

ORIGINAL ARTICLE

Effect of Covid Pandemic Upon Utilization of Contraceptive ServicesRAZIA BIBI¹, GHAZALA SHAMS², FAUZIA ANBREEN³, REEMA FATEH⁴¹Assistant Professor Gynae & Obs, KMU Institute of Medical Sciences, Kohat²Associate Professor Gynae & Obs, Hayatabad Medical Complex, Peshawar³Associate Professor Gynae & Obs, Gomal Medical College, Dera Ismail Khan⁴FCPS Gynae & Obs, Woman Medical Officer, THQ Hospital, Kabal Swat

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ABSTRACT

Background and Aim: The coronavirus illness (COVID-19) is a public health disaster on a worldwide scale. The present COVID 19 epidemic will cause significant interruption to healthcare systems long after it has passed its peak. Sexual and reproductive health (SRH), including contraception, must be viewed as a critical service. The aim of the present study was to assess the COVID pandemic effect upon utilization of contraceptive services.

Methods: This epidemiological study was carried out on 1284 women at risk of unplanned pregnancy whose longitudinal data was collected from June 2021 to 31 November 2021 in Gynae & Obs department of Hayatabad Medical Complex Peshawar and KMU Institute of Medical Sciences, Kohat. Baseline details, association of contraceptive dynamics with COVID-19 experiences, and causes for contraceptive non-use were measured outcomes during COVID pandemic. Our key outcome was the dynamics of contraceptive usage classified into four groups: a) persistent non-use, b) persistent use, c) adoption, and d) cessation. Secondary outcomes were contraceptive uptake, cessation, and switching. Factors such as socioeconomic status, reproductive health, and COVID-19 status have been associated with contraceptive behavior. Sociodemographic details consist of age, education, residency, and parity.

Results: Of the total 1284 unplanned pregnancy women, during COVID-19, no changes in contraceptive status was seen in 64.8% women, whereas those who responded were much more inclined to adopt a device 26.2% than to discontinue 9.0%. The majority of women who shifted contraceptives were using more efficient techniques than the one they used before the pandemic. In Pakistan, higher contraceptive protection was connected with economic insecurity due to COVID-19. Among all the cases, non-contraceptive users 9.1% (n=117) had cited COVID-19-related causes for not utilizing contraception.

Conclusion: The present study concluded that contraceptive status among the majority of women with unexpected pregnancy during COVID pandemic unaltered their contraception status, and adoption was more acceptable to women than discontinued techniques. COVID-19 was mentioned by a minority of women for not using the vaccine, highlighting the significance of extending safe forms of service delivery amid health crises.

Keywords: COVID-19, Pandemic, Contraception services

INTRODUCTION

Pakistan's population is expanding at an alarmingly fast pace of 2.4% each year, with 207 million people [1]. Pakistan signed the worldwide FP2020 commitment and remains committed to controlling population growth by raising the prevalence rate of contraceptives from 34.2% to 50% [2, 3]. The Federal Task Force has been monitoring the increasing pace of population growth with an aim to lower the 2.4% growth rate to 1.5% by 2025 and 1.1% by 2030 [4]. The declaration of COVID pandemic cases (March 2019) has brought unpredicted changes in daily wellbeing around the world. Total lockdown situation on all usual activities across the countries to limit disease spread, have both direct and indirect negative consequences on health care utilization including family planning services and secondly our health care system was not adequately prepared to handle this pandemic so leads to underutilization of health care system [5, 12-15]. During Covid-19 pandemic, Pakistan is facing a challenging situation to achieve targets set to reduce growth rate. Predictions made by UNFPA suggested that COVID-19 might affect the family planning and contraceptive services utilization. According to UNFPA figures, a 10% drop in the contemporary contraceptives utilization will result in an increase in the unmet demand of an extra 1,228,827 women, leading to an additional 528,065 unwanted pregnancies. If contemporary contraceptive use falls below 20%, the aforementioned impacts might be doubled [6-8].

During the COVID pandemic, health services associated with maternal and infants were curtailed due to delay in receiving treatment and interrupted health facilities caused by virus phobias among health care facilitators [9, 10]. Access to and uptake of contraceptive services is one of the low-cost and effective interventions that leads to improvements in women's health through a variety of ways, including reduced maternal mortality [11]. There is a paucity of data regarding COVID-19 impacts on utilization of reproductive health services in local setting. Therefore, the primary objective of this study is to provide necessary information to all health care stakeholders to develop a

new strategy towards reduction of COVID-19 negative impact on reproductive health service utilization, and its consequences.

