occurs highly as a result for COVID-19 pandemic are hypertension with pregnancy (22.8%), anemia during pregnancy (43.9%), UTI related to pregnancy (38.3%), abnormal vaginal secretion unable to treat (45.6%), and neglecting doctor visits during pregnancy (65%).

Pregnant women receive complex of interventions during their pregnancy as a prenatal care that provides to pregnant women at 12–16 antenatal visits from primary health care centers to diagnosed and treatment of any pregnancy problems that may threaten that may threat fetus or pregnant woman and make sure a safe pregnancy, birth and positive experience for pregnant woman, many women couldn't get their care because either fear of pandemic or lockdown and that make many pregnant women and their fetus at risks.¹¹ Antenatal care provides monitoring and follow-up of maternal and fetal health during pregnancy. Women that commitment with their Antenatal care have a better delivery and birth outcomes.¹²

Many women lose their lives due to complications and problems related to pregnancy and childbirth, especially women who neglect prenatal visits or visiting a doctor after childbirth, so there are many maternal deaths that can be prevented if the women know how to decrease their risks and get the health care at the right time, but because of the impact of pandemic, many women neglect their visits, complications related to pregnancy, such as high blood pressure during pregnancy, anemia, and the occurrence of some gynecological infections need to treatment and care, when neglect may cause severe complications for pregnant women and their fetus.

Frequently problems occurred during COVID-19 pandemic related to childbirth are: premature birth (21.7%), forced to give birth at home (18.3%), and forced to give birth in unwanted hospitals (31.1%).

Many study conducted by researchers at UC San Francisco shows that women infected with COVID-19 face a higher risk of having a very preterm birth, which occurs at less than 32 weeks of gestation. Risk of very preterm birth about (60%) higher for women infected with COVID-19 at some trimester in their pregnancy, about (40%) higher in pregnant women with COVID-19 especially for those who also had hypertension, diabetes and/or obesity, the risk of preterm birth (less than 37 weeks of gestation) increase to (160 %).^{13–15}

The risk of preterm birth increases with COVID-19 infection this was confirmed by the results of the research, and it is consistent with many studies that were conducted for pregnant women during the pandemic, in addition to that childbirth is one of the important events in a woman's life. Under normal conditions, women are very interested in choosing the setting of birth, but during the pandemic, many women were forced to give birth at home or give birth in unwanted hospitals.

The common problems occurred after childbirth during pandemic are: feeling of isolation (80%) and neglected to visit a doctors during postpartum (63.3%). About family planning (55.6%) of women are unable to use contraception during pandemic, (45%) are got unwanted pregnancy during pandemic, and (73.3%) are lack of follow-up visits due to fair of pandemic.

Limiting access to family planning information and services is one of the problems that accompanied with pandemic, COVID-19 has negatively affected health systems in worldwide, lockdown countries and people forced to staying at home, low of economic status, and inability to communicate with parents, friends, and health care providers all of this affected women sexual and reproductive health.^{16–20}

More than half of women are exposed to domestic violence due to pandemic of COVID-19; 51.1% are reported they exposed to domestic violence due to pandemic and husband's stay in home for long time, 51.7% reported increased domestic violence during pandemic, and 38.3% reported that their husband didn't care about her sexual feelings.

In previous study conducted in Iraq about the violence the results shows that half (50%) of the study sample suffered from domestic violence from the husband. Regarding the increase of violence in light of coronavirus three quarters of the study sample (74.7%) had increased violence against them in light of the pandemic.^{21,22}

Conclusion

Covid-19 pandemic has a negative impact on the sexual and reproductive health of women as their effect includes problems during pregnancy, childbirth, postpartum and family planning. More than half of women are exposed to domestic violence due to the Covid19 pandemic and the husband's stay at home for a long time.

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Conflict of Interest

There is no conflict of interest it may affect the results of the study.

Ethical Considerations

The study protocol was approved by the Scientific Research Ethical Committee, College of Nursing, University of Baghdad, Baghdad, Iraq (Ref. 551 number: 25 August 2021). Permission was granted by the committee, enabling the study to be conducted. Study ethical considerations including the nature and aims of the study, voluntary participation, the right to withdraw from participation, the protection of confidentiality and privacy of the informants, the use and publication of the study results, the storage of data, and benefits of study were explained in writing to candidates. This information was conveyed in the human ethics application form. A signed written consent was obtained from each patient who participated in the study.

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Authorship

The researcher did the Conceptualization, Methodology, formal analysis, Writing, reviewing, editing, Investigation, and validation for this study. ■

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