METHODOLOGY

This epidemiological study was carried out on 1284 women at risk of unplanned pregnancy whose longitudinal data was collected from June 2021 to 31 November 2021 in Gynae & Obs department of Hayatabad Medical Complex Peshawar and KMU Institute of Medical Sciences, Kohat. Baseline details, association of contraceptive dynamics with COVID-19 experiences, and causes for contraceptive non-use were measured outcomes during COVID pandemic. Our key outcome was the dynamics of contraceptive usage classified into four groups: a) persistent non-use, b) persistent use, c) adoption, and d) cessation. Secondary outcomes were contraceptive uptake, cessation, and switching. Factors such as socioeconomic status, reproductive health, and COVID-19 status have been associated with contraceptive behavior. Sociodemographic details consist of age, education, residency, and parity. The effectiveness of contraceptive services methods was divided into three groups: (i) less effective acting includes traditional methods, standard days, condom, emergency contraception, (ii) effective short acting involving the pills, injectable, and diaphragm, and (iii) long-acting highly effective comprised of sterilization, implants, and intrauterine device. Additionally, questioned women about their reasons for not using contraception, mainly focusing on COVID-19-associated problems such as restricted mobility, infectious fear, health facility closures, and contraceptive stock outs.

Bivariate analysis assessed factors associated with changes Factors related to variation in contraceptives during COVID-19 were analyzed by bivariate analysis. A multivariate logistic regression was conducted to examine the adoption of contraception among nonusers before COVID-19. Women who used long-acting less effective methods and short-acting highly effective methods before COVID-19 were examined for factors that contributed to switching to more effective methods. We also

examined how many non-contraceptive users cited reasons related to COVID-19 for not using contraception.

RESULTS

Of the total 1284 unplanned pregnancy women, during COVID-19, 64.8% of women did not modify their contraceptive status, whereas those who responded were much more inclined to adopt a device 26.2% than to discontinue 9.0%. The majority of women who shifted contraceptives were using techniques that were as efficient as their pre-pandemic contraception. In Pakistan, higher contraceptive protection was connected with economic insecurity due to COVID-19. Among all the cases, 9.1% (n=117) of non-contraceptive users cited COVID-19-related reasons for not using contraception. About 21.1% women belonged to urban areas and 78.9% to rural areas. Women with ≥4 children were 48.3% in the studied population. Regarding educational status, 43.6% women completed their secondary or higher education whereas 56.4% had never attended school. Concern over contracting the virus was very high among women. The prevalence of oral contraception was 66.9% pre-pandemic; 18.1% used long-acting methods and 15.0% used short-acting methods. Changes in contraceptive usage status before and during COVID-19 as shown in Figure-1. Contraceptive practices and methods used by women in the period prior to COVID-19 have changed as shown in Figure-2. The influence of COVID on the continuation and adoption of contraceptives among both users and non-users as represented in Table-1.

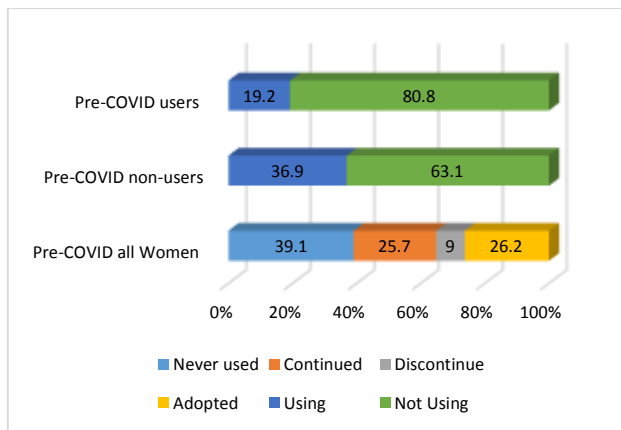


Figure-1: Changes in contraceptive usage status before and during COVID-19

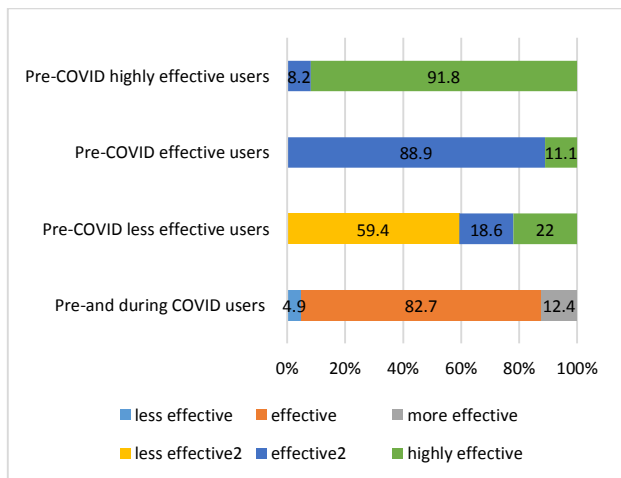


Figure-2: Changes in contraceptive technique type among women and prior to COVID-19 contraception usage.

Table-1: influence of COVID on the continuation and adoption of contraceptives among both users and non-users

Parameters	Discontinuation among users AOR (95% CI)	Adoption among non-users AOR (95% CI)
Age (years)		
16-35	Ref	Ref
16-20	0.17 (0.05) 0.72	0.58 (0.22) 1.52
36-45	2.21 (0.92) 5.42	1.58 (0.82) 3.29
Education		
Illiterate	Ref	Ref
Higher	0.29 (0.21) 0.79	1.12 (0.62) 1.89
Parity		
0-1	Ref	Ref
2-3	0.62 (0.19) 1.93	1.19 (0.52) 3.2
3+	0.32 (0.07) 1.22	0.69 (0.21) 3.28
Contraceptive use		
Short-acting use	Ref	Ref
Long-acting use	0.29 (0.12) 0.72	
Concerned about becoming infected with COVID-19		
Concerned	Ref	Ref
Very concerned	2.13 (0.89) 4.86	0.52 (0.21) 0.92
Little or no concerned	8.83 (1.93) 40.51	0.35 0.12 1.31

DISCUSSION

The present study mainly focused on effect of COVID pandemic upon utilization of contraceptive services and found that The majority of women who switched contraception used procedures that were as effective as, if not more effective than, their pre-pandemic contraception. This study examined the COVID-19 pandemic actual effect on the use of critical contraceptive services when rigorous precautions to minimize population spreading were in place. This study found a complicated association between contraceptive usages the pandemic in women at risk of unwanted pregnancy who were questioned before and during COVID-19. During initial stages of pandemic, contraceptive status was unaltered by majority of women and others adopted the contraceptive instead of stopping it. During COVID-19, few women switched methods, with the majority opting for long-acting more effective contraception. The changing aspects of contraceptive were associated with worries about the economic impact of COVID-19, however relationships differed by country.

Fear of getting COVID-19 was associated with less switching and lower uptakes by more effective methods. COVID-19 acquiring fear was cited as a cause for non-use by 2% and 10% of non-users, respectively. These findings are consistent with previous research indicating an unintended influence of pandemic on contraceptive care utilization [16, 17].

Greater contraceptive use vs cessation during the COVID-19 initial stages demonstrates the resiliency of women in local based health systems. Whereas more than two-thirds of women found it difficult to obtaining health care. Women's ability to manage primary care is demonstrated by utilization of contraception in 26% women [18, 19]. Furthermore, during COVID-19, one out of five women substituted techniques, with the majority switching to ways that were equally successful in their approach before pandemic. These findings are consistent with early phases data that outbreak, when women frequently adopted or changed to more modern contraceptives [20].

The current investigation was undertaken initially in epidemic and have not captured the COVID-19 long-term impacts, since facilities had enough contraceptive goods to function comparatively undisturbed in the initial stages of pandemic, only to experience stock outs later. Furthermore, contraceptive use or transitions to more effective techniques may have happened earlier to the pandemic.

Our findings may exaggerate COVID-19's significance in contraceptive non-use; nevertheless, considering the limited women claiming a COVID-19-associated cause for non-use supporting our earlier findings of COVID-19's limited influence on

contraceptive practices [21, 22]. Because there was a shortage of data about sexual behavior during COVID-19, researchers additionally adversely effected women's probability of unplanned pregnancy depending on family status. Lastly, due to the limited size of our sample, we were unable to analyze dynamic connection between demographical features and COVID-19 events, resulting in large confidence intervals for various components [23].

CONCLUSION

The present study concluded that contraceptive status among the majority of women with unexpected pregnancy during COVID pandemic unaltered their contraception status, and adoption was more acceptable to women than discontinued techniques. COVID-19 was mentioned by a minority of women for not using the vaccine, highlighting the significance of extending safe forms of service delivery amid health crises.

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